State budget institution of higher professional education "Orenburg State Medical Academy of Russia's Ministry of health

Faculty of surgery

TRAINING MANUAL FOR THE PREPARATION OF

FOR PRACTICAL CLASSES IN THE FACULTY

SURGERY MEDICAL FACULTY STUDENTS

Orenburg-2014

UDC 617-089 (075.8)

Authors: Associate Professor Avchenko M.t., Associate Professor, Assistant Professor D.b. Demin Kondrashov n.i., Associate Professor Nuzova O. B., MD, PhD Y.a. Sobolev Soldatov Yu.n.

Training manual for the preparation for practical classes in the Faculty of surgery medical faculty students.-Orenburg. -2014.-174 s.

Reviewers:

Tarasenko V., MD, Professor, head of the Department of hospital surgery GBOU SEI HPE «the Orenburg State Medical Academy of the Ministry of health of Russia.

Results MV, MD, Professor, head of the Department of surgery faculty GBOU VPO "Bashkir State Medical University".

Scholastic-methodical allowance considered and recommended for printing FIGURE OrGMA.

Table of contents

|  |  |  |
| --- | --- | --- |
|  |  | P. |
| 1 | Hernia |  |
| 2 | Appendicitis |  |
| 3 | Gastric ulcer and 12 duodenal ulcer and its complications |  |
| 4 | Stomach cancer |  |
| 5 | Cholecystitis |  |
| 6 | Pancreatitis |  |
| 7 | Intestinal obstruction |  |
| 8 | Peritonitis |  |
| 9 | Nagnoitelnye lung disease |  |
| 10 | Empiema pleura |  |
| 11 | Lung cancer |  |
| 12 | Varicose disease of lower limbs |  |
| 13 | Obliterating diseases of arteries of extremities |  |
| 14 | Portal hypertension |  |
| 15 | Diseases of the esophagus |  |
| 16 | Breast disease |  |
| 17 | Diseases of the thyroid gland |  |

**Topic:** "Hernia"

**1. the purpose of the practice:**

a) to acquaint students with modern views on etiology, pathogenesis of abdominal hernias, the frequency of their appearance depending on sex, age, profession;

b) to examine the different types of clinical manifestations of external abdominal hernia, complications, the differential diagnosis;

in clinical research) teach patients with various types of hernias;

g) define the indications for operative treatment;

d) choose the correct method of surgical intervention;

e) to acquaint students with the characteristics of patients in the postoperative period.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: the structure and topography of the abdominal wall, structure of inguinal and femoral canals, midline, umbilical region, Anatomy of the small and large intestines, types of operations used in the treatment of hernias;

of course General Surgery Clinic: acute inflammation with lymphadenitis, limfangoite, thrombophlebitis, questions of aseptics and antiseptics;

of course private surgery: the concept of "abdominal hernia" and the main elements of the hernia, etiology, pathogenesis, hernias, classification, the clinical picture is not complicated disadvantaged and hernias, the differential diagnosis oblique and direct inguinal, femoral hernia, congenital and acquired; stage of development of inguinal hernias, testicular lowering process, methods of surgical intervention depending on the type of hernia, especially in children, congenital and sliding hernia. Tactics of the surgeon when strangulated hernia, especially the operation rules of bowel resection, an assessment of the viability of the gut. Conducting the postoperative period, complications, rare forms of hernias.

**3. To enter, you need to understand:**

mechanism of elastic and kalovogo abuses, violations of water-salt metabolism with strangulated hernia, basic principles of surgical treatment, especially when the hernia strangulated operation, the main stages of the surgery, possible complications and their warning.

**4. To enter you must be able to:**

correctly assemble the anamnesis and complaints in patients with hernias. Describe the localization, hernias ' value. To find out whether, in the past, infringing or inflammation of the hernia. Explore the sick: inspecting, palpation, hernias ' determine the symptom "kashlevogo jolt. Hold differential diagnosis with lymphadenitis, Hydrocele, varicocele, "cold" natechnikom, varicose veins.

**5. Theoretical reference**

**A hernia** is called protrusion of an internal organs covered with peritoneum through natural or artificial pathological holes into neighbouring cavity or under the skin. If under the skin or outside vypjachivajutsja bodies covered with parietal peritoneum, this pathology is called jeventracija (subcutaneous or full) or false hernia.

**Classification**: 1. the place of education, the hernia is divided into external and internal. To the outside: inguinal, Femoral, umbilical hernia, midline, lumbar, sitting, promezhnostnye, postoperative ventral. 2. On the etiology of the hernia may be congenital and acquired. 3. the clinical picture emit partly vpravimye vpravimye:, nevpravimye, complicated and uncomplicated. Complications of hernias include: pinching, inflammation of hernias (flegmonu hernial SAC), koprostaz, neoplasm hernias. In the pathogenesis of acquired hernias relies on a combination of predisposing causes and producing essential of which has increased intra-abdominal pressure. Elements of hernias is called: hernial gate hernial SAC contents gryzhevoe. In cases where one of the elements of the hernial SAC is the wall of the bladder cecum and rarer sigmoid-it is called sliding hernia.

**The clinical picture**. Uncomplicated hernias are characterized by: moderate pain in the area, especially stress exacerbates discomfort during physical exercise, positive symptom "kashlevogo jolt. Physical examination of patients spend in two positions-lying and standing. If you experience the most frequent complications-infringement, there is a strong pain in the stomach and hernias ', nevpravimost and previously vpravimoj strain hernia, absence of symptom "jolt" kashlevogo clinic of acute intestinal obstruction. Laboratory and instrumental Diagnostics when the hernia has no independent meaning, but only allows you to diagnose or complication or differentiate disease.

**Differential diagnosis**.

Inguinal hernia should be differentiated:

with 1. Drops egg shells (Hydrocele), which also has a tumorous formation. But it occurs and increases gradually, over time, is not changed in the prone position (when vpravimoj hernia it disappears), has a dense texture. There is no indication of physical exercise in history, symptom kashlevogo push negative. Recognition helps diafanoskopii method. 2. Inguinal lymphadenitis, where there is a history of inflammatory processes, mainly on the lower extremities. Palpated a painful education, dense otgranicennoe from the outer holes of the inguinal Canal, the skin over it more often fluorescence improves overall body temperature. In the analysis of blood noted leucocytosis, increased ERYTHROCYTE SEDIMENTATION RATE, whereas in patients with uncomplicated hernias these changes.

3. Varicose veins of the spermatic cord (varicocele), which is more common on the left, under-age teenagers. By palpation identifies "grozdevidno" dilated veins in the spermatic cord along the way. Varicocele is sometimes combined with a manifestation of proteinuria, mikrogematurii.

Femoral hernia, is below the pupartovoj ligament is more common in women, it should be differentiated: with 1. Benign tumors (lipomas, fibromas) and metastasis of malignant neoplasms in which three-dimensional palpable education firm, painless, has clear boundaries, the abdominal cavity was not vpravlyaetsya, hernial gate does not are defined. For the purpose of diagnosis or exclude pelvic tumors need to conduct a study of the rectum, uterus. 2. Varicose veins disease lower limbs in which occurs a significant expansion of the great saphenous vein in its mouth (oval Fossa). But for varicose veins is characterized by bluish color of the skin over the vypjachivaniem, the absence of symptom kashlevogo Jolt, varicose veins in the legs in the distal part. 3. Tuberculous natechnikom, which differs from the femoral hernia in a characteristic clinical presentation of TB of the spine is the deformation of the spine (kyphosis), x-ray changes-wedge shape bodies affected vertebrae, narrowing mocrowave slit, positive tuberculin sample.

Hernia, umbilical and midline should be differentiated: with 1. Predbrjushinnoj Lipoma, whereby the tumorous education has clear boundaries, plotnojelasticheskoe, nevpravimoe, no hernia gate. 2. Metastatic stomach cancer implant character in the abdominal wall and the navel. To exclude Cancer Pathology EXAMINATION is conducted, x-ray of the stomach with barium, ULTRASOUND of the abdomen.

Postoperative ventral hernias occur in places previously performed surgeries and depending on the location of the median can be (upper and lower), lateral (top, bottom, left and right). Postoperative hernia is formed due to prolonged tamponade and drainage of the wound or festering. In place of the postoperative scar gradually develops an outpouching, which increases over time, becoming a multi compartment and nevpravimym due to adhesions in gryzhevom bag. Often these hernias are compounded by denial.

**Treatment of** hernias-planned operation-hernia repair with grafting herniorrhaphy in accordance with the type of hernia. When infringement is emergency surgery.

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions on the subject of the lesson:**

List the factors that contribute to the development of anterior abdominal wall hernias.

What are the main clinical manifestations of external abdominal hernia.

List the diseases with which to differentiate the inguinal, Femoral, umbilical hernia and midline.

What are the signs of infringement of a hernia.

b) **Written homework:**

Presented in the form of tables or diagrams:

classification of abdominal hernias;

structure of the inguinal Canal and the femoral triangle;

types of hernia abuses;

methods of operative treatment for inguinal, Femoral, umbilical hernia and midline.

**Tests for self-control quality home training:**

1. Contents of the hernial SAC can be everything except:

a) small intestine

b) stomach

in the pancreas)

g) liver

d) bladder

2. When sliding hernia one of walls of the hernial SAC is:

a) bladder

b) peritoneum

in stomach)

g) kidney

d) small intestine

3. When razushhemivshejsja hernia correct would be:

and immediate operation)

b) dynamic observation

in) antibiotics

g) laparoscopy

d) all named

4. For differential diagnosis of inguinal hernia and dropsy testicular membranes shows:

a) radiography

b) digital rectal

in) ULTRASOUND

g) transillumination

d) all the answers are incorrect

5. When flegmone hernial SAC operation start with:

a) autopsy phlegmons

b) puncture of the hernial SAC

in the selection of the hernial SAC) surrounding tissues

g) midline laparotomy

d) simultaneous operation of two accesses

6. When strangulated hernia in patients with myocardial infarction shown:

and emergency operation)

b) surveillance, chill on the stomach

antispasmodic agents)

g) trendelenburga

d) repair of hernia

7. During the operation at the strangulated hernia surgeon found in gryzhevom bag two loops of intestine. Type of infringement:

a) elastic

b) retrograde

) kalovoe

g) rihterovskoe

d) mixed

8. When operation found restrained in gryzhevom poke loop of intestine. How to assess the viability of the colon:

and colon) color

b the presence of bowel peristalsis)

in the mesenteric artery pulsation) guts

g) all wrong

d) all true

9. The traditional way of surgical treatment of direct inguinal hernias is:

a) Abdominoplasty prosthesis

b) Bassini operation

hernia repair on Mayo)

g) repair on Liechtenstein

d) operation Postemskogo

10. When sliding hernia in the composition of the walls of the hernial SAC most commonly found:

a) bladder

b) rectum

in stomach)

g) large stuffing box

d) kidney

**7. Independent work in the practice session:**

1. different levels of situational tasks Solution absorption.

2. Supervision of patients with evaluation results:

and collect complaints, research) history;

b) assessment of the overall condition of the patient;

definition of local) signs and symptoms hernias;

g) score paraclinical researches on the history of the disease;

d) differential diagnosis;

e) principles of surgical treatment of hernias.

3. report of the patient group.

4. Presentation topics mikroreferatov.

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**LITERATURE**

1. Resurrection n.v., Gorelik S.l. Surgery of hernias of the abdominal wall., 1965

2. Evtihov r.m., Putin m.e., Shulutko A.m., etc. Clinical surgery. Publisher group "GEOTAR-media, 2006.

3. Krymov A.p. Abdominal hernia. Kiev, 1950.

4. Kuzin M.i. surgical diseases. Tutorial. M., 2006.

5. Kukudzhanov Ni inguinal hernias. M., 1969.

6. Saveliev v.s., Kiriyenko A.i. surgical diseases. M., geotar-media, 2005.

7. Toskin K.d., etc. Abdominal hernia m., 1983.

8. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-in | 6-a |
| 2-a | 7-b |
| 3-b | 8-d |
| 4-g | 9-b |
| 5-g | 10-a |

**Topic**: "Appendicitis"

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, classification of acute appendicitis;

b) skills training for clinical examination of patients with acute appendicitis;

in) master diagnostic techniques, tactics, first aid at the pre-hospital stage, principles of treatment of patients with acute appendicitis.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: the structure of the anterior abdominal wall, especially in the right iliac region; topography and features of the location of the vermiform process, its blood supply, innervation;

etiology and pathogenesis of acute and chronic appendicitis;

classification of appendicitis (appendikuljarnaja colic, acute (catarrhal, flegmonoznyj, gangrenous), complicated, uncomplicated, chronic;

the clinical picture of acute appendicitis (suddenness of onset, pain in the abdomen, nausea, vomiting), characteristic symptoms (Rovzinga, Sitkovskogo, Obraztsova, Voskresensky, Bartome-Mihelsona, Karavaevoj (kashlevogo Jolt), Joure-rozanova, muscular protection Shchyotkina-Bljumberga, etc.); methods of laboratory diagnosis: inflammatory changes in the overall analysis of blood, urine;

differential diagnosis: with its stomach ulcer, acute pancreatitis, acute cholecystitis, ectopic pregnancy, ileus, renal colic; clinical and evolutive particularities of appendicitis in children, pregnant women, elderly and senile age;

types of operations: typical, atypical (with retrograde removal process, when retroperitonealnom the location of the vermiform process);

indications for drainage of abdominal cavity: with peritonitis, when it is impossible to completely remove the source of infection is the remainder of the Appendix, necrotic tissue in his bed, etc; at a bleeding from his bed, in case of possible insolvency of the seams, pogruzhajushhih Stump Sprouts, at the opening of appendikuljarnyh abscesses, after removing retroperitonealno located process (in this case, it is advisable to drain retroperitonealnuju fiber through kontraperturu in the rear wall of the abdomen); If you suspect the presence of pelvic abscess (Pocket Duglasovom)-an autopsy is performed through the rectum;

keeping the patient in the postoperative period (desintoksicazionnaya, antibacterial therapy), possible postoperative complications (bleeding, peritonitis, suppurating wounds, ulcers, infiltration education of postoperative hernia, etc.), methods of diagnosis, treatment; ability to work and rehabilitation of patients.

It must be remembered that most often complications arise when appendicitis late negotiability of patients for medical care, especially in elderly and senile age and as a result of diagnostic and tactical errors. Such complications include: acute appendikuljarnye infiltrates, abscesses and pelvic abscesses; congestion cancer between loops of intestines, poddiafragmalnye abscesses, pileflebit.

**3. To enter, you need to understand:**

the importance of knowledge of the clinic, appendicitis diagnosis for timely treatment of this frequent and terrible disease.

**4. To enter you must be able to:**

properly and gradually to conduct a survey of the patient (figure out the onset, nature and localize pains, their duration, treatment and testing at the pre-hospital stage);

assess the patient's appearance and behavior, to identify external signs that confirm the diagnosis (visible mucous, skin color, language, lymph nodes);

to hold percussion (identify or eliminate the presence of free fluid in the abdomen), exclude or confirm the existence of tension in the muscles of the anterior abdominal wall, auscultation (presence or absence of peristalsis, determine the characteristic symptoms, confirming the diagnosis of acute appendicitis and its possible complications;

correctly evaluate laboratory data;

based on: complaints, anamnesis, clinical picture, objective examination data, additional research methods, properly diagnose, determine the treatment method, assign the treatment in the postoperative period.

**5. theoretical reference**

**Acute appendicitis** is the most common acute surgical pathology of abdominal cavity organs, polijetiologichno disease.

Multi-faceted disease clinic, so his diagnosis in children, elderly people, pregnant women is not easy.

There is no strictly patognomonichnogo symptom of this disease, so it is necessary to differentiate with a number of other acute abdominal conditions: acute gastritis, gastric ulcer or its 12 duodenal ulcer, acute cholecystitis, acute pancreatitis, renal colic right-handed, ectopic pregnancy, acute ileus, etc.

For acute appendicitis can be complicated: peritonitis appendikuljarnym infiltration, abscess of abdominal and pelvis, pileflebitom and formation of abscesses in the liver that necessitates immediate attention to patients coming from suspected pathology vermiform process;

All patients with abdominal pain and even more so with suspected acute appendicitis must be hospitalized for dynamic observation of surgeons. In obscure and diagnostically difficult cases, it is necessary to actively apply for verification of disease laparoscopy and ultrasound.

**Classification** According to the classification proposed by V.i. Kolesov (1972), the following forms of acute appendicitis:

1. Appendikuljarnaja colic.

2. Simple (superficial) or catarrhal appendicitis.

3. Destructive flegmonoznyj, gangrenous appendicitis:, perforativnyj.

4. Complicated appendicitis: infiltration by appendikuljarnym, appendikuljarnym, pileflebitom, purulent peritonitis, abscess, pelvic mezhkishechnymi by, sepsis, etc.

**The clinical picture** of the disease varied, so surgeons call it the "hameleonopodobnym disease". Acute appendicitis usually starts suddenly, among the full health, with the appearance of pain in epigastria, near the navel, or even across the stomach. Pain accompanied by nausea, one-two vomiting. The pathological process evolves through 2-3 hours or later (this depends on the reactivity) pain shifted right ileum region (p-m Kocher-Volkovich), amplified when walking, irradiiruet in the right leg, right lumbar area.

In the first hours of the disease (with kataralnom appendicitis) patient's condition satisfactory subfebrilnaya temperature ( -37.8 37.4), pulse 80-90 beats/min blood pressure does not change language slightly wet with Belly whitish bloom, not swollen, the front abdominal wall soft participates in the breath, but painful at palpation in the right iliac region. Notes the positive symptoms: Sitkovskogo, Rovzinga, Bartome-Mihelsona.

When flegmonoznom appendicitis patient's condition moderate febrile temperature ( -38.5 38.0), the patient restless, trying less to move. 90-100 Pulse beats/min Language is paved with white bloom is noted by palpation. muscle tension and sharp pain in the right iliac region. Determined by positive symptoms: Karavaevoj, dolina, Sitkovskogo, Rovzinga, V.razdolskiy, Voskresensky, Bartome-Mihelsona, Shchyotkina-obrazcova, Bljumberga.

When gangrenoznom appendicitis condition of the patient is usually heavy. It's sluggish, aims to take a comfortable position so as not to exacerbate the pain in the abdomen, body temperature is 38.5 -39.0  pulse 100-120 BPM, language dry, densely lined with grey touch. Belly breathing practically does not participate, the anterior abdominal wall sharply painful in the right half with a muscle strain dramatically positive appendicitis symptoms and irritation peritoneum (V.razdolskiy, Karavaevoj, Voskresensky, Valley, obraztsova, Bartome-Mihelsona, Shchyotkina-Bljumberga, etc.). Bowel motility is not being heard, gases do not depart. Pronounced phenomenon of intoxication.

Acute destructive appendicitis may be complicated by appendikuljarnym infiltration, peritonitis, asbcessami (periappendikuljarnym, poddiafragmalnym, podpechenochnym, mezhkishechnym, pelvic), pileflebitom, sepsis.

In the diagnosis of acute appendicitis in addition to ascertaining the anamnesis, complaints, patient examination results, in which rectal examination necessarily, have a value of laboratory evidence of the development of inflammatory process, phenomenon intoxication: in the blood rise blood leukocyte and shift left, EMS the ESR. When peritonitis leucocytosis rises to 25-30 x 109/l.

**Differential diagnosis**.

The differential diagnosis of acute appendicitis must hold: with its stomach ulcer and 12 duodenal ulcer, acute cholecystitis, acute pancreatitis, acute ileus, right-handed renal colic, ectopic pregnancy, acute adneksitom.

Perforativnaja gastric ulcer and 12 duodenal ulcer might resemble the clinic of acute appendicitis, starting with pain in epigastria, who then pushed right ileum area. However, unlike appendicitis, if its ulcer pain significantly stronger, "how to kick the knife" (""). In anamnesis in patients with ulcer disease indications. Notes expressed weakness, nausea, stool and gas delay. The general condition of the patient is significantly heavier than in acute appendicitis: facial expression afraid, suffering, position in bed-on the back or on the side of the legs to the stomach (pose "the embryo"). In the first hours of determined aetiology (50-55 beats/min), and then tachycardia. Blood pressure drops to 90/40 mm Hg. The tongue dry, lined with white bloom. Retracted belly (scaphoid), anterior abdominal wall of the abdomen in breathing does not participate, sharply strained-doskoobraznyj "belly". You should always remember about this triad of symptoms: "" pain "," doskoobraznyj "," stomach ulcer history "(Knigina-triad-Mondor). Defines a positive symptom dramatically Shchyotkina-Bljumberga around the stomach. Perkutorno liver dullness is reduced or not defined (a symptom of Spizharnogo). The sloping ground belly taped free liquid. Abdominal x-rays determined free gas in the form of a Crescent strips under right dome diaphragm. In the blood indicated pronounced Leukocytosis with a shift to the left lejkoformuly, high ESR. It should be remembered that through 8-10 hours from the onset of the disease, the pain subsides, the patient noted improvement, but this is an apparent period of "well-being". The phenomenon of increasing intoxication, clinic of peritonitis progresses (language dry, belly swollen, painful sharply in all departments, tachycardia, gases do not depart, no Chair), blood leucocytosis, under fluoroscopy-Bowl Klojbera, no gas bubble. The patient must operate urgently.

Acute cholecystitis frequently resembles a picture of appendicitis, too, starting with upper abdominal pain. This is possible with high, podpechenochnom, location of the vermiform process or during pregnancy, when the Processus pushed back up, as well as with a low bottom location of the gallbladder is "hanging the gall bladder. All of these options are difficult in diagnostic terms.

It should be remembered that the acute cholecystitis usually starts after taking a large amount of spicy and fatty foods, at night, with the appearance of sharp pain, accompanied by nausea and repeated vomiting bile, there is little to facilitate human patient's condition. Move in the right hypochondrium pain and here are localized. Acute cholecystitis frequently suffer from overweight women aged 45-50 years. Typical pain irradiation illusion (which is not in acute appendicitis) in the right arm, shoulder, and nadpleche shoulder. The patients body temperature rises rapidly (up to 38 degrees and above) indicates weakness, malaise. Possible ikterichnost skler and skin when hit by a stone in the common bile duct. The language in the first hours of wet, then dry and covered with brownish touch. The belly is not swollen by palpation of the anterior abdominal wall indicated expressed pain and muscle strain in the right podreberie, where one can often detect testovatoj consistency-the bottom seal of the gall bladder. Determined by positive symptoms Ortner, Murphy, Kera, Zaharin, Mussy-St George, Shoffara, Baking. The expression of the process in the right podreberie observed protective muscle tension. In the peripheral blood leucocytosis is detected with a shift to the left lejkoformuly, high ERYTHROCYTE SEDIMENTATION RATE, raising cium (which does not happen with appendicitis). When ULTRASOUND: detects gallstones, lamination and other signs of hitting the wall of the gallbladder.

Acute pancreatitis is also characterized by the emergence of pain in epigastria, but unlike the appendicitis pain intensity significantly stronger. Pain radiating to the back, worn shingles nature. Precedes the pain syndrome diet-drinking large amounts of spicy and fatty foods, and alcohol.

Pain syndrome accompanied with acute dispepticheskimi disorders in the form of nausea and repeated, not facilitate, vomiting. The condition of patients with progressive deteriorating: the skin of the face is pale grey, dry language, with greyish-Brown. The abdomen is moderately swollen bowel motility is weak or not listening, not depart-the phenomenon of dynamic ileus. Defines the positive symptoms of the resurrection, Kerte, Mayo-Robson, Shchyotkina-Bljumberga, Cullen,-Mondor, Grey-Turner. Marked by shortness of breath, tachycardia, reduction in blood pressure.

When the laboratory examination blood leucocytosis is detected with the lejkoformuly shift to the left, high ESR. In biochemical research-hyperglycemia, gipocalziemia, increased blood amylase. Growing up to high numbers (512.1024 etc.) urinary incontinence. If ULTRASOUND detected the characteristic signs of acute pancreatitis, often liquid in sealing the bag and the abdominal cavity. When rentgenoskopicheskom study is determined by the reduction of trips of the diaphragm, the presence of fluid in the peritoneal and pleural cavities.

Acute intestinal occlusion have to differentiate from acute appendicitis, in cases where the pain is localized in the right abdomen, e.g. when ileum intussusception in blind (often children). There is the emergence of pain shvatkoobraznogo character, nausea, vomiting, a delay of flatus and stool. The belly is usually swollen, but there is no abdominal palpation of its tension. In the ileocecal region is defined by maloboleznennoe, kolbasovidnoe mobile education-invaginat. Percussion of the abdomen-timpanit. Quite often when rectal study find mucus with blood-symptom of "raspberry jelly.

Acute intestinal obstruction in adults is usually preceded by diet, for example-receiving abundant, rough food after the preceding fasting. Therefore, acute intestinal obstruction, especially stranguljacionnuju, called "disease wars". History can be abdominal operation.

Bowel obstruction can be caused by a tumor, helminthic invasion, the inversion of the intestines, uzloobrazovaniem or invaginaciej. Patients complain of sharp, cramping in the abdomen without explicit localization, nausea, vomiting repeatedly. In the final stage in the development of peritonitis, vomiting is "kalovyj". For intestinal obstruction characterized by asymmetric bloating, lack of stool and gas. Determined by positive symptoms Valya, Hose, Sklyarov (succussion), Spasokukockogo, Obukhiv hospital. When the review of abdominal radiography detected Bowl Klojbera.

Renal colic. Typical for right-handed renal colic is a sharp pain in the lower back, irradiirujushhaja in his right groin, restless patient behavior, frequent urination with rezju and pain in small portions with an impurity of blood. By palpation-pain along the course of the ureter. Positive symptom of Pasternackogo. Symptoms of irritation of the peritoneum. In the urine-protein and fresh blood. X-rays of the kidneys and ureters-shadows of concrements. When hromocistoskopii is delayed or even indigokarmina selection facility. ULTRASOUND: stones are detected and symptoms of renal hypertension.

Ectopic pregnancy, unlike acute appendicitis is characterized by strong, sharp pains in the abdomen above the vagina accompanied by dizziness, weakness, nausea, vomiting, transient fainting episodes. Notes the delay in menses, bleeding from the vagina. The skin is pale. Frequent heartbeat, weak content. Blood pressure lowered. The abdomen is moderately swollen, not involved in the Act of breathing. Can be determined by voltage recti. Positive symptom Schetkina-Bljumberga. Percussion-free fluid in the abdominal cavity. Puncture of posterior FORNIX confirms or excludes the diagnosis of ectopic pregnancy. ULTRASOUND: a free fluid in the abdominal cavity (blood).

Acute adnexitis as acute appendicitis is characterized by lower abdominal pain, fever. Unlike with pain disorders, appendicitis radiating in the sacrum, the lower back. In history there are indications on the menstrual cycle or postponed earlier inflammatory disease of appendages. By palpation tenderness is defined at the bottom of the abdomen on both sides. Muscle tension is often missing. When the vaginal inflammatory tumor detected study appendages, which is closely related to the uterus. Defines a positive symptom Promptova-pain when sometimes the uterus during vaginal or rectal. Can be determined by positive symptom Zhindrinskogo-reducing pain in the right iliac region when you change the status of the patient (from a lying position in sitting position).

Sharp appendikuljarnye infiltrates and abscesses. Infiltrates appear on 3-5 the day of the attack of appendicitis. Acute abdominal pain disappear, or remain small, blunt, pulling pain in the right iliac region, body temperature becomes normal or subfebrile, belly soft in the right iliac region is determined at first unclear, fuzzy contours, seal, which later becomes denser, with clear contours. Under the influence of the treatment of pain and the size of the infiltration gradually decrease and finally stop the lesions. Amid the usual flow of infiltration in some patients remain signs of irritation of the peritoneum, etc. symptoms of appendicitis, infiltration increases in the blood is high Leukocytosis with left shift-picture illness progresses, a appendikuljarnyj abscess. Patients undergoing inflammatory infiltration, after its resorption better operate via 2-3 month after discharge. Patients with appendikuljarnym by need to operate only under anaesthesia. Access in this localization vnebrjushinnyj ulcer, closer to the wing of ilium (Ni Pirogovu), so that the contents do not fall into the free abdomen. If the process lies in the abscess cavity freely, then it must be removed. If the Processus immured spikes, then look for it does not follow, as in swollen tissues easily damage the bowel wall or vessels. Abscess cavity should drain the swabs and tubes. Patients in the postoperative period is assigned dezintoksikatsionnaya, oxisept therapy. Tubes are removed at 4-5 and tampons-7-9 day.

Pelvic abscesses formed: in process in the pelvis, in the normal process of the location where the content flows into purulent pelvis and there osumkovyvaetsja, if nagnoenia accumulated during operation exudate or blood, as a result of remaining? ATEC pus after purulent peritonitis.

Abscess formation on average ranges from 5 to 25 days from the beginning of the attack of appendicitis. Clinic pelvic abscess manifests itself at the beginning of frequent and painful urination, faster liquid stool, sometimes tenezmami, marked abdominal pain above the vagina, increases body temperature, the temperature difference between the armpit and rectum instead of 0.2 -0.5aboutwith reaches 1.1 -1.4aboutwith important diagnostic value study is through the rectum, which indicated a relaxation of the sphincter anus first, soreness of the anterior wall of the rectum, then bulging and is determined by infiltration, and then, in one of his sites appears softening, body temperature takes a hectic nature is said that ulcer you want to open. Puncture the abscess is only valid when obvious signs of a festering, just before opening the abscess to refine its localization. When prompted you must open ulcer fluctuations through the rectum or the vagina in women.

Accumulation of pus in destructive appendicitis may be between loops of intestines. At the beginning of the formation of abscess overall patients suffers a little. Then a high body temperature, high Leukocytosis with left shift, palpable infiltration in any area of the abdomen. When you see the first infiltration hold conservative treatment and further examination (review a snapshot of the abdominal cavity ultrasound) (expectant management). When deterioration, fluctuations, other symptoms that indicate an abscess is shown his autopsy under anesthesia and draining.

Poddiafragmalnye abscesses. Almost half of the cases poddiafragmalnye abscesses are appendikuljarnoj etiology (according to K.p. Sapozhkova). Diagnosis of poddiafragmalnyh abscesses are hard. Usually through various dates after the operation signs abscess-pain in the early uncertain localizations, then move in the right podreberie, amplified when inhaling, often appears a dry cough and left friendly Pleurisy. At pressing on the area of the lower rib soreness appears (symptom Kryukov), expressed cases noted, she has mezhreberij the flatness of the hypochondrium liver radiographically detected sometimes gas bubble with liquid level-abscess, restriction of mobility right dome diaphragm or paradoxical mobility when breathing, when during inhalation a diaphragm on the right rises and descends to the left and appear friendly Pleurisy. Poddiafragmalnogo puncture the abscess may not always be successful. For the opening of gnanikov poddiafragmalnogo space is most useful for access vneplevralnyj A.v. Melnikov.

Pileflebit is one of the most serious complications of acute appendicitis, although perforativnom encounters when appendicitis is rare (approximately 3% of cases). It is purulent thrombophlebitis Portal vein with the formation of abscesses in the liver, leading to sepsis. The disease starts with pain in the right podreberie, stunning oznobov, fever, reaching 39-40onc, with daily razmahami in 1-2aboutwith a person of the patient becomes pale, his sharpened, grows and becomes painful liver, appears ikterichnost skler, skin. With a substantial violation of the outflow through the portal vein to the liver develops. Anterior abdominal wall usually is not strained, symptoms of irritation of the peritoneum is not expressed, is noted in some patients diarrhea. Pileflebit makes the prognosis for life is very serious. Treatment should be complex (dissection of abscesses of the liver, massive dezinoksikacionnaja, antibacterial therapy, blood transfusions, plasma, vitamin therapy, the use of intra-and extracorporeal detoxification techniques). Mortality is high. Patients die from developing Hepatorenal failure.

**Treatment** appendicitis only surgical (emergency operation)-appendectomy.

**6. Self-study in extracurricular time** (preparation for practical occupation).

a) **annotated list of questions on the subject of the lesson:**

The definition of "acute abdomen"-"acute appendicitis.

Classification of acute appendicitis. Especially the location of the vermiform process, the structure of its wall.

Causes of acute appendicitis.

Clinic: appendicitis especially the beginning and course of the disease.

Main symptoms of acute appendicitis (Kocher-Volkovich, Sitkovskogo, Voskresensky, Rovzinga, V.razdolskiy, Karavaevoj, Bartome-Mihelsona, Obraztsova, dolina, Rizvasha, Shchyotkina-Bljumberga, etc.).

Features of acute appendicitis in children, the elderly and pregnant women.

Differential diagnosis of acute appendicitis with:

its ulcer of the stomach or duodenum 12;

acute gastritis;

acute cholecystitis;

acute pancreatitis;

right renal colic;

ectopic pregnancy;

acute ileus.

The role of laparoscopy and ultrasound in differential diagnosis of acute appendicitis.

Complications during acute appendicitis (peritonitis, appendikuljarnyj infiltrate, abscesses in the abdomen, pelvis, pileflebit).

Medical tactics at a prehospital stage in patients with acute abdomen clinic (acute appendicitis).

Examination of patients with suspected acute appendicitis.

Methods of treatment of acute appendicitis.

b) **Written homework:**

Presented in the form of diagrams or tables:

characteristics and location of the vermiform process;

classification of acute appendicitis;

survey methods of patients with acute appendicitis;

the differential diagnosis;

complications of acute appendicitis;

methods of operative treatment of acute appendicitis.

**Tests for self-control quality home training:**

1. For acute appendicitis is not characterized by the symptom:

a) Rovzinga

b) Resurrection

in) Murphy

g) Obraztsova

d) Bartome-Mihelsona

2. peritonealnym in acute appendicitis symptoms include:

and) Resurrection (symptom of "shirt")

b) Schetkina-Bljumberga

) V.razdolskiy

g) all these symptoms

d) none of these

3. acute appendicitis should be differentiated with all listed diseases, except:

a) paraodontita

b) acute pancreatitis

in) acute Gynecologic diseases

g) acute gastroenteritis

j) right-handed renal colic

4. Clinically acute appendicitis may be adopted for:

a) salpingitis

b) acute cholecystitis

in) ectopic pregnancy

g) any of these types of Pathology

5. To diagnose acute appendicitis does not apply:

a) palpation of abdominal wall

b) blood test

digital rectal examination)

g) irrigoskopiju

d) vaginal research

6. Contraindication emergency appendectomy is:

a) appendikuljarnyj infiltration

b) myocardial infarction

in the second half of pregnancy)

g) hemorrhagic Diathesis

d) spilled peritonitis

7. Typical complications of acute appendicitis are all, except:

a) appendikuljarnogo infiltration

b) periappendikuljarnogo abscess

local peritonitis)

g) spilled peritonitis

d) obstructive jaundice

8. For the diagnosis of acute appendicitis used methods:

s) laparoscopy

b) blood test

rectal examination)

g) thermography

d) all of the above is true

9. Acute flegmonoznom appendicitis symptom is not observed:

and Schetkina-Bljumberga)

b) Bartome-Mihelsona

in) Kocher-Volkovich

g) George-Mussy

10. appendikuljarnogo infiltration are all Symptoms except:

a) subfebrile temperature

b) symptom Rovzinga

) profuzhnykh diarrhea

g) Leukocytosis

d) palpiruemogo opuholevidnogo education in the right iliac region

**7. Independent work in the practice session:**

1. different levels of situational tasks Solution absorption.

2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) medical history of disease

in) assessment of the overall condition of the patient

g) definition local signs and symptoms

d) score paraclinical examination methods (history)

e) conclusions on the diagnosis

Yo) differential diagnosis

f) treatment definition

w) principles of conservative and surgical treatment.

3. report of the patient group.

4. Read and parse the radiographs.

5. Presentation of the themes mikroreferatov.

**8. Venue of the sessions:**

1.the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**LITERATURE**

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial m., 2006.

3. Savelyev V.s. Guide to emergency abdominal surgery m., 2004.

4. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial t. 1-2, m., geotar-media, 2005.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-in | 6-a |
| 2-g | 7-d |
| 3-a | 8-d |
| 4-d | 9-g |
| 5-g | 10- |

**Theme classes** : "Peptic ulcer and 12 duodenal ulcer

and its complications "

**1. the purpose of the practice:**

a) assimilate memory playback level causes, pathogenesis, clinical course of gastric ulcer and 12 duodenal ulcer;

b) algorithm for examining and treatments of major complications of the disease (perforation, piloroduodenalny stenosis, bleeding malignant transformation, penetration).

**2. To enter, you need to know:**

of course, normal and topographic Anatomy, Clinical Physiology: Anatomy and physiology of the stomach and duodenum, 12 features of their blood supply and innervation;

of course private surgery: causes, classification of stages of stenosis severity of blood loss, and course development stages of perforation; clinical manifestations of the major complications of peptic ulcers;

obshheklinicheskogo methods and instrumental examination of patients; the differential diagnosis of diseases during which may arise related complications (Mallory-Weiss Syndrome, gastric cancer, lung cancer, acute abdominal disease).

**3. To enter, you need to understand:**

pathogenesis of common and local irregularities arising in the course of peptic ulcer disease and its complications and methods of correction.

**4. To enter you must be able to:**

gather the complaints and history;

plan and conduct a survey of patients with peptic ulcer disease and its complications;

analyze the information received;

outline the methods of treatment in accordance with the nature of the detected pathology.

**5. Theoretical reference**

(I) . GASTRODUODENAL BLEEDING

Acute gastrointestinal bleeding (HMO) is a complication of many diseases of the gastrointestinal tract, gastric ulcer and 12 duodenal ulcer accounts for up to 75-80% of bleeding. It is essential to distinguish between bleeding ulcerative nejazvennogo and Genesis. To nejazvennym reasons include: varicose veins of the esophagus varices in portal hypertension syndrome, Mallory-Weiss reaction, disintegrating tumors of the stomach, hemorrhagic gastritis. Intestinal bleeding can be observed: when nonspecific yazvennom kolite, bruchnom tife, jekzofitnoj colon tumors, blood diseases nature (haemophilia, the disease Verlgofa), arsenic poisoning, acids and alkalis.

**The clinical picture** is characterized by CHRONIC RECURRENT vomiting with admixture of blood or coffee grounds», «degteobraznym» liquid stool (Melena), general weakness, dizziness, loss of consciousness, until rising paleness of the skin and mucous membranes membranes. It is accepted to allocate three degrees of severity of acute HMO-mild, moderate and severe, which is primarily determined by subjective and objective condition of the patient, the degree of tachycardia and the level of blood pressure (BP). So when krovopotere to 500 ml (light), the patient's condition does not change significantly, appears weak in physical exertion, tachycardia up to 100 beats/min, systolic hell not below 100 mm Hg. Blood loss from 500 ml to 1 litre determines average severity: appears sharp paleness, dizziness, noise in the ears, "flies" flickering eyes, patients sometimes lose consciousness. Pulse rate 100-120 BPM, content and voltage decreases the radial artery, sometimes the pulse is defined only in the area of the carotid arteries, hell progressively reduced from 100 to 80 mm Hg. With severe blood loss (more than 1 liter) patient's condition heavy or extremely heavy, lost consciousness, paleness, pronounced facial features seen with an earthy undertone tachycardia greater than 120 beats/min, systolic HELL below 80 mmHg, diastolic could not be determined.

Bleeding from ulcers stomach or duodenal ulcer 12 is the most common cause (75%) gastroduodenal bleeding.

On clinical flow distinguish latent and clear (c) bleeding. Hidden hemorrhage manifesting weakness, reduced working capacity, drowsiness, fatigue, paleness of the skin and mucous membranes. Patients often within a few days or even weeks long do not seek medical help. And only the appearance of the black stool causes them to come to the doctor. In a survey of their peripheral blood detected signs of gipohromnoj anaemia (decrease in hemoglobin, gematokrita, the number of red blood cells, color) and in the study of Kala-positive reaction Yens Gregersen collection. On EXAMINATION detected ulcer.

Most patients indicates that there is a history of ulcer symptoms of peptic ulcer disease (heartburn, pain, vomiting, etc.). For the clinical picture is characteristic of bleeding ulcer explicitly peculiar symptom: increased pain attack before the bleeding followed by rapid stihaniem-symptom Bergman (effect of acid alkali content stomach, blood streamed) and vomiting "coffee grounds". There are common symptoms of blood loss (hypotension, tachycardia, tarry stools (Melena). Severity of symptoms of acute blood loss depends on the amount of foregone blood, intensity and duration of bleeding. The patient is pale, concentrated, a person afraid. He is afraid to move, so as not to cause resumption of vomiting blood. A person can be (with considerable krovopotere) shrouded in cold, sticky afterwards. Frequent heartbeat (100-120), soft, hell is reduced (80-90 mmHg), the language of the humid, almost always with white bloom, often on the lips, tongue and gums are visible the remains of bloody vomit. The belly is not swollen, the front abdominal wall is soft and practically painless in all departments.

In the study of peripheral blood detected by lower hemoglobin, gematokrita, the number of red blood cells, a color indicator. The number of platelets is normal. In patients with bleeding ulcer extension is missing gemorroidalnah veins and veins of the anterior abdominal wall, as portal hypertension syndrome complicated with bleeding from esophageal varices. Preceding intoxication and growing stomach cancer are inherent, cachexia and gastric ulcer and 12 duodenal ulcer, they have not been observed. Finally determine the source of the bleeding allows EXAMINATION, during which the canker is found or swelling, rupture of mucous or esophageal varicose veins of the Cardia.

**Differential diagnosis**.

The differential diagnosis should be carried out: Mallory Weiss Syndrome, bleeding in stomach cancer, portal hypertension syndrome, haemorrhagic gastritis jerozivnym, Verlgofa disease, pulmonary hemorrhage.

Mallory-Weiss Syndrome occurs more commonly in perfectly healthy people as a result of the sharp increase of intragastric pressure (when strong vomiting associated with poisoning surrogates alcohol, hypertensive crisis, epilepsy, seasickness). Bleeding occurs when rupture of mucous membranes and other segments of the Cardia of the stomach. Unlike bleeding ulcer bleeding main symptom in this case will be vomiting, gastric contents unchanged initially and then see the vomit, blood veins and "coffee grounds". There is no ulcer history. When EXAMINATION identifies erosion breaks the Cardia of the stomach Mucosa, the absence of ulcers.

Bleeding in stomach cancer in the majority of cases observed in the later stages, when the breakup and izjazvlenii tumors. Unlike ulcers, stomach cancer is more often observed: old age patients, progressive weight loss and cachexia, increasing weakness, belching rotten. May palpirovatsja Nodular swelling in the stomach, projection determined by metastases in the left supraclavicular region (Virchow), navel (Joseph metastasis), cystic-prjamokishechnoe deepening (Schnitzler), ovary (Krukenberga).

     Profuznomu bleeding in stomach cancer is preceded by a period of latent haemorrhage and anaemia patient. When EXAMINATION detected dense bugristoe education, bleeding, fragmentirujushheesja. The final verification of the diagnosis is carried out when the biopsy and histological biopsy.

Portal hypertension syndrome is characterized with splenomegaly, abdominal "dropsy", violation of venous blood outflow, and consequently expansion of portokavalnyh anastomosis. Bleeding occurs when breaking varikozno expanded veins oesophagus and bottom of the Cardia of the stomach. There is a massive, boisterous, bleeding mouth full, practically unchanged. While ulcerative bleeding more often "coffee grounds". At a bleeding from varikozno expanded veins oesophagus lacks ulcerative anamnesis. Visually zheltushnye skin, there are "spider veins", "liver Palms", expansion of subcutaneous abdominal veins as "head of Medusa", palpable enlarged liver and spleen, is determined by the free fluid in the abdominal cavity (ascites) data there are no changes in gastroduodenalnom bleeding ulcer Genesis. In jezofagogastroskopii there has been an increase in esophageal and gastric kardiii, the absence of ulcers.

Hemorrhagic erosive gastritis develops against the backdrop of chronic gastritis with the formation of the erosion of the stomach lining. In some cases it occurs against the background of the prolonged use of medicines (Steroidal and non-steroidal anti-inflammatory drugs, hormones crust napochechnikov). Differential diagnosis is based on the absence of ulcer history and objective signs of ulcers. Bleeding with hemorrhagic gastritis has the character of a "coffee grounds", noted black Chair. However, unlike ulcerative bleeding weakness does not comes to collapse, because bleeding is usually not profuznogo nature. The most reliable method of research, allowing to differentiate this bleeding is gastroscopy study, which gives the opportunity to discover the erosion of the stomach lining.

Verlgofa disease is more common in women at a young age. Unlike gastric ulcer and 12 duodenal ulcer detected bleeding in the skin ("spotted" disease), bleeding of mucous membranes (nose, gingival, etc.). Characterized by changes in the blood: thrombocytopenia, coagulation time and duration of bleeding, impaired blood clot retraction. Unlike ulcerative, bleeding disease Verlgofa is not sharp and not accompanied by collapse, exposing the positive symptoms-plucking and tow. When fibrogastroscopy not detected ulcers in the stomach or intestine ulcer 12.

Pulmonary bleeding heart diseases observed with symptoms of stagnation in the small circle of blood circulation, in destructive lung diseases (tuberculosis, abscess, lung cancer, bronchiectasis). Unlike the ulcer, gastrointestinal bleeding, pulmonary cough begins with a first allocation of veins blood in the sputum, and then red blood mixed with air bubbles, accompanied by pronounced shortness of breath, cyanosis, no vomiting and Melena. When radiography of thorax organs detected pockets of destruction of lung tissue, lung cancer with the collapse, increasing heart borders.

**Treatment.** Gastroduodenal bleeding may be conservative in mild and severe blood loss (Hemostatic therapy, argon plasma coagulation of bleeding ulcers, clipping bleeding blood vessels, etc.) and operational with heavy and recurrent bleeding (flashing of a bleeding ulcer, gastric resection, excision of a bleeding ulcer with vagotomiej).

II. PERFORATED GASTRIC ULCER and 12 duodenal ulcer

Perforation or CPMSR-sharp violation of the integrity of the lining of the stomach or duodenum 12.

CPMSR occurs in 12-14% of cases the flow of gastric ulcer and 12 duodenal ulcer. Perforating ulcers occur more often in men than in women.

**Classification**. Clinically distinguish:

1. acute CPMSR in free abdominal cavity with the formation of widespread peritonitis;

2. CPMSR with formation of abdominal abscesses delineated areas;

3. atypical CPMSR in nearby hollow organs or retroperitoneal space kletchatochnoe;

4. injury CPMSR.

**The clinical picture** includes three periods:

a) Jet, shock-a period of sudden sharp pain response, sympathoadrenal system voltage expressed the reaction of peritoneum; b) imaginary well-being;

in the present progressive) peritonitis.

In the early hours of the perforation occurs sharp "" "pain is characterized by: a forced position the patient on his side, hunched over, with preloaded to belly legs (" embryo "pose), aetiology and hypotension (due to vagus nerve irritation). You should be aware of the triad-Knigina-Mondor ("pain, ulcerative doskoobraznyj anamnesis, abdomen). 2-6 hours later, due to the chemical (abakterialnoj) phase of the bacterial peritonitis, reduced pain response, belly becomes softer. Subjective patient notes "improvement" and sometimes it can serve as a diagnostic error in interpretation of the clinical symptoms. Especially the one period when well-being covered perforation of the imaginary, as is fully able to abate the pain and only at deep palpation indicated rigidity in the upper right quadrant of the abdomen (symptom Ratner-Wenner). In a subsequent progresses intoxication, signs of paralytic ileus (bloating). During all periods of its development of ulcers in the stomach detected by palpation Shchyotkina symptom:-Bljumberga and perkutorno symptom Spizharnogo. When perforation of ulcer in zabrjushinnuju tissue there is retroperitoneal abscess triad of symptoms: soreness and stiffness in the lumbar region, sponginess integument and thickening of the skin folds in the lumbar region, scoliosis in the direction of formation the abscess. While painting the belly for a long time remained calm and true diagnosis sometimes cannot be determined only after ljumbotomii.

The most informative in the diagnosis of probodnoj ulcer is review radiography (Scopy) abdomen, where taped free gas in the form of a Crescent strips under right dome diaphragm. If this symptom screening with a view to establishing the diagnosis of resorting to receive Mayo (introduction of air into the stomach through the probe) or ESOPHAGOGASTRODUODENOSCOPY (with subsequent verification review radiography of abdominal cavity) or runs diagnostic laparoscopy. Perforativnaja ulcer is subject to immediate surgical treatment.

**Differential diagnosis**.

The differential diagnosis should be: with severe appendicitis, acute cholecystitis, acute pancreatitis, liver colic, acute violation of mezenterialnogo circulation, myocardial infarction.

Acute appendicitis is characterized by initially moderate pain in the epigastria followed their migration into the right area of the ileum (a symptom of Kocher-Volkovich). Patients for a long time may be satisfactory. In a survey of belly pain localized in the right iliac region are positive symptoms, V.razdolskiy Rovzinga, Sitkovskogo, Karavaevoj, Bartome-Mihelsona, etc. Under fluoroscopy no free gas in the abdominal cavity. When questionable clinical picture issue is resolved in favor of the execution of diagnostic laparoscopy.

Acute cholecystitis is thicket sick women with overweight, pain associated with an accuracy in the diet in history can reveal a jelchnokamennouu disease. Characterized by pain in the right podreberie, defining positive symptoms Ortner, Murphy, Kera, Zaharin, sometimes palpable enlarged painful gallbladder. Typical multiple vomiting bile not bringing relief that little is typical for perforation of the stomach or duodenum 12. If ULTRASOUND detected the stones increase and thickening of gallbladder wall.

Acute pancreatitis-like perforativnaja ulcer with pain in epigastria, but they are gradual, incremental, not have a sudden "kyndzhalnyy on" character, and surround. Characterized by multiple, painful vomiting, not inherent in its throat, swelling of the upper half of the abdomen. Identify symptoms Kerte, Mayo-Robson, Resurrection, with progression of pancreatic necrosis can be determined by "color" Symptoms-Cullen, Grey-Turner-Mondor. When UZI pancreas increased, dense, jehostruktury can be detected by a free liquid in sealing the bag. In the analysis of urine-increased diastazurija. In cases of doubt, have resorted to diagnostic laparoscopy.

Renal colic is characterized by sudden intense pain in the lumbar region radiating into the back, groin and genitals, dizuriei. Patient restless, rushes. In contrast, the patient with its ulcer takes a forced position and is pursing the legs to the stomach. Stomach in case of renal colic most often mild, sometimes seen psevdoperitonealnyj syndrome, which disappears after the novokainovoj blockade of the spermatic cord on Lorin-Jepshtejnu or introduced the embargo. In the analysis of urine-hematuria, when renal ultrasound-uretrogidronefroz, the shadow of concrements. Sometimes justified hromocistoskopija, intravenous urography. Diagnostic laparoscopy is rarely used.

Acute mezenterialnogo blood circulation (ACCD) occurs suddenly and desperately, similar to its ulcer. However, this is against the backdrop of a soft abdomen, missing the aetiology. Patients are restless, tossing from the pain. Characteristic identification in history and clinically atrial fibrillation or, less frequently, other pathology of the cardiovascular system. Quickly accrues bloating, decrease, and then the lack of peristalsis of the bowel, the expressed intoxication. In the analysis of blood-giperlejkocitoz with toxic shift. While maintaining and increasing pain in the first hours of shows a diagnostic laparoscopy in order, firstly, to exclude perforation of a hollow body, and secondly to determine the condition of the intestines and the need for surgical intervention.

Myocardial infarction (abdominal, gastralgicheskaja, form) is more common in elderly people suffering from IBS. The overall condition of the grave. Pulse frequently, aritmichnyj. Lowered blood pressure. Heart tones deaf. There is no tension and pain during palpation of the abdomen. ECG-symptoms of ischemia and myocardial necrosis. Treatment and monitoring of ECG in the conditions of intensive care and resuscitation. Diagnostic laparoscopy is used in very rare cases, when a very strong suspicions of abdominal catastrophe (increase of Leukocytosis, tension and defense muscles of the abdominal wall, the presence of abdominal ULTRASOUND when free liquid).

**Treatment.** Perforativnaja ulcer is an absolute indication for emergency operations. It might be needles perforation in the presence of peritonitis, excision of ulcer with its vagotomiej, 2/3 resection of the stomach, when the perforation does not exceed 2-4 hours and the patient's condition allows it to run.

III. PILORODUODENALNY STENOSIS

Piloroduodenalny stenosis-the narrowing of pyloric Department of stomach or primary Division 12 duodenal ulcer. This complication occurs in 10-40% of patients with peptic ulcer. The cause of piloroduodenalnogo stenosis often are 12 ulcers duodenal ulcer, rarely prepiloricheskie ulcers and sores pyloric Canal.

Pyloric stenosis is one of the 5 complications of gastric ulcer and 12 duodenal ulcer (perforation, penetration, bleeding, stenosis, malignant transformation).

**Classification**. Depending on the time of occurrence and severity, distinguish three stages: stenosis

1. compensated stenosis

2. subkompensirovannyj stenosis

3. Decompensated stenosis

**The clinical picture**. Patients with piloroduodenalnam stenosis have complaints of fatigue, exhaustion, multiple vomit stagnating gastric contents that brings temporary relief. They often cause vomiting. Phase compensated stenosis symptoms are not expressed, the sick note only the feeling of overcrowding in the stomach, gravity epigastrii. This is accompanied by heartburn, belching acidic. In phase subkompensirovannogo stenosis symptoms increase, belching acquires an unpleasant odor of rotten eggs. Periodically bother colicky pain associated with gastric peristalsis, progressing the weight loss process. In Decompensated phase of stenosis patients dramatically depleted, the skin is dry, skin fold thinned. Dehydration and electrolyte loss resulted in severe condition, up to the development of adinamii and klonicakih convulsing. Vomited mass become malodorous nature and contain the decomposing mass food, eaten the day before. A typical symptom of abdominal examination is "succussion" in the stomach, detected on an empty stomach. The contours of a large curvature of the stomach is defined far below physiological borders, up to gipogastrija. Motility of the stomach auskultativno not heard (atony stomach). There has been a small and frequent pulse, low blood pressure, but because of violations vodno-elektrolitnogo balance-gipokaliemia, gipohloremia, metabolic alkalosis, decreased urine output. Potassium loss leads to violation of cardiac activity, decreased tonus of vascular wall. When alkaloze plasma ionized calcium level decreases, resulting in changed neuromuscular excitability, and in severe cases, develops gastrogennaja tetany: General convulsions, Lockjaw, mixing fingers hands (hands symptom obstetrician» Trousseau), twitching facial muscles when pokolachivanii in the area of the trunk of the facial nerve (a symptom of Hvosteka). Gipohloremicski alkaloz gipokaliemicheskij and combined with increasing azotemia, that plagued the overall condition of the patients.

When conducting an x-ray of the stomach with barium observed phenomenon gastrostaza, delays evacuation of barium from the stomach up to 6:00 (compensated stenosis), to 12-18 hours (subkompensirovannyj stenosis) and more 12:00 am (Decompensated stenosis).

**Differential diagnosis**.

Differential diagnosis between ulcerative origin stenosis and stenosis in the patients with gastric Division output.

In patients with ulcerative pyloric stenosis has a long history of origin of chronic recurrent ulcer, seasonality of exacerbations (spring-autumn), a characteristic relationship with meal-pain: hungry or appearing after 15-30 minutes After eating, wearing, non-persistent circadian rhythm. May also be familiar with the instructions earlier endoscopy stomach and 12 duodenum with ulcer detection. By palpation of the left nadkljuchichnoj area and the digital rectal study pathological infiltrative entities do not. When EXAMINATION detected chronic ulcers, stenozirutaya and distorts the gatekeeper and 12 duodenum, while the biopsy no atypical cells.

Unlike ulcerative, tumorous nature stenosis has a shorter history. Faster depletion occurs. Identifies small clinical symptoms "A.i. Savitsky: reduced efficiency, progressive weight loss and emaciation, refusal of food, particularly meat and fish, fatigue, etc. Pain, in contrast to ulcers, in the beginning is missing, and then acquires a dull, constant, not removed inflammatory drugs. By palpation taped tight, tumorous formation in the projection of the stomach, malopodvizhnoe or not smeshhaemoe. Can be identified in pleural foci navel (Joseph metastases) node in the left pane nadkljuchichnoj (Virchow), in the area of Douglas Pocket (Schnitzler), ovary (Krukenberga). When an ULTRASOUND of the liver, spleen and paraaortalnoj zones identifies the metastatic foci infiltrative.

X-ray of the stomach with barium in stenozirujushhem stomach cancer gives a characteristic picture of symptom "Hourglass".

Additional diagnostic step is endoscopic examination of the stomach with biopsy. Cytological biopsy detected atypical cells. These changes are not typical for stenosis of ulcerous etiology. Often resolve the question definitively about the nature of piloroduodenalnogo stenosis, (chronic, kalleznaja ulcer or cancer) is very difficult. In this case, perhaps the application of diagnostic laparoscopy or laparotomy, in which emergency doctor study on biopsied material is determined by the operabelnost and the amount of intervention-radical- gastrectomy, gastrectomy, or palliative, draining the stomach operation.

**Treatment of** piloroduodenalnogo stenosis may be conservative (in the stage of compensation, subcompensation) and operational with декомпенсированном stenosis.

IY. PENETRATION OF ULCER

Penetration of ulcer-peptic ulcer complication in the form of the proliferation of destructive process from the wall of the stomach or duodenum 12 in thickness of a neighbouring authority-the head of the pancreas, the liver the duodenum bunch, small gland. Possible penetration of canker not only in these organs (most often), but also the liver, gallbladder, colon cross with internal Fistula formation and bryzhejku of the transverse colon.

**Classification**. In the process of building penetration into three stages:

1. vnutristenochnoj peneracii;

2. phase of fibrous adhesions;

3. stage of complete penetration to a nearby organ.

**The clinical picture of** penetration develops gradually, long. The main sign of ulcer penetration is to change the rhythm of pain-she takes a permanent character. And it reflects the more often the body defeats clinic in which penetriruet ulcer. So, if the pain localized over the navel, in the left hypochondrium and worn shingles character irradiiruja in the left lumbar region, penetriruet ulcer in the pancreas.

If the patient perform x-ray examination 12 a stomach and duodenum with barium, then detected deep niche "beyond the body. EXAMINATION for suspected penetration is usually not performed since the introduction of air into the stomach and raising it is possible to pressure breakaway area of penetration from the neighbouring authority and the emergence of the perforation, which would require the immediate operational treatment. Penetration of ulcers in hollow organ, usually leads to pathologic and soustja between the stomach and rectum, colon cross-12 duodenal gut and a bilious bubble. Clinically, it has been accompanied by pain in the projection of the affected organ, the appearance of vomiting with detachable or intestinal jelchew. X-ray investigation with barium or other contrast medium reveals its getting into cross-colon through fistulas or horizontal fluid level with gas (a symptom of ajeroholii) in the projection of the gallbladder with receipt of barium in gall bladder.

When penetration 12 ulcers duodenal ulcer in renal and hepatic duodenal bunch noted the appearance of obstructive jaundice due to compression and deformation of the common bile duct, violations of passage of bile into the duodenum 12. Clinically, this is reflected increasing pains in the right hypochondrium, nausea, vomiting, increased body temperature, pozhelteniem mucous membranes and skin, darkening of urine and light-colored feces. If ULTRASOUND indicated expansion in diameter of the common bile duct, change its contours due to compression of the penetrating ulcer. Penetration of ulcers in the retroperitoneal space usually occurs when its localization in "weak" areas 12-duodenum-not covered by peritoneum (rear panel). Clinical symptoms of this complication is characterized by symptoms of severe purulent-septic process (expressed intoxication, weakness, sweating, fever, shivering, pain in the lumbar region, anemia, high Leukocytosis with shift to the left, high ESR). Diagnosis is very difficult-applied x-ray stomach and 12 duodenal ulcer, ultrasound, computed tomography.

**Differential diagnosis**.

Differential diagnosis of penetrating ulcers: with chronic pancreatitis, gastric tumor with spread to adjacent organs.

For chronic pancreatitis is characterized by communication of pain with the reception of oily, spicy foods, alcohol. Expressed pain, localized in the projection of the gland, radiating into the back, carrying shingles nature. In acute pain syndrome quickly increases up to shock, and ulcerative process happens: marked positive symptoms Kerte, Chukhrienko, Mayo-Robson, Voskresensky,-Mondor, Grey-Turner, Cullen. In blood and urine and urinary amylase increased content. When UZI pancreas size enlarged, changes its jehogennost. In contrast, when the penetration of ulcers in the pancreas in the patient has a long history of ulcerative pain syndrome is modest. Rhythmic pain (day, night), associated with the intake of any food, then gradually become permanent. As a result of developing secondary pancreatitis may be increasing the level of urinary in urine. When the x-ray study of the stomach and duodenum 12 with barium taped deep niche.

Gastric cancer with germination into neighbouring organs clinically verified quite simply. For cancer of stomach lesions also is characteristic of long-lasting pain in podlojecna area, the left hypochondrium. The pain is constant, dull, aching, but unlike ulcer penetration is not as intense, as a rule, is not the nature of the zoster. Patients have the changing nature of supply (renunciation of meat-eating, fish), progressive emaciation (cachexia cancer), belching and vomiting rotten.

When the x-ray study of the stomach with barium is found not deep "niche" and "filling" defect with Depot barium in it, Cliff folds, absence of peristalsis in this phase of the stomach. When EXAMINATION with biopsy confirmed the nature of the tumor (atypical cells), and the absence of their shows in favor of Chronic Ulcerative process.

If stomach cancer is often detected by palpation, dense, bugristoe, malopodvizhnoe education in the projection of the stomach. Detection of distant metastasis, Virchow Schnitzler, Krukenberga, anterior abdominal wall (belly button) is also demonstrated in favor of stomach cancer.

**Treatment.** Treatment of penetrating ulcers may be conservative (under vnutristenochnoj and penetration of fibrous adhesions) and operational expression of (long-term) pain syndrome and the absence of the effect of conservative therapy.

YMALIGNIZATION.

Malignant transformation of gastric ulcer and 12 duodenal ulcer is a disease process, which is based on the appearance of genital epithelium defects foci of cell proliferation with atipiej epithelium. This complication is not uncommon and is from 2 to 35%. The longer there is an ulcer (2-3 years or more) than the more proximally located more than its size ( -2 1.5 cm. or more), all the more reason for suspicion at malignizatiou. So chronic, "kalleznyh" ulcers with a diameter of more than 2 cm. cancer is formed by more than 10% of cases, and ulcers, localised in Cardia have the Department of a stomach, malignizirujutsja in 30-48% of cases.

**The clinical picture**. Suspect the transition process of ulcerative cancer in patients with peptic ulcer, it is far from easy. Development of cancer sores is accompanied by a kind of change in the clinical picture, as the attentive, thinking, the clinician must remember. First of all, the sharpness of the pain subsides, that is regarded as patients improved condition. Gradually disappearing bouts of pain, and the pain becomes moderate in intensity, but permanent. They are only slightly amplified after eating. And then the link pain with food completely disappears. Cyclical changes of pain by time of day, season of exacerbations (spring and autumn) also disappears. Increased or normal appetite decreases, and soon appears and an aversion to food, especially meat and fish. Quite characteristic for transition sores in cancer is the syndrome of "small signs", described by Igor Savitsky A.i.: loss of interest in work, to family, to the environment, uncaused (from the point of view of the patient), weakness, fatigue, rapid decline efficiency, restless sleep, paleness of the skin. Gradually manifest themselves and other symptoms typical to this process: gravity in epigastralna area, lack of satisfaction from eating, gastric discomfort, odour from mouth, progressive ishudanie, pallor and earthy colors person.

**Differential diagnosis**.

Differential diagnosis of malignizirujushhejsja ulcer: with chronic anatidian gastritis, stomach cancer.

When chronic gastritis patients celebrate pain in podlojecna area, the left hypochondrium, nausea, bad breath, weight loss, weakness. The clinical picture may resemble malignizatiou ulcers. Crucial in the differential diagnosis is EXAMINATION with biopsy in Dynamics amid conservative anti-inflammatory therapy.

Recognition of cancer sores is considerable and often insurmountable difficulties. It is hardly possible to clinically set a clear line when ulcerative process and ends of ulcers cancer arises. Differential-diagnostic algorithm should include the following points: 1. a thorough medical history, ascertaining the duration of diseases, treatments and their effectiveness; 2. clarification of complaints and altering their nature ("small signs" A.i. Savitsky); inspection: KLA, Buck (anemia, hypoproteinemia), gentle leukogram shift left, EMS the ESR, analysis of lavages from the stomach to the atypical cells; 3. instrumental examination.

X-rays (barium) stomach can detect if there are niche, marginal defect filling», rigidity of the surrounding Mucosa, flatness of folds, absence of peristalsis, the graininess of the edge of niche.

A very important and essential is the EXAMINATION in dynamics with compulsory taking biopsies of suspicious places (at least 6-8) for histological study. But downplayed the possibilities listed methods, do not-they also give a certain percentage of errors. Only the sum of all of the clinical symptoms and the survey data allows you to make a diagnosis. This, of course, the main value is the direction and focus of the doctor.

**Treatment.** Treatment of malignant ulcers of stomach and duodenum only 12 operational. A method of surgical treatment depends on the location of ulcers and usually subtotalnuju resection of the stomach.

**6. Self-study in extracurricular time** (preparation for practical occupation):

a) **annotated list of questions on the subject of the lesson:**

Particular anatomical structure and blood supply of the stomach and duodenum 12.

Classification of pyloric stenosis.

Classification of gastroduodenal bleedings.

Classification of stages of perforation.

Clinical stenosis.

Clinical bleeding.

Clinical punching.

The concept of syndrome of small signs of A.i. Savitsky.

Clinical-penetration.

Differential diagnosis of complications of gastric ulcer and 12 duodenal ulcer.

A physician at a prehospital stage tactics when complicated course of gastric ulcer and 12 duodenal ulcer.

Examination methods in patients with gastric ulcer and 12 duodenal ulcer and its complications.

Types and methods of conservative and operative treatment of patients with peptic ulcer disease and its complications.

b) **Written homework:**

Presented in the form of diagrams or tables:

classification of ulcer complications;

classification of perforation;

classification of bleeding;

classification of stenosis;

algorithm for examining patients with: bleeding;

penetration;

malignancy;

pyloric stenosis;

perforation;

indications for surgical treatment of peptic ulcer disease;

types and methods of surgical treatment: a) at perforation; b) with malignancy; in case of bleeding).

) **mikroreferatov Topics to address in Lesson:**

1. Methods of diagnosis of gastric ulcer and 12 duodenal ulcer.

2. Etiology of gastroduodenal bleedings.

3. The Etiology of piloroduodenalnogo stenosis.

4. Methods of examination of patients with suspected malignizatiou.

5. methods of operative treatment of gastric ulcer and 12 duodenal ulcer.

**Tests for self-control quality home training:**

1. Spitting up frothy blood bright red, increasing cough is characteristic for:

a) bleeding stomach ulcers

b) Cardia tumor

in) Mallory Weiss Syndrome

g) pulmonary hemorrhage

2. Determine the source of bleeding gastroduodenalnogo allows you to:

a) x-ray study of stomach

b) laparoscopy

)-gastric probe

g) redefinition of hematocrit and hemoglobin

d) EXAMINATION

3. Mallory-Weiss Syndrome is:

a) varicose veins of the esophagus and Cardia, complicated bleeding

b) bleeding from mucous membranes on the soil of hemorrhagic Vasculitis (Rendu-Osler disease)

in) crack in Cardia have the Department of a stomach bleeding

g) haemorrhagic erosive gastroduodenitis

4. the disappearance of pain and the appearance of "meleny" with duodenal ulcer is characteristic for:

a) piloroduodenalnogo stenosis

b) ulcer perforation

in) malignancy ulcers

g) bleeding

d) penetration in the pancreas

5. For a bleeding ulcer of duodenum 12 not typical:

a) vomiting color coffee grounds

b) increased pain in the abdomen

in) falling hemoglobin

g) Melena

d) reduction of BCC

6. For its ulcer characteristically:

a) rest pain

b) symptom Spizharnogo

in) repeated vomiting

g) sharp bloating

d) symptom Kocher-Volkovich

7. In the diagnosis of its ulcer apply:

a review of abdominal x-ray)

b) intravenous urography

in a tract with barium x-rays)

g) angiography

d) novokainovuju blockade

8. In the differential diagnosis of its ulcer and acute appendicitis is the most informative:

a) blood test

b) symptom Schetkina-Bljumberga

diagnostic laparoscopy)

g) digital rectal examination

d) passage of barium kishechniku

9. At its clinic ulcer the following periods:

a) hemodynamic violations

b) imaginary well-being

in the) toxic

g) Terminal

d) spilled peritonitis

e) shock

10. Compensated stenoses privratnika is characterized by:

) "Daggers" pain after eating

b) blunt, nojushhego nature, pain after eating

lower back pain)

g) constipation

11. For Decompensated pyloric stenosis are not typical:

a) vomiting food eaten on the eve

b) muscles of the anterior abdominal wall

in) "succussion" in the stomach on an empty stomach

g) scleral and skin

12. For the diagnosis of pyloric stenosis does not apply:

a) holetsistografia

b) Proctosigmoidoscopy

) bronhografia

g) x-ray of the stomach with barium

13. pyloric stenosis occurs, the main role is played by the disease:

a) acute pancreatitis

b) acute gastritis

in) acute gastroenteritis

g) chronic ulcer of the antrum of the stomach Division

14. Dull, aching, belting the nature of pain in left hypochondrium characteristic:

a) acute appendicitis

b) acute pancreatitis

in chronic pancreatitis)

g) hollow organ perforation

d) 12 ulcer duodenal ulcer

e) penetration of ulcers in pancreas

15. To diagnose penetrating ulcers do not apply to:

a) radiography 12 a stomach and duodenum

b) laparoscopy

in) skull radiography

g) chest x-ray

d) EXAMINATION

e) ULTRASOUND

16. Please indicate the main clinical signs of penetration ulcers in the pancreas:

a) pain when swallowing

b) multiple, exhausting vomiting

in) pain of a permanent nature, after taking any food, spreading in the lumbar region

g) pain in the chest

17. The following radiological sign indicates that the penetration of ulcers:

a filling defect) rounded shape in the body of the stomach

b) small "niche" in the piloricheskom Department of a stomach

Klojbera Bowl)

in the Gaza Strip falcata) under right dome of diaphragm

g) gas bubble in the area of the bottom of the stomach

d) deep niche "beyond body

18. the main malignization are all, except:

and Horner's syndrome)

b) triads-Knigina-Mondor

small syndrome ") signs»

g) Courvoisier syndrome

19. the following methods must be used when suspected malignizatiou ulcer:

a) sputum

b) saliva

in) analysis of bile

g) analysis of lavages from the stomach to the atypical cells

20. Of these methods the most informative at diagnostics of cancer sores:

a) stomach roentgenoscopy

b) x-rays of the skull

Lung roentgenoscopy)

g) EXAMINATION with biopsy

21. Clinical symptoms of malignization ulcers are not:

a) pain in the right hypochondrium

b) headaches

in) pain in the calf muscles during walking

g) dull, aching, persistent, not associated with eating pain in epigastria

d) uncaused weakness, malaise, weakness, an aversion to meat food, weight loss

e) gravity in podlojecna area, belching rotten, unpleasant smell from the mouth.

**7. Independent work in the practice session:**

1. different levels of situational tasks Solution absorption. 2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) clarifying the history of the disease

in) assessment of general condition of the patient:

the color of the skin and mucous membranes

body temperature

nutrition

the number of respiratory movements

State language

part of the anterior abdominal wall to breath

the status of the anterior abdominal wall (tension, painful divisions)

local symptoms and signs of disease

peristalsis of the bowel

the presence or absence of flatus and stool

urination

g) score paraclinical examination methods

d) conclusions on the diagnosis

e) differential diagnosis

f) treatment definition

w) principles of conservative or operative treatment.

3. report of the patient group.

4. Read and parse the radiographs.

5. Presentation of the themes mikroreferatov

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Endoscopic room.

5. Operating.

**Literature**

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial, m., 2006.

3. Savelyev V.s. Guide to emergency abdominal surgery m., 2004.

4. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. (I) - (II) , M., geotar-media, 2005.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1-g | 6-b | 11-b, g | 16-in | 21-a, b, c |
| 2-d | 7-a | 12-a, b, c | 17-e |  |
| 3-in | 8- | 13-g | 18-a, b, g |  |
| 4-g | 9-e, b, d | 14- | 19-g |  |
| 5-b | 10-b | 15-б, в, г, д | 20-g |  |

**Theme classes** : "Stomach cancer»

**1. the purpose of the practice**:

a) assimilate memory playback level etiology, classification, clinical manifestations ("small signs"), laboratory and instrumental Diagnostics methods of stomach cancer;

b) differential diagnosis and methods of operative treatment of this debilitating disease.

**2. To enter, you need to know:**

causes which contribute to the occurrence of stomach cancer;

classification, clinical manifestations, diagnosis and prompt treatment;

differential diagnosis: chronic gastritis, peptic ulcer disease, malignant tumors, tuberculosis, aktinomikozom.

**3. To enter, you need to understand:**

the etiology of gastric cancer;

the way its metastasis;

the need for an early comprehensive survey;

options for surgical treatment.

**4. To enter you must be able to:**

collect medical history, patient complaints, focusing on identifying the syndrome of "small signs";

to outline the plan of survey;

to properly assess the results of laboratory and instrumental examination;

patient treatment plan.

**5. Theoretical reference**

**Stomach cancer** among malignant neoplasms by frequency and mortality in different countries takes the first or one of the first places. Men get cancer of the stomach in 3 times more often than women. Most often found in aged 40-60 years.

**Classification**. On macroscopic picture allocate:

1. Limited growing cancers (jekzofitnye): a) polipoobraznye; b) flat, bljashkoobraznye or mushroom with superficial izgyazwleniem. 2. Infiltrative growing cancers (endophytic): a) degree-infiltrative; b) diffuse cancers.

3. Mixed-bljudceobraznyj cancer.

On histologic structure are distinguished: 1) adenocarcinoma; 2) meduljarnyj cancer; 3) skirr (fibrous cancer); 4) colloidal or slimy, undifferentiated carcinoma.

In stages:

1 art. -clearly separated swelling on the mucous membrane, not beyond the podslizistogo layer (cancer in situ). Regional metastases are not.

     II art. -tumor of large sizes, sprouts in the muscular layer but not germinate in serous cover, and not soldered with neighbouring authorities. Stomach mobile. Single movable metastases in the next regional lymph nodes.

     (III) art. -tumor size, grows through the entire thickness of the wall of the stomach, grows in neighbouring authorities, severely limits the mobility of stomach, without metastasis. The same tumor or multiple smaller regional metastases.

     IY art. -tumor of any size in the presence of distant metastases.

There is an international classification system T, N, M.

T -primary tumor; N -regional lymph nodes; M -distant metastases.

T0 -primary tumor is not defined.

T1 -tumor infiltrating the stomach wall to the Sub-mucous basis.

T2 -tumor infiltrating the stomach wall to the subseroznoj shell.

T3 -tumor grows seroznuju wrapper without invasion into adjacent structures.

T4 -tumor spreading to nearby structures.

(N) 0 -no signs of metastatic lesions.

(N) 1 -there are metastases in gastric lymph nodes do not continue 3 cm from the edge of the primary tumor.

(N) 2 -have a metastasis in gastric lymph nodes at a distance of more than 3 cm from the edge of the primary tumor or lymph nodes located along the left gastric, common hepatic or splenic, celiac artery.

(M) 0 -no distant metastasis.

(M) 1 -there are distant metastases.

**The clinical picture** of stomach cancer in the early period of the disease is characterized by "small signs" syndrome (Savitsky): uncaused weakness, decrease disability, fatigue, unexplained persistent lowering appetite, loss of physiological sense of complacency from the food, accompanied by a feeling of stomach overflow, the gratuitous use of progressive weight loss patient, loss of the joy of life, of interest to the surrounding, to work. With the progression of the process is excruciating constant pain in epigastria, vomiting after eating, sometimes "coffee grounds", constipation, cachexia. Cardia cancer-symptoms of difficulty passing food regurgitation. Output Division cancer clinic, stenosis appears worried about belching "rotten egg". The spread of tumors to the cross-colon or jejunum may result in growing symptoms of intestinal obstruction. The growth of the tumor to the gates of the liver and biliary tract compression leads to rapidly increasing jaundice. The spread of tumors to the peritoneum is accompanied by the development of ascites, manifested increasing belly. Patients have a peculiar pale colour with greyish tinged an earthy, slightly osunuvshiesja facial features. The skin becomes dry, easy going in the crease. Body weight is significantly reduced. By palpation may detect dense, hilly, maloboleznennoj tumors, which corresponds to the late stages of the disease. Detecting ascites tumor metastasis, in the left pane nadkljuchichnoj (metastasis Virchow), in the area of the navel (metastasis Joseph), duglasovom space (metastasis Schnitzler), ovary (cancer Krukenberga) points to a fourth, neoperabelnuju stage disease. In the peripheral blood determined by hypochromic anemia, accelerated ESR. In gastric juice-achlorhydria, the presence of lactic acid, mucus, atypical cells; in Calais hidden blood. Under fluoroscopy stomach tumor jekzofitnorastushhej symptom direct is filling defect, while suggesting growth find rigidity lining of the stomach, malignant mucosal folds, dropped relief and peristalsis, concentric contraction the lumen of the stomach. When fibrogastroscopy visible acting in the lumen of the stomach ulcer or tumor polipovidnaja, surrounded by a rampart with a sublime necrotic masses at the bottom. When suggesting growth is determined by the rigidity of the stomach wall and folds, the absence of peristalsis, narrowing of the stomach, fatigue overlay on the mucosa. Gastrobiopsy helps to verify cancer.

Complications of gastric cancer include: stenosis, bleeding, perforation, penetration, anemia, cancer cachexia.

**Differential diagnosis**.

The differential diagnosis should be: with chronic gastritis, gastric ulcer and 12 duodenal ulcer, stomach polyposis, precancerous diseases of stomach, stomach tuberculosis, aktinomikozom.

Gastritis, accompanied by leiko-and Lymphocytic Infiltration across the stomach wall with a long, sometimes poses great difficulties in differential diagnosis. While there is often a relief restructuring radiographically mucous, accompanied by changing stroke folds their deformation and stiffness. Such rigid gastritis, most often developing in the antrum of the stomach Division, can even cause defect filling. Great value in diffdiagnostike of chronic gastritis and gastric cancer played repeated endoscopic and radiographic studies on background anti-inflammatory therapy, as well as combined EXAMINATION and biopsy.

Particular difficulties arise also in the diagnosis of chronic gipertroficheskogo gastritis-Édouard Ménétries, disease opuholesimulirujushhego gastritis. The clinical picture of the disease Édouard Ménétries has no specific signs. The most valuable method of clinical examination of the patient is endoscopy to detect disease Édouard Ménétries giperemirovannuju oedematous mucous with swollen wide pleats in the stomach cavity throughout or at limited area of the body or antrum of stomach Division. Biopsy with subsequent histological study allows you to reject cancer.

Gastric ulcer and 12 duodenal ulcer in contrast to stomach cancer is characterized by the duration of the disease. In cancer, the same process of history is short. Peptic ulcer disease is characterized by a certain cyclical flow with peaking in spring and autumn. Gastric ulcer pain is usually sharp and associated with food intake (early arise through 0.5 -1 h, late-through 2-3 hours) and hungry and night pain characteristic 12 ulcers duodenal ulcer. Appetite in patients, in contrast to patients with stomach cancer, maintained or upgraded, but patients should refrain from eating due to pain. Vomiting in ulcer occurs at an altitude of pain attack, stenosis-outside attack of pain. In contrast to stomach cancer in exacerbation of ulcers have resistance, sometimes tense muscles of the abdominal wall. Changing regularities and cyclical pain in patients with gastric ulcers stomach, as well as more blunt nature of pain, changing the general condition of the patient (the emergence of general weakness, loss of weight, loss of appetite, i.e. the occurrence of the syndrome of "small signs" A.i. Savitsky), are typical signs of malignization. In contrast to stomach cancer in the study of gastric juice in patients with peptic ulcer, usually find increasing free hydrochloric acid. Identification of "niche" or "contrast spots" when x-ray study allows you to affirmatively talk about ulcers. However, the discovery of a niche not beyond the contours of the stomach, large shaft infiltration around sores, symptoms of loss of peristalsis and broken terrain surrounding mucosa suggest turning canker into cancer.

Fibrogastroskopicheskoe research, especially in combination with biopsy diagnosis easier. In cases where differentiation of ulcerative or tumor in the stomach is extremely difficult, the final phase of the study should be a laparoscopy or even diagnostic chrevosechenie.

Stomach polyposis some patients are asymptomatic. More often however, there are non-localized pain in epigastria, decreased appetite, nausea, which is not conducive to a clear diagnosis. Role of x-ray and fibrogastroskopicheskogo research is indispensable. Under fluoroscopy stomach definition circular defect filling with clear contours demonstrated in favor of the polyp, while cancer along with a filling defect in the malignant terrain, peristalsis, Cliff folds of mucous. Gastroscopy lets see polyp and determine its size. The color of the polyp is more red than the surrounding Mucosa, folds does not converge, and bypass it. If you malignizatiou produce biopsy with subsequent histological study.

Benign tumors of the stomach (Leiomyoma, Lipoma, neuromas) as growth can cause a number of complications (bleeding, obstruction), which are characterized by a particular clinical picture. Most often, these neoplasms are determined radiographically and endoscopically. The main radiological symptoms of benign tumors of the stomach is the presence of filling defect having sharp contours on the border which break the folds and there is no peristalsis. In some cases you can detect stomach contour impression of having smooth edges with keeping the folds or rasplastyvaniem them in this place. Definition of the nature of the tumor is difficult not only in clinical and x-ray study, but also during the operation. Therefore only histological study clarifies the diagnosis.

Stomach tuberculosis is among the rare diseases. Vivo diagnosis extremely difficult due to the lack of the characteristic clinical picture. Has a value of history (previously migrated pulmonary tuberculosis is registered or is cleared), the detection of tuberculosis sticks in gastric juice on an empty stomach or lavage. X-ray of the stomach in 77% find TB ulcers, jekzofitno rising education. When EXAMINATION reveal TB ulcers, with sharp edges and podrytymi yellow-brown bottom, tiny TB erosion, scattered across the mucosa. Directional gastrobiopsy contributes to more accurate differentiation of gastric cancer and tuberculosis.

Actinomycosis of the stomach (defeated radiant fungus) clinically resembles a defeat stomach malignant process. Definition in epigastria tumor development, coordinated with the surrounding tissue, education on the skin of multiple deep convoluted fistula with little purulent otdelemam as pips-drusen suggest Actinomycosis. Study of tissue and detection of mycelium of Actinomyces confirmed the diagnosis.

**Treatment.** Stomach cancer is an absolute indication for surgical treatment. Contraindications may be only: the dire condition of the patient (if running processes), acute stroke, acute myocardial infarction.

Preoperative patient carried out the correction of violations elektrolitnykh shimmer protein drugs, blood components, carefully sanitized stomach, intestines. Operations are divided into radical (subtotal resection of extended resection, gastrectomy) and palliative care (Palliative resection, bypass anastomoses-esophageal-for duodenum, gastroenteroanastomosis, gastrostomy).

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions on the subject of the lesson:**

Definition of stomach cancer.

Anatomical classification of cancer.

Clinical classification of cancer.

Possible causes of stomach cancer.

Ways of metastasis of gastric cancer.

"Small signs".

Clinical manifestations of cancer of different localization.

Differential diagnosis of cancer.

Diagnostic algorithm search.

Complications of stomach cancer.

Types of radical operations.

Methods of palliative operations.

b) **Written homework**

Presented in the form of diagrams or tables:

classification of gastric cancer;

ways of metastasis of cancer;

diagnostic methods;

types and methods of operations with stomach cancer.

) **mikroreferatov Topics to address in Lesson:**

1. Causation of stomach cancer.

2. ways of metastasis of cancer.

3. methods of laboratory and instrumental examination of patients with gastric cancer.

4. Differential diagnosis of stomach cancer.

5. complications of stomach cancer.

6. Methods of treatment for stomach cancer.

**Tests for self-control quality home training:**

1. stomach cancer Symptoms are not:

and the nature of the Zoster pain)

b) pain in the heart

in) pain in podlojecna area

g) pain in the calf muscles

d) headaches

2. Metastasis Schnitzler is localized:

a) in liver

b) recto-puzyrnoj crease

in) in the ovaries

g) between the sternocleidomastoid muscle legs

the navel area)

3. Metastasis Krukenberga is located:

a) recto-puzyrnoj crease

b) in the ovaries

in between the sternocleidomastoid muscle legs)

g) in the area of the navel

d) in liver

4. "small signs" includes:

and rapid, purposeless) weight loss

b) cough with purulent sputum

) gematuriju

g) aversion to dairy food

d) aversion to meat food

5. Metastases Virchow is discovered:

a) in liver

b) recto-puzyrnoj crease

in) in the ovaries

g) between the sternocleidomastoid muscle legs

d) in the light

6. Clinical manifestations of cancer are:

a) weakness, malaise, fast physical fatigue

b) increased food

exophthalmos) and glitter eyes

g) weight loss, pallor of mucous and skin

d) ascites

7. the delayed evacuation of stomach cancer localization is typical:

a division of piloricheskom)

b) in Cardia have the Division

in) in the body of the stomach

g) for large curvature

d) on small curvature

8. Select survey methods used in cancer:

a) urine test

b) sputum

in) analysis of gastric juice

g) EXAMINATION with biopsy

d) phlebography

9. Most stomach cancer early diagnosis provides:

a) EXAMINATION with biopsy

b) search for "small signs" syndrome

in stomach radiography)

g) review x-rays of the abdomen

10. in gastric cancer, the following operational benefits:

a) cholecystectomy

b) thyroid resection

in) Subtotal gastrectomy

g) appendectomy

d) gastrectomy

**7. Independent work in the practice session:**

1. different levels of situational tasks Solution absorption. 2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) clarifying the history of the disease

in) assessment of general condition of the patient:

the color of the skin and mucous membranes

body temperature

nutrition

the number of respiratory movements

State language

part of the anterior abdominal wall to breath

the status of the anterior abdominal wall (tension, painful divisions)

local symptoms and signs of disease

peristalsis of the bowel

the presence or absence of flatus and stool

urination

g) score paraclinical examination methods

d) conclusions on the diagnosis

e) differential diagnosis

f) treatment definition

w) principles of conservative or operative treatment

3. report of the patient group

4. Read and parse the radiographs

5. Presentation of the themes mikroreferatov

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**Literature**

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial, m., 2006.

3. Savelyev V.s. Guide to emergency abdominal surgery m., 2004.

4. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. (I) - (II) , M., geotar-media, 2005.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-a, b, c, d, e | 6-a, g, d |
| 2-b | 7-a |
| 3-in | 8-b, g |
| 4-a, d | 9-a |
| 5-g | 10, d |

**Theme classes** : "Cholecystitis"

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, classification of cholecystitis;

b) skills training clinical examination of patients with cholecystitis;

in) master diagnostic techniques, tactics, first aid at the pre-hospital stage, principles of treatment of patients with cholecystitis.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: the structure and topography of the gallbladder and extrahepatic bile ducts, anatomical-functional link with the pancreas and 12 duodenal gut;

of course Physiology: functions of bile, puzyrnoj and hepatic bile, exchange of bilirubin in the body;

etiology and pathogenesis of cholecystitis; pathogenesis of formation of gallstones;

classification of cholecystitis;

the clinical picture of acute cholecystitis;

cholecystitis complicated clinical picture: a) empyema of the gallbladder; b) holangitom; in) bilious peritonitis; g) obstructive jaundice;

methods of diagnosis: a) laboratory; b) tool;

types of conservative and endoscopic treatment of cholecystitis; indications for surgery and types of surgical interventions for acute uncomplicated and complicated cholecystitis (holecistostomija, cholecystectomy of the neck and from the bottom, vishnevsky holedohostomija, Keru, Pikovskomu);

conducting the postoperative period (diet, mode, destination); possible complications in the postoperative period.

**3. To enter, you need to understand:**

Morphological changes in the gallbladder in cholecystitis;

the role of microbial aggression in the occurrence of acute cholecystitis;

for acute cholecystitis in elderly and senile age;

the role of the time factor in the choice of operational benefits in the treatment of acute cholecystitis (emergency, urgent, early elective surgery).

**4. To enter you must be able to:**

to properly conduct a poll and survey of the patient;

identify characteristic of acute cholecystitis symptoms (Murphy, Mussy-George, Ortner-Grekova, Shoffara, Baking, etc.);

analyzing laboratory data;

differentiate acute cholecystitis: with acute appendicitis, its ulcer, acute gastritis, acute pancreatitis, mezenterialnah vascular thrombosis and other acute diseases of the abdominal cavity.

**5. Theoretical reference**

**Cholecystitis** currently ranks 2-3 place (along with acute pancreatitis) in frequency among diseases of the abdominal cavity organs. More frequently suffer from women with metabolic, increased body weight. Acute cholecystitis is almost always associated with errors in nutrition.

When preparing to enter, you must pay attention to:

a) etiology (stones, bile allocation violations, infection), pathways of infection in the wall of the gallbladder;

b) clinical and evolutive particularities and diagnosis of acute and chronic cholecystitis where the essential survey of the patient with the identification of the characteristic syndromic and confirm the diagnosis of the paraclinical examination methods, among which the the main attention is paid to the ULTRASOUND;

in) you need to be aware of such complications as acute cholecystitis: periholetsistit, perforation of the wall with the development of peritonitis, biliary obstructive jaundice, cholangitis, primary dropsy, empiema gallbladder;

g) differential diagnosis of acute cholecystitis must necessarily hold: with acute appendicitis, acute pancreatitis, gastric ulcer or its 12 duodenal ulcer, acute trrombozom mezenterialnah vessels, acute intestinal obstruction, acute myocardial infarction, etc.;

d) observation and treatment of patients with acute cholecystitis must be carried out only in surgical hospitals. At the pre-hospital stage antispasmodic agents may apply (e.g., nitroglycerin under tongue), bubble with ice or cold water onto the right hypochondrium and then hospitalization in the surgical hospital.

**Classification**:

1. primary Acute cholecystitis

catarrhal

flegmonoznyj

gangrenous

destructive forms of

2. Recurrent cholecystitis

3. Primary-chronic cholecystitis

4. Secondary chronic cholecystitis (consequence of acute cholecystitis)

5. Sclerosing cholecystitis

Complications:

-         periholetsistit

-         peritonitis

-         mechanical jaundice

-         cholangitis

-         dropsy (primary, secondary)

-         empiema gall bladder

-         biliopancreatic diggestivnye fistula

**The clinical picture**. Acute cholecystitis manifests intense spasm of pain, of a permanent nature in the right podreberie radiating to the right supraclavicular area, and shoulder, emerging after errors in diet (spicy and fatty foods). Marked nausea, repeated vomiting. Body temperature rises. By palpation detects local soreness in the right podreberie, identifies the symptoms of acute cholecystitis: Ortner, Kera, Zaharin, Murphy, George-Mussy, Shoffara, Baking. If Bluetongue form of inflammation of the muscles of the anterior abdominal wall no, symptom Schetkina-negative Bljumberga.

When destructive cholecystitis with local or General peritonitis increase body temperature to 39-40° c, pulse frequency to 100-120 BPM, dry furred tongue, muscles of the anterior abdominal wall, expressed symptoms Ortner, Kera, Murphy, Zaharin, positive symptom Schetkina-Bljumberga.

For acute cholecystitis can be complicated: periholecistitom (inflammatory process on neighbouring organs), empyema of the gallbladder, primary holangitom, edema, obstructive jaundice, acute peritonitis, holecistopankreatitom, abdominal abscess.

**Differential diagnosis**.

Differential diagnosis: with diskinesia biliary tract, acute appendicitis, probodnoj stomach ulcer and 12 duodenal ulcer, acute pancreatitis, acute ileus, right-handed renal colic.

Biliary dyskinesia in contrast to acute cholecystitis usually found in women under 40 years of age and is characterized by bouts of pain in the right podreberie without typical irradiation. The pain may subside after abundant one-time vomiting, tend to occur every day. Satisfactory condition of patients, there has been no rise in body temperature. The abdomen is slightly painful in the right podreberie, sometimes palpable painless, enlarged gall bladder. Blood tests without deviation from the norm.

Acute appendicitis in contrast to acute cholecystitis occurs equally often among men and women, mostly in young and middle-aged adults. For appendicitis is characterized by localization of pain in the right iliac region, where there is a protective muscle tension of the anterior abdominal wall and taped a symptom of Shchyotkina-Bljumberga. Determined by positive symptoms Kocher-Volkovich, Rovzinga, Sitkovskogo, Obraztsova, Voskresensky, Karavaevoj, Bartome-Mihelsona.

Perforated gastric ulcer and 12 duodenal ulcer is more common in men. There is a "history of" aggravation-ulcerative process in autumn-spring period, increased pain in connection with meals. The moment of perforation is accompanied by a sharp pain comparable to "blow a dagger." Ill try to lie motionless, more often on the right side, with preloaded to belly legs. Unlike acute cholecystitis, normally there is no vomiting. Muscles of the anterior abdominal wall is diffuse nature and expressed much more sharply («doskoobraznyj» belly). Defines a positive symptom Spizharnogo-disappearance or reducing liver dullness, radiological sign-falcata Strip Strip under right dome diaphragm. The important thing to remember about triad-Knigina-Mondor: ulcerative history, "pain, stomach doskoobraznyj. For the purpose of diagnosis should be used with modern techniques such as ultrasound, laparoscopy, in which detected fluid in the abdominal cavity.

Acute pancreatitis is especially intense pain in epigastria (the left hypochondrium) radiating to the back, early uncontrollable vomiting. There is swelling of the upper half of the abdomen, abdominal aortic pulsation is not determined (a symptom of the Resurrection). Tension in the muscles of the anterior abdominal wall, there is no painful resistance in the area epigastralna (Kerte symptom). There is also tenderness in the left costal-spinal corner (a symptom of Mayo-Robson). Identify symptoms-Mondor, Cullen, Grey-Turner. In blood and urine analyses detected increasing levels of amylase and Diastasis. X-ray study allows you to install indirect signs of pancreatitis-restriction of mobility left the dome of the diaphragm, the liquid in the left sinus determination. When the SONOGRAM visible changes in the structure of the pancreas may be liquid in sealing the bag.

Acute intestinal obstruction characterized by shvatkoobraznymi pain, growing with peristalsis, without irradiation, abdominal distention. There is no tension of muscles of the anterior abdominal wall, not depart Gaza, no chairs. Determined by positive symptoms valia Sklyarov, Hose, Kivulja, Spasokukockogo. Review of Abdominal radiograph discover Bowl Klojbera. When giving the water suspended barium stated violation of his movement on the bowel.

Renal colic peculiar to sharp, not stihajushhie right lumbar pain radiating into the area causing the thigh muscles, the sexual organs. Patients do not find space from pain, restless. Appear more frequent urination accompanied by rezju and pain in the urethra. Defines a positive symptom of Pasternackogo. When the ultrasound and to review a radiograph can be defined in calculus. In the urine analysis reveal the presence of fresh red blood cells, white blood cells, protein.

**Treatment** acute cholecystitis happens to be conservative and operative. Operations are performed:

a) inefficiency of conservative treatment and signs of peritonitis;

b) upon accession (mechanical jaundice, meningitis holangit, empiema gallbladder, etc.).

Surgical treatment may be:

a) gallbladder removal (from the neck, from the bottom)

b) without removal of the gallbladder (c) imposition of holecistostomy.

On the timing of surgery for cholecystitis may be:

and emergency);

b) Futures (24-48 hours);

in) planning (via 2-3 weeks after healing acute attack). They run: a) laparotomnym access; b) of mini access; in the laparoscopic method (80-85)%).

**6. Self-study in extracurricular time** (preparation for practical occupation).

a) **annotated list of questions on the subject of the lesson:**

Definition of acute cholecystitis. Chronic cholecystitis.

Especially the location of the gall bladder, the structure of its wall.

Features of the anatomical structure of external biliary tract.

Especially the blood supply of the gall bladder (Calo).

Classification of cholecystitis.

The clinic of acute and chronic cholecystitis.

The main symptoms of cholecystitis (pain in the right podreberie, symptoms of Ortner, Kera, Zaharin, Murphy, George-Mussy, etc.).

Especially his flow of the elderly.

Differential diagnosis of acute cholecystitis with:

-         acute appendicitis

-         acute gastritis

-         its ulcer of the stomach or duodenum 12

-         acute pancreatitis

-         acute ileus.

Complications of acute cholecystitis (periholetsistit, perforation and peritonitis, biliary obstructive jaundice, purulent cholangitis, primary dropsy, empiema gallbladder).

Physician at a prehospital stage tactics.

Principles of conservative treatment.

Indications for surgery.

Methods (laparotomnaja, from mini access, laparoscopic) and the types of operations (cholecystectomy from necks, from the bottom, holecistostomija).

b) **Written homework:**

Presented in the form of diagrams or tables:

classification of cholecystitis;

the differential diagnosis;

features of structure and blood supply of the gall bladder;

survey methods of patients with cholecystitis;

complications of cholecystitis;

types and methods of operative treatment of patients with cholecystitis.

**Tests for self-control quality home training:**

1. The width of normal exeresis is equal to:

a) 0.5 cm

b) -1.0 0.6 cm

1.1 see -1.5)

g) -2.0 1.6 cm

d) over 2 cm

2. Patient with cholecystitis gangrenoznym shows:

and) conservative treatment

b) delayed operation

in) the decision depends on the age of the patient

g) operation in the absence of the effect of conservative therapy

d) emergency operation

3. intraoperacionnym extrahepatic biliary tract research methods include all but:

a) palpation choledochitis

b) holedohoskopii

intraoperative cholangiography)

g) sensing choledochitis

d) intravenous cholangiography

4. Patient jaundice amid holedoholitiaza needs:

and emergency operations)

b) in conservative treatment

in) in emergency surgery after preoperative preparation

g) in celiac artery catheterization

5. To complications acute cholecystitis is not:

and esophageal varices)

b) mechanical jaundice

cholangitis)

g) podpechenochnyj abscess

d) peritonitis

6. Kamneobrazovaniju in the gallbladder helps everyone except:

a) bile in a bubble

b) metabolic disorders

b) inflammatory changes in the gallbladder

g) diskenezii biliary tract

d) violations of pancreatic secretion

7. in order to clarify the nature and cause of the jaundice is not used:

a) computed tomography

b) intravenous holecistoholangiografija

in) percutaneous chrezpechenochnaja c cholangiogram

d) ULTRASOUND

8. In the case of gallstone disease emergency surgery is indicated when:

and gallbladder duct occlusion)

b) holecistopankreatite

) perforativnom cholecystitis

g) mechanical jaundice

d) hepatic colic

9. A complication of holedoholitiaza is:

and gall bladder hydrops)

b) empiema gall bladder

in) jaundice, cholangitis

g) perforativnyj cholecystitis, peritonitis

10. If jelchnokamenna disease planned cholecystectomy shows:

and in all cases)

b) in latent disease

in) If you have clinical signs of the disease and reducing disability

g) in patients over 55 years

d) from persons under the age of 20 years.

**7. Independent work in the practice session:**

1. the decision of various levels of situational tasks of mastering

       2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) medical history of disease

in) assessment of the overall condition of the patient

g) definition local signs and symptoms

d) score paraclinical examination methods (history)

e) conclusions on the diagnosis

Yo) differential diagnosis

f) treatment definition

w) principles of conservative and surgical treatment.

3. report of the patient in a group.

4. Read and parse the radiographs.

5. Presentation of the themes mikroreferatov.

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**LITERATURE**

1. Evtihov r.m., Putin m.e., Shulutko A.m., etc. Clinical surgery. Publisher group "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial. M., 2006.

3. Saveliev V.s. Guide for emergency surgery the abdominal organs. M., 2004.

4. Saveliev v.s., Kiriyenko A.i. surgical diseases. Tutorial. t. 1-2, m., geotar-media, 2005.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-b | 6-d |
| 2-d | 7-b |
| 3-d | 8- |
| 4-in | 9-in |
| 5-a | 10-a |

**Topic**: "Pancreatitis"

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, classification of pancreatitis;

b) skills training clinical examination of patients with pancreatitis;

in) master diagnostic techniques, tactics, first aid and pre-hospital treatment guidelines for patients with pancreatitis.

**2. To enter, you need to know:**

of course, normal and topographical Anatomy: structure, topography, the blood supply to the pancreas;

in the course of normal and pathological physiology: features of the pancreas and its role in the process of digestion;

etiology and pathogenesis of pancreatitis (acute and chronic);

classification of acute and chronic pancreatitis;

the clinical picture of acute and chronic pancreatitis;

methods of laboratory Diagnostics-changes in blood test, urine test, calcium, glucose, blood amylase, urinary incontinence, kreatorreja, steatorreja, etc.;

methods of instrumental Diagnostics-ultrasound, radiography, CT, laparoscopy;

the differential diagnosis of acute and chronic pancreatitis: acute appendicitis, acute ileus, acute thrombosis mezenterialnah vessels, urolithic illness (acute renal colic), myocardial infarction, cancer head pancreas, liver, gall bladder;

the main tasks and methods of integrated conservative treatment: create physiological dormancy pancreas, fighting with the enzyme toksemiej, shock, antisekretornaja, dezintoksikatsionnaya, desencibilizirutaya, spazmoliticheskaja, antibacterial therapy, the normalization vodno-elektrolitnogo Exchange, symptomatic therapy;

types and methods of operative treatment;

complications of acute pancreatitis and their correction (peritonitis, bleeding, sepsis and abscesses, Phlegmon stuffing bags, retroperitoneum, chronic pancreatitis, cysts and fistulas).

**3. To enter, you need to understand:**

Anatomic-physiological relationship of bodies gepatopankreato-duodenal area;

the importance of the time factor in the diagnosis and treatment of acute pancreatitis;

Morphological changes of the structure of the pancreas in acute and chronic pancreatitis.

**4. To enter you must be able to:**

to determine the clinical symptoms of acute and chronic pancreatitis;

evaluate the data laboratory and instrumental examination;

on the basis of complaints, anamnesis, objective survey put the preliminary diagnosis;

to properly decide on method of treatment.

**5. Theoretical reference**

**Acute pancreatitis** -acute autoliticheskij caused degeneratvno-inflammation of the tissues of the pancreas until necrosis of parenchyma and adipose tissue, accompanied by extensive bleeding in the pancreas and zabrjushinnuju fiber and leads to significant distortion of homeostasis and vital functions of an organism of the patient. Acute pancreatitis (op) in recent years 5-10 is one of the most frequent acute diseases of the abdominal cavity, requiring very careful and active, comprehensive treatment. The disease is polijetiologichno. Any reason that causes pancreatic juice and gipersecretia difficulty its outflow to the development of hypertension in the pancreatic ducts, throw in the ducts and pancreatic enzymes activate cytotoxic substances (bile, intestinal juice), direct damage by secreting cells, could lead to the development of acute pancreatitis.

The main causes of acute pancreatitis:

1) diseases of the biliary tract with violation outflow of bile (GSD, cholelithiasis, tumours, narrow ducts);

2) disease 12-duodenum and major duodenal papilla-OBD (peptic ulcer, tumor, papillit);

3) excess food load;

4) alcohol and its surrogates (have a toxic effect on the exocrine gland activity to cause degenerative changes in acinarnyh cells Pancreas (PJ);

5) acute and chronic disorders of blood circulation in the tissues of the pancreas.

In **the pathogenesis** of acute pancreatitis a combination of several factors is the impetus for launching the initial vnutriacinarnoj and activation of pancreatic ductal own proteolytic enzymes and further samoperevarivanija gland tissue- pancreatic necrosis develops. This activation occurs under the influence of citokinazy (biliary, pancreatic or intestinal). A major role among the active enzymes play a trypsin, phospholipase, chymotrypsin, pancreatic amylase. Pancreatic enzymes are active because of their aggressiveness not only locally, but are outside the gland: a gland in the surrounding tissue, the peritoneum cavity on the portal system to the liver, lymphatic system into the blood. Develops pankreatogennaja toxaemia defeat the functions of the vital organs and body systems-multiple organ dysfunction that results in the severity of the condition of patients.

**Classification** Following form. acute pancreatitis:

1. Otechny (intersticialny) pancreatitis

2. sterile pancreatic necrosis:

and necrosis in nature)-fatty, bloody, mixed

b) scale destruction-melkoochagovyj, krupnoochagovyj, subtotalno-total

3. Pancreatitis infected

Complications of acute pancreatitis:

a) peripankreaticheskij infiltration

b) peritonitis: enzymatic (abakterialnyj), bacterial

in obstructive jaundice)

g) pancreatic abscess

d) pseudocyst: clean infected

e) arrozivnoe bleeding

f) purulent Phlegmon retroperitoneal fiber

w) internal and external digestivnye fistulas.

**The clinical picture** . Clinic of acute pancreatitis distinguished three periods:

a) hemodynamic disorders (from a few hours to 2-3 days)

b) functional insufficiency of parenchymatous organs (liver, kidneys, lungs, central nervous system)-3-5 days

) postnekroticheskih, Dystrophic, purulent complications (7-14 days).

Patient makes complaints about cruel, skirted, pain in epigastria, the permanent nature of the relentless vomiting, not with ease. History of patients may be an indication of jelchnokamennouu disease. The disease can be caused by errors in the diet, frequent consumption of large quantities of alcoholic beverages and their surrogates. The pain starts suddenly, irradiiruet in the back, "rest", sometimes unbearable, the patient restless, rushes. Body temperature is normal or subfebrilnaya. Language dry, densely lined with white-Brown coating. Pulse uchashhen to 90-110 beats/min, blood pressure (BP) is not stable, with progression of the disease is developing hypotension. Swollen belly in epigastria, in the Act of breathing involved limited, by palpation is determined by the zone of pain and resistance in the area epigastralna (Kerte), irradiation illusion of pain in the left costal-vertebral angle (Mayo-Robson), sharply weakened or not transfer is defined abdominal aortic pulsation (Resurrection). Cyanosis is noted persons (s.-Mondor), swelling and-yellowish staining of the skin in the area of the umbilicus (Cullen), melkotochechnye abdominal haemorrhage (Grey-Turner). Perkutorno-timpanit in the upper abdomen and dulling in lateral sloping ground.

If auscultation heard languid Peristaltic noises (bowel paresis). The progression process show signs of irritation of the peritoneum (Shchyotkina-Bljumberga). When forming the infiltration stuffing bags palpated tight, painful, tumorous formation in epigastria, when abscedirovanii supported gekticheskaja fever. Purulent pancreatitis flows extremely difficult. Against the background of the progression of the disease quickly growing intoxication (septic pulmonary injury status, peritonitis).

In the blood are identified: accumulation of Leukocytosis, shift left formula, increased ERYTHROCYTE SEDIMENTATION RATE, marked hyperglycemia and hypocalcemia. Informative laboratory tests indicating the degree of enzyme toxemia are the determination of the level of amylase blood and urinary incontinence, which increase or decrease even to 0. Often, there has been an increased total and direct bilirubin blood, in connection with the squeezing of the swollen head gland common bile duct.

When the review of abdominal distention reveal retgenoskopii transverse colon, slurring the outline the left psoas major (c. Tobia), duodenostasis and deployed a horseshoe 12 duodenal ulcer. Radiography of the thoracic cavity allows you to set the reduction in tours of the diaphragm, reactive effusion in pleural sinus left.

When the ULTRASOUND there has been an increase in the size of the pancreas, increasing its echogenicity oteke, pockets of uneven density and softening in tissue destruction of the gland, the expansion of the common bile duct. Calculus can be identified in the gall bladder and bile ducts. Additional methods that enable Diagnostics instrumentelnoj clarify the picture of defeat can be computed tomography (CTG) and nuclear magnetic resonance (NMR) scan, diagnostic laparoscopy.

**Differential diagnosis**.

The differential diagnosis should be carried out: with its stomach ulcer and 12 duodenal ulcer, acute thrombosis mezenterialnah vessels, acute ileus, acute appendicitis, acute cholecystitis, acute gastritis, left renal colic, myocardial infarction.

When carrying out differential diagnosis of acute pancreatitis and its sores should remember that forprobodnoj gastric ulcer and 12 duodenal ulcer is characterized by gastric anamnesis, sudden onset, "pain", "Triada Knigina--Mondor, forced the situation the patient lying on his right side with the knees to the stomach ("embryo" posture), doskoobraznyj retracted belly, bradycardia, vomiting rare or one-time. Perkutorno is defined by the disappearance of liver dullness (Spizharnogo). When the review of abdominal x-rays detected gas under right dome diaphragm. When the hollow organ perforation cover-up often occurs between imaginary well-being characterized by stihaniem pain, absence of gas under the dome of the diaphragm. With a view to the diagnosis of perforation, ESOPHAGOGASTRODUODENOSCOPY is shown covered with repeated x-ray research or diagnostic laparoscopy.

In acute pancreatitis pain is noted in the projection of the pancreas rest. Taped restiveness diseased, uncontrollable vomiting, not bringing relief, tachycardia, bloating with relatively mild abdominal wall, positive symptoms Kerte, Mayo-Robson, Voskresensky, Cullen-Mondor, etc., increase urinary incontinence, lack of free gas under right dome diaphragm.

Thrombosis mezenterialnah vessels differentiate from acute pancreatitis is difficult, due to the presence of common symptoms of intoxication, paresis bowel. Thrombosis develops, usually in patients with elderly and senile age, suffering from heart disease, endocarditis, violation of rhythm, atherosclerotic lesions of aorta and its visceral (mesenteric) branches. Pain occur suddenly, are kolikoobraznyj in nature, there is local soreness in the projection of the pancreas. Notes with a touch of liquid stool blood. Vomiting is rare, with the occasional dash of "coffee grounds", which is not typical for acute pancreatitis. In the analysis of blood coagulation increase activity. Blood urine diastase and amylase, unlike acute pancreatitis, often not promoted. Crucial for the differential diagnosis are diagnostic laparoscopy and selective mezenterikografija on Seldingeru, a diagnostic laparotomy.

Acute intestinal obstruction has a number of common symptoms with acute pancreatitis: repeated vomiting, sudden onset of abdominal pain, bloating, and gas delay. But the pain is shvatkoobraznyj nature around the stomach, while the pancreatitis is localized pain in the area epigastralna, is shingles character constant. In acute intestinal obstruction identifies positive symptoms valia Sklyarov, Hose, Spasokukockogo, rectal examination notes dehiscence anus, an empty rectal ampulla extended (Obukhovskaya hospitals) that are not typical for acute pancreatitis, where there is dynamic and cross swelling paresis of the colon. Radiographically, with scoping study of abdominal cavity defined by bowls and Klojbera violation of passage of barium kishechniku in acute intestinal obstruction.

Acute appendicitis starts with pain in epigastralna area, which later 3-4 hours are moved to the right podvzodshnuju area (c. Kocher-Volkovich). In acute pancreatitis the pain also arise in epigastria, but do not move are brutal, surround and radiating to left costal-vertebral angle (Mayo-Robson). General condition when appendicitis is usually satisfactory. In acute pancreatitis, especially destructive, the status is always difficult. Vomiting in acute appendicitis usually one-double, in pancreatitis frequent, uncontrollable. Belly in acute appendicitis often not swollen when pancreatitis usually bloating in the upper divisions. For appendicitis is characterized by symptoms of Rovzinga, Sitkovskogo, obraztsova, Bartome-Mihelsona, V.razdolskiy, Karavaevoj. In acute pancreatitis these symptoms but negative positive symptoms Kerte, Voskresensky, Mayo-Robson-Mondor, Cullen. Urine diastase when appendicitis was normal, with pancreatitis. ULTRASOUND detects modified tissue echogenicity gland, increasing its size, presence of effusion in stuffing the bag and the abdominal cavity. When diagnostic laparoscopy noted: in acute pancreatitis by bloody vpot, steatonekroza spots in the abdominal cavity, whereas in acute appendicitis identifies changes in the shoot, cherveobraznom effusion by-fibrinous or purulent in the right iliac region.

Acute cholecystitis is also accompanied by frequent vomiting and pain syndrome. But the pain is localized in the right podreberie, irradiiruet in the right supraclavicular area, and shoulder. By palpation are often determined by enlarged, painful gallbladder, positive symptoms Murphy, George-Mussy, Kera, Zaharin, Ortner. In acute pancreatitis is pain in epigastria rest and spreading around the stomach. Define symptoms, Voskresensky Kerte, Mayo-Robson-Mondor, Cullen. Acute cholecystitis normally does not leak with rapidly increasing signs of intoxication, collapse and shock, and bloating and paralysis intestinal occlusion appear in connection with the development of peritonitis after 1-2 days. Unlike pancreatitis ULTRASOUND reveals overwhelmingly concrements in the gall bladder, and changes in the pancreas are secondary.

Acute gastritis, as acute pancreatitis is characterized by the sudden appearance of abdominal pain, vomiting. The pain of pancreatitis cruel, skirted, sometimes patients lose consciousness. For gastritis pain more frequently localized without irradiation, not as sharp as with pancreatitis. At first the plan for gastritis serve diarrhoeal disorders-belching, poor appetite, nausea, heartburn, vomiting with an unpleasant smell. The condition of the patient with gastritis often satisfactory. The abdomen is soft, moderate pain in epigastralna area, no simptomyKerte, Voskresensky, Mayo Robson Schetkina-Bljumberga. Diastase in urine is not enhanced. When ULTRASOUND is not detectable changes in the pancreas. EXAMINATION gives a picture of localized or widespread lesions of gastric mucosa.

Renal colic has a number of common symptoms with acute pancreatitis, especially when pathologic process is localized in the area of the tail of the pancreas, or in her head. However, in case of renal colic pain is sudden and sharp, radiating to the groin, thigh, scrotum, and removed the introduction of spasmolytics, blockade the spermatic cord.

History-guidance on the urinary system pathology, urolithic bolez, dizuriceskie disorders. The patient with renal colic is restless, rushes. Taped dramatically positive symptom of Pasternackogo. In the analysis of urine in the patient with renal colic fresh red blood cells may be protein cylinders, leukocytes. When hromocistoskopii selection indigokarmina slowed down or does not exist on the side of the lesion. When renal ultrasound-signs of urodynamics, pielojektazija, hydronephrosis, dense inclusions in the ureters-lohanochnoj system. In case of difficulties in the differential diagnosis of resorting to diagnostic laparoscopy.

Myocardial infarction is sometimes accompanied by severe pain in the area epigastralna, followed by shock or collapse may occur. However, myocardial infarction there is no vomiting, no pain during palpation in the area of the pancreas, no bowel paresis stomach not swollen. The patient's situation enforced sitting or lying down. Expressed by the paleness of the skin, shortness of breath. The pulse is weak, broken heart rhythm, heart deaf. In contrast, the patient with acute pancreatitis restless, rushes, stomach swollen, painful in the area epigastralna, determined by positive symptoms Kerte, Voskresensky, Mayo-Robson, Koolena,-Mondor, etc. In the study of blood in the patient with acute pancreatitis there is Leukocytosis, toxic formula shift to the left. Identifies the increase in urinary incontinence, and myocardial infarct, those changes are not available. Diagnosis of myocardial infarction must be clinically and confirm jelektrokardiograficheski.

**Treatment** of acute pancreatitis must be carried out only under surgical hospital. It happens to be conservative (in the absence of peritonitis clinic) and includes: creating serenity pancreas-hunger (3-7 days), decompression of the stomach, paranefralnuju and the round ligament of the liver blockade 0.25% solution novokaina, in/in detoxication, antifermentnuju, antisekretornuju, spazmoliticheskuju, anesthetic, anti-inflammatory, antigistaminnuu therapy, restoration vodno-elektrolitnogo balance, correction of cardiovascular disorders. The nature, sequence, amount of conservative therapy depends on the severity of the condition, the clinical manifestations of pancreatitis, the patient's age and comorbidity.

The ineffectiveness of conservative treatment during 24-48 hours shows surgical treatment. It includes: gastro-dissection of the colon, ligaments, audit of stuffing bags, pancreas, nekrsekvestrjektomiju, sanitation and drainage of stuffing bags, holecistostomiju, drainage of the abdominal cavity. It is now widely used in the early 2-3 days laparoscopic drainage of stuffing bags, holecistostomija.

**Chronic pancreatitis**

This is a relapsing mnogoprichinnoe disease, proceeding with the change of destructive and proliferative phases.

**Classification**

1. Primary chronic disease-independent;

2. secondary chronic (as a consequence of other diseases of abdominal organs-peptic ulcer, CHOLELITHIASIS and cholecystitis).

Emit:

-         chronic recurrent (after 2-3 attacks);

-         chronic pain;

-         chronic indurativnyj;

-         chronic psevdotumoroznyj (reminiscent of head cancer);

-         chronic calculous Sclerosing (stones in the duct).

Etiopathogenesis. The leading theory is enzymatically-gipertenzionnaja (in the face of the GSD-pancreatic hypertension leading to gradual loss of pankreatocitov, the replacement of their connective tissue and permanent violation of the functions of the pancreas.

**Clinical picture.** Major manifestations: pain in epigastria, diarrhoea disorders, jaundice. 1.100% pain; 2. Pancreatic neuralgia is malodorous, Pappy, with bold sequined feces (steatorrhoea, kreatoreja); 3. Progressive weight loss-(three "d" (dolor, diarea, diabetes)-pain, diarrhea, diabetes). 4. Jaundice.

Survey: 1. General clinical laboratory methods (blood test, urine test, biochemistry, analysis of feces, urine diastase, amylase blood in dynamic); 2. ULTRASOUND; 3. EXAMINATION; 4. X-ray of the stomach; 5. CT.

Differential diagnosis: with GSD pancreatic head cancer; gastric ulcer and 12 duodenal ulcer.

**Treatment:** Conservative: diet (float food (4-6 times per day) with a limit of acute, greasy, fried foods meat (beef, chicken-in the form of products, carefully processed, steamed). Intravenous therapy-protein preparations antispasmodics, desensitizing preparations taking medicines containing pancreatic enzymes; Sanatorium-and-spa treatment.

Surgical treatment: rehabilitation of bodies, contributing to the development of chronic pancreatitis (cholecystectomy, holedoholitotomija, gastrectomy, SPV); creation of a full-fledged outflow on pankreaticheskomu channel-longitudinal pankreatoejunostomija.

**6. Self-study in extracurricular time** (preparation for practical occupation):

a) **annotated list of questions on the subject of the lesson:**

Definition of acute pancreatitis, chronic pancreatitis.

Features of the structure and function of the pancreas.

The main causes of the disease.

Pathogenesis of acute and chronic pancreatitis.

Clinical manifestations of the disease.

Nature of pain.

The main symptoms (Kerte, Voskresensky, Mayo-Robson-Mondor, Cullen, Grey-Turner, Holstead's, etc.).

Features of the disease.

Diagnostic methods (laboratory, instrumental).

Differential diagnosis of acute and chronic pancreatitis.

Complications of acute pancreatitis.

The basic principles of treatment (pre-hospital) swollen and destructive forms of acute pancreatitis, chronic pancreatitis.

b) **Written homework:**

Presented in the form of diagrams or tables:

the structure of the pancreas and its basic functions;

pathogenesis of acute pancreatitis;

classification of acute and chronic pancreatitis;

basic principles for the treatment of acute and chronic pancreatitis.

) **mikroreferatov Topics to address in Lesson:**

1. the role of the pancreas in the life of the human body.

2. methods of clinical and instrumental diagnosis of acute and chronic pancreatitis.

3. methods of conservative and operative treatment of acute and chronic pancreatitis.

**Tests for self-control quality home training:**

1. In the development of acute pancreatitis primacy belongs to:

a) microbial flora

b) mikrocirkuljatornym violations

) autofermentnoj aggression

g) venous stazu

2. Lateral pain resistance of anterior abdominal wall in the projection of the pancreas in acute pancreatitis is called symptom:

and Mayo-Robson)

b) Kerte

Grey-Turner)

g)-Mondor

h) Resurrection

3. Pain by palpation in the left costal-povzvonochnom corner of characteristic symptoms:

and) Resurrection

b) Mayo-Robson

Grünwald)

g)-Mondor

d) Grey-Turner

4. Most informative method of research when pancreatitis is:

a review of abdominal x-ray)

b) laparoscopy

gastroduodenoscopy)

g) amylase blood and urine tests, ultrasound

5. identification of hemorrhagic abdominal effusion and pockets of fat necrosis on the peritoneum lets think:

a hollow organ damage)

b) on liver rupture

in) on acute pancreatitis

g) on its stomach ulcer

d) on mezenterialnom thrombosis

6. the most frequent symptom of pancreatitis are:

a) nausea and vomiting

b) hyperthermia

in) jaundice

g) bloating

d) pain in the upper abdomen

7. In the pathogenesis of acute pancreatitis is not involved:

a) jenterokinaza

b) elastase

in) phospholipase

g) trypsin

d) streptokinase

8. The most frequent clinical-morphological form of acute pancreatitis is:

a) oedematous pancreatitis

b) adipose pankreonekros

c) hemorrhagic pancreatic necrosis

g) purulent pancreatitis

q) adipose pankreonekros with enzymatic peritonitis

9. The most typical for acute pancreatitis pain are:

and aching)

b) skirted

colicy)

g) daggers

e) blunt

10. The patient with acute pancreatitis on the first day is assigned:

and) table 15

b) table 5A

in) table 9

g) table 10

d) starvation

**7. Independent work in the practice session:**

1. the decision of various levels of situational tasks of mastering

2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) clarifying the history of the disease

in) assessment of general condition of the patient:

the color of the skin and mucous membranes

body temperature

nutrition

the number of respiratory movements

State language

part of the anterior abdominal wall to breath

the status of the anterior abdominal wall (tension, painful divisions)

local symptoms and signs of disease

peristalsis of the bowel

the presence or absence of flatus and stool

urination

g) score paraclinical examination methods

d) conclusions on the diagnosis

e) differential diagnosis

f) treatment definition

w) principles of conservative or operative treatment.

3. report of the patient group.

4. Read and parse the radiographs.

5. Presentation of the themes mikroreferatov.

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**Literature**

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial, m., 2006.

3. Savelyev V.s. Guide to emergency abdominal surgery m., 2004.

4. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. (I) - (II) , M., geotar-media, 2005.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-in | 6-d |
| 2-b | 7-d |
| 3-b | 8-a |
| 4-b | 9-b |
| 5-in | 10-d |

**Topic:** "Ileus"

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, classification of intestinal obstruction;

b) skills training anamnesis, complaints, inspection of patients with ileus;

Learn methods of detecting) characteristic symptoms, instrumental examination of patients with ileus;

g) learn to evaluate the data obtained, put the preliminary diagnosis, prescribe the appropriate treatment the clinical picture.

**2. To enter, you need to know:**

of course, normal and topographical Anatomy: structure, topography of the blood supply to the intestines;

in the course of normal and pathological physiology: basic data on water-jelektrolitnomu Exchange, its violations and their correction;

classification of intestinal obstruction;

Clinical form and stage of development of intestinal obstruction;

the clinical course of acute intestinal obstruction;

methods of laboratory and instrumental examination of patients;

the differential diagnosis of intestinal obstruction with other acute diseases of the abdominal cavity;

General principles and methods of treatment (conservative and operative) acute intestinal obstruction.

**3. To enter, you need to understand:**

mechanisms of violations vodno-elektrolitnogo Exchange and nervous regulation of motor-evacuation bowel activity, leading to the development of necrosis of the bowel and peritonitis;

need a quick comprehensive surveys of patients for diagnosis and adequate treatment assignment.

**4. To enter you must be able to:**

correctly assemble the complaints and the patient had acute ileus;

identify the characteristic symptoms of acute intestinal obstruction;

based on anamnesis, clinical picture, additional research data to put the correct diagnosis;

hold the differential diagnosis of acute ileus with other diseases of the abdominal cavity organs (acute appendicitis, acute cholecystitis, acute pancreatitis, its stomach ulcer, acute thrombosis of blood vessels bryzhejki), and between different types of intestinal obstruction;

define and justify the tactics of treatment of a patient with intestinal obstruction.

**5. Theoretical reference**

**Bowel obstruction** -disease characterized by partial or total breach of content promotion moves through the path.

Acute ileus belongs to the Group of acute surgical diseases of the abdominal cavity, requiring immediate diagnostic and therapeutic measures.

**Classification**. Distinguish between dynamic and mechanical intestinal obstruction. In turn, the mechanical intestinal occlusion can be: obturative, stranguljacionnoj and mixed high and low tonkokishechnoj, colonic. Dynamic occlusion bowel and spastic paralysis happens.

**The clinical picture of** acute mechanical intestinal obstruction include: pain in the abdomen shvatkoobraznogo nature, nausea, bloating and vomiting repeatedly asymmetry belly, violation of flatus and stool. Depending on the reasons for and the level of obstruction of these symptoms can vary. The rapid development of pain attack and repeated painful vomiting are the beginning of acute intestinal obstruction high localization. Conversely, low, colonic obstruction, begins with exfoliation of the violations and gases, then align the bloating and pain. Vomiting is when this late and prognostically unfavorable sign.

Dynamic spastical occlusion occurs relatively rarely and develops in a spasm of a particular piece of intestine, leading to narrowing of its lumen. Clinically this form is characterized by mild pain syndrome, the feeling of bloating, nausea, vomiting, Chair. There may be uneven bloating. The belly is usually mild, by palpation can palpate spazmirovannyj plot. Tapped Peristaltic noises of the bowel. The general condition of the patient is relatively satisfactory, violations on the part of the cardiovascular system. Blood and urine tests are within normal limits.

Paralysis intestinal occlusion develops due to paresis or paralysis of the muscle layers of the intestine in early postoperative period, as a result of chemical or bacterial effects on the intestine, at peritonitah.

Clinically it is gradually increasing constant abdominal pain, nausea, vomiting, delayed emission of gas and stool. Belly usually evenly swollen, the front abdominal wall is soft, but painful at palpation. Can be determined by symptom Shchyotkina-Bljumberga. Uchashheny pulse and breathing. In blood leucocytosis, and in severe cases and lejkoformuly shift to the left. When review x-rays of the abdomen can be detected by a Klojbera Bowl and diffuse intestinal flatulence. Both forms do not require surgical treatment, and usually are cured using conservative events.

In the clinical course of acute mechanical intestinal obstruction decided to allocate three stages:

In **I stage** (hemodynamic disorders or ileusnogo scream ") is dominated by pain syndrome and common disorders. A patient behaves in a restless, there are: shvatkoobraznaja abdominal pain, repeated vomiting, tachycardia, unstable blood pressure (BP). The tongue dry, lined with white bloom. Belly swollen, often asymmetric, in the Act of breathing involved uneven, not depart Gaza, no chairs. Can be determined visually expressed peristalsis (Hose) asymmetry of the abdomen, bloated guts and loop over it timpanit (Val). When bumped, anterior abdominal wall taped "succussion" (s. Sklyarov). Perkutorno over hyped bowel loops indicated timpanit with metallic tint (c. Kivulja). Auskultativno can be listened to "the noise of falling drops" (Spasokukockogo). When uzloobrazovanii or zavorote sigmoid by palpation is defined by zapustevanie in the right iliac region (Shimon breakdance). Digital rectal examination is required, which can be determined by the dehiscence of the anus and an empty rectal ampulla (Obukhovskaya hospitals). Introduction to klizme siphon cannot be more than 500 ml of water (Cege-Mantejfelja). Analysis of peripheral blood and urine in I stage did not significantly change. Radiographically defined bloated loops of the intestines, "arch", Bowl Klojbera, p-m Casey (lateral pectoral small intestine-"skeleton of a herring").

**(II) stage** (intoxication) is characterized by further circulatory disorders in the wall of the intestine, common violations hemodynamics, the main types of Exchange (protein, water and electrolyte, vitamin), increasing signs of intoxication. Marked by persistent pain, vomiting, auskultativno-sharp weakening or absence of peristalsis of the bowel noises, weakness. Then pain is decreasing because of the destruction of the nerve endings in the intestinal wall ("imaginary well-being"), vomiting less abundant, but with the rotten smell, thirst. The facial expression of suffering. Earthy skin-gray color. Pulse uchashhen, weakened by filling in the peripheral arteries, blood pressure progressively reduced, sometimes there is a collapse. In addition to the above symptoms observed in I stage begins to be determined symptom Shchyotkina-Bljumberga, perkutorno taped free fluid in sloping field of the abdominal cavity. X-ray picture is characterized by multiple bowls Klojbera. In the blood increases leucocytosis with toxic leukocyte shift to the left.

**(III) stage** (Terminal). In this stage of the highly expressed intoxication phenomena. The dire condition of the patient, increasing already, confusion or loss of consciousness. Facial features seen (face of Hippocrates), sick grumpy adinamichen, kontakten, not indifferent to their own status and others. Hemodynamic parameters dramatically violated, low blood pressure, pulse, frequent, low voltage and filling. Vomiting acquires kalovyj smell. Picture of the abdomen is a classic picture of diffuse peritonitis spilled. There are no noises of the intestinal peristalsis (symptom of "absolute silence). Blood analyses-high Leukocytosis, pronounced shift towards lejkoformuly and young palochkojadernyh forms, toxic graininess. Increasing urea and creatinine levels, signs of acute Hepatorenal failure.

**Differential diagnosis**.

Acute intestinal obstruction should be differentiated: with acute appendicitis, acute pancreatitis, acute thrombosis of mesenteric vessels, its stomach ulcer and 12 duodenal ulcer, renal colic.

In acute appendicitis, as with intestinal obstruction, acute beginning. A common symptom is abdominal pain. However, when appendicitis pain constant, is characterized by the symptom of its migration (c. Kocher-Volkovich), and intestinal obstruction pain shvatkoobraznaja and corresponds to place obstacles in the intestine. In acute appendicitis in early disease no bloating can depart Gaza and Chair, while the intestinal obstruction, these symptoms are signs of disease. In acute appendicitis identifies positive symptoms of Rovzinga, Karavaevoj, Sitkovskogo, obraztsova, Voskresensky, Bartome-Mihelsona, which will be missing when intestinal obstruction. Radiographically in acute appendicitis does not identify Bowl Klojbera characteristic of acute intestinal obstruction.

Acute pancreatitis is characterized by unbearable, pain in epigastralna area spanning, whereas when intestinal obstruction colicy pains. A common symptom is bloating. However, if the swelling is observed in acute pancreatitis upper division stomach, acute intestinal obstruction bloating occurs in different departments, depending on the level and type of obstacles, there is an asymmetry of the abdomen. In acute pancreatitis vomit the agonizing, often mixed with bile and intestinal obstruction in it in the early hours of the profuse, bringing short-term relief, and then acquires kalovyj smell. In acute pancreatitis are determined by positive symptoms: Mayo-Robson, Kerte, Resurrection, and there are no symptoms: "noise succussion" Sklyarov, Valea, Hose, Kivulja. There was an increased level of blood amylase, urinary incontinence, which is not typical for acute intestinal obstruction. When you review the abdominal x-ray found reduced tours aperture, duodenostasis and deployed a horseshoe 12-duodenum, unlike bowls Klojbera characteristic of intestinal obstruction. ULTRASOUND reveals a violation of pancreatic structure echogenicity, resizing, the presence of fluid in the abdominal cavity bag stuffing.

When acute tromboze mezenterialnah vessels also raises strong, sharp pain, bloating, vomiting. The pain is permanent, kolikoobraznyj, nature without explicit localization. Acute coronary mezenterialnah blood vessels often occurs in patients with elderly and senile patients with disturbances of the heart rhythm, arteriosclerosis, heart disease. Notes with a touch of liquid stool blood, whereas in acute intestinal obstruction Chair and Gaza detained. Vomiting is rare, with the occasional dash of "coffee grounds", but when repeated vomiting, ileus with fecal odor. Auskultativno in acute mezenterialnom trombose noted oppression peristalsis, while the intestinal obstruction in initial stage of peristalsis strengthened. Radiographically, with scoping study of abdominal cavity in tromboze mesenteric vessels noted swelling of the intestinal loops, free fluid in sloping field of the abdominal cavity, and in acute intestinal obstruction, Klojbera Bowl "arches". When ultrasound and laparoscopy is determined by the fluid in the abdominal cavity-free.

For its stomach ulcer and 12 duodenal ulcer is characterized by a sharp, sudden, beginning, "kinzhalnogo" nature of the pain, apply immediately around the abdomen, anterior abdominal wall dramatically tense-"belly doskoobraznyj" (remember the triad Knigina--Mondor). Often patients have ulcerative anamnesis. Such pain in the beginning attack of acute intestinal obstruction. Vomiting when its throat is rare, there is a reflex, does not have a kalovogo smell like in acute intestinal obstruction. In the first minutes and hours of the perforation in the patient State of shock, there is pallor of the skin, cold sweat, aetiology. Retracted belly due to reactive muscle tension, and in intestinal obstruction, by contrast, has a bloating. Anterior abdominal wall when its ulcer dramatically tense-"doskoobraznaja", percussion notes the disappearance of liver dullness (c. Spizharnogo), dramatically positive symptom Schetkina-Bljumberga, which is not typical for acute intestinal obstruction. When the review of screening in its abdominal cavity ulcer is determined by free gas under right dome diaphragm. And for acute intestinal obstruction characterized by bowls, intestinal Klojbera "arches".

Renal colic-begins abruptly strong bouts of pain. This raises the tension of muscles of the anterior abdominal wall, sometimes false symptoms of peritonitis, moderate bloating, vomiting, which is a similar sign of acute intestinal obstruction. But in case of renal colic pain constant, irradiiruet in the groin, thigh, scrotum, removed introduction spasmolytics, and when intestinal obstruction the pain is shvatkoobraznyj nature, do not leave Gaza, no chairs. In case of renal colic taped positive symptom in acute Pasternackogo ileus symptoms valia Hose, Kivulja, "succussion" (s. Sklyarov). When review x-rays of the abdominal cavity in patients with renal colic abdominal pathology is not detectable in acute intestinal obstruction-multiple bowls, Klojbera "arches". In the analysis of urine in patients with renal colic fresh erythrocytes, leukocytes, cylinders, when there are no changes to the data of intestinal obstruction. When renal ultrasound pielojektazii signs, presence of concrements in the ureters-lohanochnoj system, hydronephrosis, demonstrating in favor of Urologic pathology.

**Treatment.** Treatment of acute intestinal obstruction may be conservative (in the absence of peritonitis clinic) and includes: starvation, gastric emptying, two-way blockade paranefralnuju 0.25% solution novokaina, intravenous dezintoksikacijuonnuju therapy, supplementation of BCC, correction of violations vodno-elektrolitnogo Exchange, antispasmodics, antibiotics, as well as operational (if the patient is immediately comes to the clinic of peritonitis) in the absence of the effect of conservative treatment.

**6. Self-study in extracurricular time** (preparation for practical occupation).

a) **annotated list of questions on the subject of the lesson:**

Definition of acute ileus.

Classification of intestinal obstruction.

Causes of intestinal obstruction.

Pathogenesis of peritonitis in acute intestinal obstruction.

The clinical picture of acute intestinal obstruction.

Instrumental examination methods in patients with ileus.

Differential diagnosis of acute intestinal obstruction.

Methods of conservative and surgical treatment of acute intestinal obstruction.

b) **Written homework:**

Presented in the form of diagrams or tables:

classification of intestinal obstruction;

pathogenesis of intestinal dysfunction in acute intestinal obstruction;

algorithm of patients with acute ileus;

principles of conservative and surgical treatment of intestinal obstruction.

) **mikroreferatov Topics to address in Lesson:**

1. Methods of examination of patients with suspected acute intestinal obstruction.

2. Violations vodno-elektrolitnogo Exchange in acute intestinal obstruction.

3. Pathogenesis of peritonitis in acute intestinal obstruction.

4. Methods of treatment of patients with intestinal obstruction.

**Tests for self-control quality home training:**

1. Provoke acute intestinal obstruction can:

and abdominal muscle weakness)

b) alcohol

in) the use of oily and spicy food

g) eating lots of food rich in fiber

d) psychological trauma for the

2. For all types of acute intestinal obstruction characterized by:

a) intense abdominal pain

b) sharp increase peristalsis

in resistant Chair and latency) of gases

g) asymmetry of the abdomen

e) abdominal muscle strain

3. For a low of colonic obstruction characterized by all except:

a gradual build-up of symptoms)

b) abdominal distention

in) of the occurrence of bowls Klojbera

g) delay stool

d) quickly (within 24 hours) dewatering

4. The main symptom obturative intestinal obstruction is:

and constant abdominal pain)

b) abdominal cramps

in) color "vomiting coffee grounds»

g) bloating

d) Melena

5. In case of acute intussusception in the first place:

a) review x-rays of the abdominal cavity organs

b) passage of barium kishechniku

in) esophagogastroduodenoscopy

g) laparoscopy

d) biochemical analysis of blood

6. When uzloobrazovanii, zavorote gut:

a) conservative treatment should be

b) shows the emergency operation

in) must be dynamic observation

g) operation is carried out in the cold period

d) all the answers are correct

7. With cancer of the cecum operation of choice is:

a right-sided with gemikoljektomija) ileotransverzoanastomoza

b) imposition of ileostomy

cekostomy overlay)

g) Hartmann operation

8. For acute tonkokishechnoj ileus is not typical:

a) uncontrollable vomiting

b) cramping

in) the rapid dehydration

g) bloating in the first hours of the disease

d) rapid reduction BCC

9. When the paralytic ileus apply:

a) operative treatment

b) holinjergetiki

) nazointestinalnuju intubation

g) novokainovuju blockade

d) all means of stimulation of bowel

10. In acute intestinal obstruction does not identify the symptom:

and Valia)

b) Resurrection

Sklyarov)

g) Kivulja

d) "hospital" Obukhiv

**7. Independent work in the practice session:**

1. the decision of various levels of situational tasks of mastering

2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) clarifying the history of the disease

in) assessment of general condition of the patient:

the color of the skin and mucous membranes

body temperature

nutrition

the number of respiratory movements

State language

part of the anterior abdominal wall to breath

the status of the anterior abdominal wall (tension, painful divisions)

local symptoms and signs of disease

peristalsis of the bowel

the presence or absence of flatus and stool

urination

g) score paraclinical examination methods

d) conclusions on the diagnosis

e) differential diagnosis

f) treatment definition

w) principles of conservative or operative treatment

3. report of the patient group

4. Read and parse the radiographs

5. Presentation of the themes mikroreferatov

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**Literature**

1. Evtihov r.m., m.e., Putin Shulutko A.m. and others Publisher. gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial, m., 2006.

3. Savelyev V.s. Guide to emergency abdominal surgery m., 2004.

4. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. (I) - (II) , M., geotar-media, 2005.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-g | 6-b |
| 2-in | 7-a |
| 3-d | 8-g |
| 4-b | 9-d |
| 5-a | 10-b |

**Topic:** "Peritonitis"

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, classification, clinical manifestations, methods of examination and differential diagnosis of various forms of peritonitis;

b) classification, clinical symptoms of peritonitis, methods of laboratory and instrumental Diagnostics;

in) assimilate the etiology, mechanism and developmental stages of peritonitis depending on the calling source;

g) teach seek history, collect and assess complaints, identify the clinical symptoms, properly assess the data of laboratory and instrumental tests;

d) differential diagnosis of peritonitis: with acute pancreatitis, Kidney stone disease (renal colic), acute ileus, acute violation of circulation mezenterialnogo complicated by peptic ulcer and 12- duodenal ulcer, ectopic pregnancy, impaired haemorrhagic Diathesis, salts of heavy metals poisoning.

**2. To engage the student should know:**

anatomical and physiological information about the peritoneum (surface structure, wallet, sinus, channels), blood circulation and innervation, absorption of peritoneum, resistance to infection and inflammation distribution mechanism;

definition of peritonitis;

etiology and pathogenesis of peritonitis;

the classification and form of peritonitis:

stimulate a)

b) because of

in) on the nature of currents

g) according to the character of exudate

d) prevalence

(e)) for phase currents

Clinic symptoms and spilled, local and limited peritonitis, depending on the reasons which caused it;

the differential diagnosis of peritonitis with acute surgical diseases of the abdominal cavity and retroperitoneal space;

comprehensive treatment of peritonitis:

a) correction vodno-elektrolitnogo and protein metabolism

b) stimulation of immune activity of the organism

in) antimicrobial therapy

g) intraperitoneal lavage

d) surgical treatment of limited and spilled peritonitis. complications of peritonitis with abdominal side (mezhpetlevye, poddiafragmalnye, pelvic abscess), thoracic cavity (pneumonia and Pleurisy), vascular (thrombosis and embolism);

outcomes, immediate and long-term complications of peritonitis.

**3. To enter, you need to understand:**

phase currents of peritonitis and their duration (reactive, toxic, end);

pathological anatomy and pathological physiology development of peritonitis.

**4. To enter you must be able to:**

correctly assemble the anamnesis, the complaints of the patient;

identify the early signs of the disease;

survey of the patient (a general view, color of skin, the cardiovascular and respiratory systems);

describe local symptoms-abdominal shape, tension and soreness by palpation, a symptom of Shchyotkina-Bljumberga, percussion and auscultation of the abdomen;

evaluate laboratory data and rentgenologicheskuju picture with peritonitis and ultrasound data;

conduct a preoperative preparation and postoperative treatment.

**5. Theoretical reference**

**Peritonitis** is an acute or chronic inflammation of the peritoneum, accompanied by local or shared symptoms of the disease, impaired function of major organs and body systems. Peritonitis in 99% of cases, is a complication of acute surgical diseases of the abdominal cavity organs, that is secondary. Spontaneous, primary peritonitis (1%), is a consequence of the gematogennoj translocation of microorganisms into the peritoneum from other bodies. Chronic peritonitis, basically, is specific-tuberculosis, parazitarnyj, kankroznyj, ascites-peritonitis.

**Classification**. Acute peritonitis, caused by the nature of its causes can be appendikuljarnym, gastric, intestinal, bilious, urinary, pankreatogennym, fermentative, genital.

By the nature of the effusion secrete: serous, fibrinous, purulent, Putrid, bloody, mixed.

On the prevalence of lesions distinguish peritonitis:

1. local:

a) softness (abscess)

b) neotgranichennyj (struck a pocket of peritoneum);

2. common:

a) diffuse (struck several anatomical divisions of the peritoneum),

b) spilled or General (the whole blighted peritoneum).

**The clinical picture**. During acute peritonitis three clinical stages: 1. reactive (12-24 hours)-maximum local manifestations and the reaction of the simpatadrenalovoj system of the body (primarily pain); 2. toxic (24-72 hours)-stihanie local manifestations, the prevalence of common symptoms of intoxication; 3. Terminal (over 72 hours)-extremely serious intoxication on the verge of decompensation of the vital functions of the organism.

It is considered that brjushinnyj cover area is approximately equal to the human skin cover. Therefore, developing in the abdominal cavity of Pyo-inflammatory process quickly leads to flood the body with toxins Exo-and endogenous origin. Etiopathogenesis, regardless of the cause of peritonitis, pathogenic e. coli and dominates the cocci. Increasing intoxication leads to the defeat of the vital organs and the development of multiple organ failure: Hepatorenal, then cardiovascular and lung and in end stage lesion of the CENTRAL NERVOUS SYSTEM. Diagnosis usually presents no special difficulties. Set the nearest cause disease (original peritonitis) and then identifies peritoneal symptoms: 1. abdominal pain, 2. abdominal muscle tension and positive symptom Schetkina-Bljumberga, 3. nausea and vomiting, 4. increased body temperature, etc.

If the reactive stage prevails pain syndrome and protective voltage abdominals, the toxic stage these symptoms are less pronounced, but increasing tachycardia, nausea, vomiting, bowel paresis and bloating, febrile morbidity. In the terminal stages of peritonitis symptoms of toxic lesions of CNS-consciences oppressed pointy, facial features, pulse deficit amid tachycardia, reduction in blood pressure. Significantly, no swollen belly peristalsis of the intestine (symptom of "absolute silence). In laboratory studies of blood detected growing Leukocytosis, which can then change or lakopenia, indicating exhaustion protective forces of the organism, there has been a significant toxic lejkoformuly shift left. Hypo-and desproteinemia also provide evidence of immuno-depletion of protective forces of the organism. In toxic and terminal stages of peritonitis are increasing rates of residual nitrogen. Water-electrolyte loss body leads to thickening of the blood, that the notes on the changes in coagulogram. Increasing intoxication affects the kidneys-observed trace anuria, changes in urine toxic nature. Instrumental research methods do not have any independent significance, but merely complement the main clinical picture: ECG-signs of toxic lesions of the myocardium; radiographically-identifies the Bowl Klojbera, high standing of the dome of the diaphragm and friendly effusion in pleural cavity; Ultrasonic examination of abdominal viscera (by prescription) and free abdominal cavity to detect fluid. Diagnostic laparoscopy is shown in cases of uncertainty in diagnosis.

In toxic and terminal stages of peritonitis symptoms pronounced, so need to differentiate peritonitis occurs rarely. In reactive stage a short time, the commonality of several symptoms determines the necessity of holding the differential diagnosis of diseases as inflammatory, inflammatory nature.

**Differential diagnosis.**

Differential diagnosis of peritonitis is conducted with urolithiasis, acute pancreatitis, acute ileus, complicated by peptic ulcer and 12 duodenal ulcer, impaired ectopic pregnancy, haemorrhagic Diathesis, salts of heavy metals poisoning.

Kidney stones (renal colic) is manifested by severe pain, nausea, vomiting, bowel paresis and falsely positive symptom Schetkina-Bljumberga (psevdoperitonealnyj syndrome). However, pristupoobrazny character with the typical pain radiating into the thigh, groin, crotch, presence of dysuric phenomena lack inflammatory reaction of blood, changes in urine (jeritrociturija), renal ultrasound can help in establishing a diagnosis.

In acute pancreatitis you can identify some symptoms of peritonitis. But before the development of destructive pancreatitis, complicated currents, protective muscle tension, aches and pains are Herpes nature, accompanied by painful vomiting, the temperature at the beginning of the disease remains normal. Survey identifies symptoms Kerte, Voskresensky, Mayo-Robson, Cullen,-Mondor. Help blood amylase and urinary incontinence, which increases in acute pancreatitis and is not changed when peritonitis. If ULTRASOUND detected a change in the structure of the pancreas, effusion in stuffing the bag.

Acute intestinal mechanical occlusion clinically different from peritonitis is only in its early stages. Pain initially strong (the so-called "ileusnyj Creek") are shvatkoobraznyj in nature, and when peritonitis permanent. Peristalsis in acute intestinal obstruction initially strengthened, defined symptoms Valya, hose, Kivulja, "succussion" Sklyarov. Radiographically detected Bowl Klojbera, a symptom of the "organ pipes", passage of barium slowed down. Subsequently, in the absence of adequate treatment, necrosis and perforation of intestine joins peritonitis.

When ulcers stomach and duodenal ulcer, 12 especially big kalleznyh, penetrirujushhih ulcers can occur pretty intense abdominal pain, some protective muscle tension. However, in contrast, there are small to moderate the peritonitis pain after taking food, water or milk, bowel paresis is not observed, the temperature remains normal, non-existent or minimal changes in laboratory indices of blood. EXAMINATION and x-ray of the stomach (with barium) confirm the presence of ulcers of the stomach or duodenum 12 (symptom of "niche").

Acute mezenterialnogo blood circulation occurs suddenly without any previous inflammatory reactions and is characterized by initially severe pain in the abdomen. Draws the attention of the pulse irregular, expressed in the history of rheumatic heart diseases or post-infarction etiology. Analyses of blood, the sharp shift giperlejkocitoz notes lejkoformuly, coagulogram changes left. In a subsequent join peritoneal phenomenon. Significant assistance is provided by the early holding of diagnostic laparoscopy.

When disturbed ectopic pregnancy bleeding occurs in the abdomen and severe painful reaction, accompanied by tachycardia, falling blood pressure, up to the collapse. However, initially there is no symptom of Shchyotkina-Bljumberga, abdominal wall remains soft, characteristic symptom "Vanki-vstanki", i.e. the impossibility of inspecting the patient lying on his back due to increased pain. History of taped delayed menstrual cycle. Diagnosis allows ultrasound, needling the rear body of the vagina in which blood is detected.

Bloody diates (Shenlejn-Genoha) is manifested mainly in young age. There are multiple bleeding under the skin, mucous and serous, including the peritoneum. As a consequence, the occurs pain syndrome. However, there is no history of inflammatory disease. Analyses of blood there is no inflammatory changes and thrombocytopenia. In doubtful cases helps laparoscopy.

In cases of poisoning by heavy metal salts may experience strong pristupoobraznaya abdominal pain, and even protective tension of the abdominal wall. However, there is no nausea, vomiting, a symptom of Schetkina-Bljumberga is negative. Anamnesticheski detects contact with industrial poisonous substances. Body temperature is normal. In the analysis of blood no inflammatory reaction.

**Treatment.** The basic method of treatment of peritonitis is surgical. Shows how to execute a laparotomy, auditing organs of the abdominal cavity and removal of the hearth, which caused peritonitis, sanitation and drainage of the abdominal cavity, nasogastrointestinal intubation. In the pre-and aftercare period intensive infusion, dezintoksikatsionnaya, anti-inflammatory, antibacterial therapy, including razlitom peritonitis extracorporeal detoxification methods (ULTRAVIOLET blood hemosorption, plasmapheresis, limfosorbcija, etc.). Correction is performed cardio-vascular, pulmonary, hepatic-renal failure.

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions on the subject of the lesson:**

1. What are the classification of peritonitis

2. list the clinical symptoms of peritonitis, depending on the stage of the tide.

3. name of laboratory and instrumental research methods applied to differential diagnosis of peritonitis.

4. list the diseases to differentiate peritonitis.

b) **Written homework:**

Presented in the form of tables or diagrams:

classification of peritonitis;

pathogenesis of pathological disorders in the body when circulated peritonitis;

surgical treatment of peritonitis;

ways to prevent complications of peritonitis.

**Tests for self-control quality home training:**

1. For general purulent peritonitis is characterized by:

a) surround the pain

b) multiple uncontrollable vomiting

in the) frequent painful urination

g) Schetkina-Bljumberga symptom

d) Melena

2. In the terminal stage of a peritonitis not typical:

and the dire state of) total

b) increased peristalsis

in) heavy intoxication

g) face of Hippocrates

d) bloating

3. Peritonitis is a complication of all diseases except:

a) acute appendicitis

b) acute intestinal obstruction

in) broken ectopic pregnancy

g) acute pancreatitis

h) papilla stenosis

4. To diagnose abscess Douglas space optimal method is:

a) abdominal ultrasound

b) diagnostic laparoscopy

in) digital rectal

g) radiography of abdominal cavity

d) blood test

5. The most common cause of peritonitis is:

a) acute appendicitis

b) perforated ulcer

h) acute ileus

g) acute pancreatitis

d) the aggrieved hernia

6. For peritonitis not typical:

and abdominal wall muscles)

b) symptom Courvoisier

increased heart rate)

g) Chair and gas delay

e) vomiting

7. Pathognomonic symptom of perforation of a hollow organ in the abdominal cavity free is:

a) high Leukocytosis

b) positive symptom Shchyotkina-Bljumberga

in) free gas under right dome of diaphragm

g) dulling in sloping field of abdomen

d) absence of Peristaltic noises

8. For late stages of peritonitis not typical:

a) bloating

b) dewatering

the disappearance of the intestinal noises)

g) increased peristalsis

d) hyperproteinaemia

9. Cause psevdoperitonealnogo syndrome can be:

a) acute appendicitis

b) intestinal obstruction

pneumothorax)

g) retroperitoneal hematoma

d) nefrotlitiaz

10. what symptoms do not relate to the initial stages of peritonitis:

and sudden shifts in electrolyte)

b) tendency to tachycardia

in the peritoneum by palpation tenderness)

g) abdominal muscle strain

d) accumulation of Leukocytosis

**7. Independent work in the practice session:**

1. Supervision of patients with an assessment of the results of the survey:

and) collect complaints

b) medical history

the General status assessment)

g) definition local signs and symptoms

d) palpation, percussion and auscultation of the abdomen

(e)) score paraclinical data survey

f) correct interpretation of diagnosis

w) differential diagnosis

and) principles of conservative treatment

the operative treatment of types)

2. situational tasks Solution

3. report of the patient group

4. reading radiographs.

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**LITERATURE**

1. Evtihov r.m., Putin m.e., Shulutko A.m., etc. Clinical surgery. Publisher group "GEOTAR-media, 2006.

2. clinical surgery. Guide ed. Pancyreva Yu.m., m., 1988.

3. Kuzin M.i. surgical diseases. Tutorial. M., 2006.

4. Acute spilled peritonitis. Ed. Struchkova A.i., m., 1987.

5. Saveliev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. 1-2, m., geotar-media, 2005.

6. Simonian H.p. Peritonitis m., 1971.

7. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-g | 6-b |
| 2-b | 7- |
| 3-d | 8-g |
| 4-in | 9-d |
| 5-a | 10-a |

**Topic:** "Nagnoitelnye lung disease"

**1. the purpose of the practice:**

and learn how to examine patients) nagnoitelnymi lung diseases;

b) formulate detailed clinical diagnosis to justify it on the basis of differential diagnosis;

in articulate testimony to conservative) and surgical treatment.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: segmental structure of light, Anatomy and topography of the pleura and mediastinum; Clinical classification of nagnoitelnyh lung disease;

etiology and pathogenesis of abscess, bronchiectasis and lung gangrene; the clinical picture of acute and chronic abscess, bronchiectasis, pulmonary gangrene;

research methods: clinical, laboratory, endoscopic, x-ray;

methods of medical treatment nagnoitelnyh diseases of the lungs and of the preparations for the operation;

types of operations: resection of the share pulmonjektomija, plevrotomija, decorticator, drainage of pleural cavity for Bjullau-Subbotin.

**3. To enter, you need to understand:**

the causes of and the transition of acute to chronic suppurations of the form nagnoitelnyh lung disease;

the possibility of conservative therapy of patients with chronic pulmonary suppurations;

nagnoitelnyh prevention of lung diseases.

**4. To enter you must be able to:**

gather the complaints and patient with pulmonary suppuration (figure out the nature and localization of pain onset, duration, dogospitalnoe treatment);

conduct a survey of the patient (figure out the outward signs of the disease, to determine the boundaries of light, their tour to hold samples bar auscultation Soobraze, spirometriju);

read radiographs of patients with nagnoitelnymi lung disease.

**5. Theoretical reference.**

**Lung abscess** -purulent or rot decay plots of lung tissue, often within the segment with the presence of one or more cavities of destruction, filled with dense or liquid pus surrounded by perifocal infiltration of lung tissue. Lung gangrene-Pyo-putrid necrosis significant plot of lung tissue, often share 2-x shares or all light, without clear demarcation signs tending to further spread and reflected dire general condition patient. Diagnosis of infectious lung destruction is determined on the basis of anamnesis, assessing clinical manifestations, laboratory and radiological investigations. Primary source verification of diagnosis data of x-ray studies (x-ray, radiography), Imaging. The past decades have been characterized by active introduction of digital medical images for diagnosis of pulmonary suppurations. Leading role, took the computer tomography. In the list of mandatory instrumental research Bronchoscopy should be noted to enable deletion of tumor nature of the process, hold the fence material for bacteriological and cytological study. Much later, in diagnostic arsenal Lung Surgery took place ultrasonography. Valuable diagnostic method is bronchial Arteriography.

**Classification.** Distinguish:

On the etiology of: (a)) primary and secondary abscesses;

b) aerobic and anaerobic.

Pathogenesis: a) ajerogenno-aspiration;

b) haematogenously-Embolic;

traumatic)

g) septic.

Adrift: a) sharp; b) chronic.

Localization: a) the parietal;

b) median;

in solitary, deep mnozhestennye).

By the nature of currents: a) uncomplicated;

b) complicated (empyema, lung hemorrhage, sepsis, etc.).

**The clinical picture** of the disease depends on the phase of development of the pathological process. During the formation of the infiltrate in patients dominated clinic growing intoxication-weakness, headache, high fever, dry cough, fever, tachypnea. Percussion is determined by the perkutornogo entering the sound diminished breath over an area of blunting. Breakthrough phase abscess suddenly appears a large number of three-layer with the smell of sputum, decrease health, improves intoxication dropping temperature.

**Differential diagnosis.**

Differential diagnosis of lung abscess is conducted with other lung diseases: nagnoivshejsja cyst of the lung, lung cancer, bronchoectatic disease, gangrene of the lung jehinokokkom lung.

Lung abscess must be differentiated from bronchiectasis. The latter often flowing, long, long, from childhood. When bronchiectasis are experiencing intermittent exacerbation with febrile fever, cough with a small amount of purulent sputum. Patients have symptoms of chronic purulent intoxication-puffiness of the face, ishudanie, nail plate in the form of a watch glass. The retraction notes Fizikalno healthy side thorax, dulling the sound perkutornogo, multiple small and medium bubble wheezing. Radiographically defined diffuse pulmonary picture enhancement, increased lung root structure. More accurate diagnosis is possible if Tomo or bronhografii, allowing to identify the type of localization and bronchiectasis.

Often the abscess must differentiate with lung cancer. Unlike an abscess when lung cancer is characterized by prolonged over a multiyear period, subfebriliteta accumulation of small signs "syndrome, with a meager amount of muco-haemorrhagic sputum, hemoptysis, lack of accession three-layer rate, as in abscesse. For lung cancer is not characteristic for abscess faznosti currents. When the obturation tumour the bronchus and the development of atelectasis share, notes lag chest retraction of her in the Act of breathing, vtjazhenii and losing their intercostal spaces.

In the sputum and bronchial lavage in 83% of cases detected atypical cells. In the blood is characterized by increased SEDIMENTATION RATE up to 60-70 mm/h, lakopenia, anaemia anaemia. When x-ray study tumor dense, with uneven contours, does not contain the level of the liquid, there are phenomena cancer Lymphangitis (symptom moustache).

In some cases, you must differentiate lung abscesses of the hydatid lung cyst. Typical jepidanamneza specific data-accommodation in jepidemichnoj in jehinokokku terrain. In the first period, complaints are typical preclinical sporadic manifestations of hives, vague aches and pains in the chest, a rare dry cough. It is noted in the study of blood Eosinophilia (20-25%), there is a positive reaction Latex Agglutination antibody jehinokokku. x-ray study cavity is determined when the liquid formation with thin walls, sometimes visible Crescent shadow when detached hitinovoj shell.

Also requires a differential diagnosis of acute lung abscess with various kinds of limited pleural empyemas and so-called pleural lung cavities in which one of the walls of the cavity is raspadajushhajasja lung tissue, other parietal pleura, abscess poddiafragmalnymi. The most informative in such cases, ultrasound and computed tomography.

**Treatment of** acute infectious lung destrukcij prescribes antiviral therapy and pathogenetic along the following lines:

1. the maximum total emptying of the cavities containing purulent discharge.

2. Antibacterial therapy sensitivity microflora.

3. General treatment aimed at eliminating intoxication, correction of all types of Exchange, stimulation of protective reactions of the body.

Complete non-invasive rehabilitation of pulmonary abscesses should include:

1. Medication effect on the mucous membranes of the bronchial tubes to reduce swelling and elimination of bronchospasm (aminophylline, teofedrin, broncholitin). The best way of introducing drugs-inhalation using ultrasonic fogging machines (berodual, berotek, etc.).

2. Dilution of viscous sputum (expectorants, including vegetable origin-decoctions 1.31, violet three-coloured, etc.).

3. compulsory combination of listed activities with persistent posture drainage, a patient with a situation in which the lowest point is the mouth cavity drainage of purulent bronchus.

If sanitation and drainage in conducting these activities proved to be ineffective, we should resort to buzhirovaniju mouth subsegmentarnyh bronchi using a closed biopsy forceps and then brushes of various sizes. Catheterisation procedure ends with the abscess cavity through the channel of bronchoscope and medicinal compositions containing antibiotics, antiseptics, proteolytic enzymes.

The most rational way of minimally invasive evacuation abscess is considered transtorakalnoe drainage of lung abscess by Monaldi. For a successful drainage of abscess requires the following conditions: subkortikalnoe location of it, not less than 2 weeks from the onset of the disease; accurate localization of the abscess. The draining operations in infectious lung destrukcijah applies pnevmotomija. The conditions of its implementation the same as drainage of lung abscess by Monaldi. Indications for pnevmotomii limited: it is performed mainly in progressive lung gangrene when radical surgery is impossible because of the dire state of the patient, and transtorakalnoe drainage tube in the presence of multiple cavities is doomed to failure in advance.

Indications for lung resection in infectionykh destrukcijah are:

1. Lung Gangrene.

2. complications of acute lung abscess-pulmonary bleeding, massive hemoptysis with pulmonary hemorrhage development threat.

3. Chronic lung abscess.

When common gangrene easy runs, and when gangrenoznyh underwent pneumonectomy and purulent abscessah-usually Lobectomy.

**Bronchiectasis.**

Bronchiectasis-morphological concept that refers to a persistent abnormal expansion and deformation of the bronchi. Persistent expansion of the small peripheral bronchi can develop as a consequence of pathological processes in the surrounding tissue (a chronic abscess, Fibro-cavernous tuberculosis, chronic pneumonia). Such bronchiectasis commonly referred to as secondary.

Bronchiectasis-acquired disease characterized by chronic purulent inflammation affecting the entire thickness of the bronchial walls with irreversible change in its structure and function that occurs typically in the lower divisions of the lungs.

**Classification of** bronchiectasis.

(I) . Origin:

1. congenital (including combined with other malformations-Sv-Kartagenera syndrome).

2. acquired (with bronchiectasis).

(II) On the defeat of the male structures. Lung:

1. Favouring defeat lung parenchyma.

2. Favouring defeat bronchi.

(III) Bronchiectasis. the form:

1. Cylindrical.

2. Saccular.

3. Spindly.

4. Mixed.

IY .: Flow for clinical

1. Remission.

2. Aggravation.

3. Continually relapsing course.

Y Complications: availability.

1. Neoslojnennoe.

2. Complicated:

-pulmonary haemorrhage

-blood-tinged sputum

-piopnevmotoraksom

-abscedirovaniem.

YI The external respiration function:

1. Without respiratory failure.

2. Respiratory failure (I) , (II) and (III) Church.

3. Legern-serdecnaya insufficient.

A detailed diagnosis of bronchiectasis must take into account all listed in the classification of signs marking the localization and the prevalence of the disease process.

**The clinical picture**. Bronchiectasis often flows long phase, from childhood. There are also secondary bronchiectasic nagnoitelnymi in patients with chronic lung diseases, as well as with pulmonary tuberculosis and aktinomikoze.

The clinical picture is characterized by bronchiectasis stadijnostju currents: 1. initial stage, 2. stage of sepsis (a, b), 3. stage destruction (a, b), occasional exacerbations, abundant selection, as well as the ever-present and growing during illness chronic purulent intoxication. Symptom of "hour glass", "drumsticks" lateral pectoral nail plates. A specific complication of this disease is renal Amyloidosis. In the diagnosis of bronhojektazij a leading place is occupied by the x-ray study-bronhografia, bronchoscopy and Imaging.

**Differential diagnosis.**

Differential diagnosis of bronchiectasis is needed with chronic empyema, chronic by the lungs, lung cancer, tuberculosis.

The same chronic empieme pleura in diagnosis with the disease is a long, bronchoectatic chronic nature of the disease, the presence of recurrent exacerbations of chronic purulent intoxication. In times of increasing complaints are also available on subfebrilitet, cough with purulent sputum Office coming from the chronic empiema through draining bronchi. Detected in the blood leucocytosis, shift formula white blood, increased ERYTHROCYTE SEDIMENTATION RATE. Different appearance of the patient: usually chronic pleural empyema occurs in middle and old age, there has been a narrowing of the intercostal spaces, their umbilicus on cavity empiema, a dulling perkutornogo sound and relaxed entering or amforicheskoe breath. Accurately verify diagnosis helps lung x-ray, allowing to visualize chronic empiema cavity. In cases of doubt, use polipozicionnuju x-rays of lungs, superjeksponirovannye pictures, bronhografiju and plevrografiju, even rarer, with suspected pleural-mezeteliomu (plevroskopiju) thoracoscopy with biopsy, computed tomography. There is evidence that in recent years, on the diagnostic value of ultrasound scanning.

Chronic lung abscess also has similarities with the disease in the form of a long bronchoectatic currents, phase of exacerbation and remission, presence of chronic purulent intoxication. Unlike bronchiectasis in rentegnologicheskom study identifies located in thicker, rounded shape, cavity formation fluid level.

In doubtful cases the differential diagnosis helps bronhografia, which finds out when bronchiectasis generalized nature of the lesion and the absence of cavity abscess.

Bronhojektaticheskuju disease need to differentiate with lung cancer. Patients suffering from lung cancer, usually elderly, die-hard smokers, while patients typically bronhojektazijami young age. In doubtful cases required FBS is used that enables you to visualize the tumor. When x-ray study can identify tumors with shadow polycyclic contours and areas in its thicker, "moustache" symptom. In cases of doubt, applied research rinsate on atypical cells, selective bronhografia.

The differential diagnosis should be vnutrisindromno (bronchiectasis, bronhoektaza as a manifestation of other pathological processes-chronic bronchitis, tuberculosis; bronchiectasis with congenital pathology-cystic hypoplastic, traheobronholigalii, Sv-Kartagenera syndrome, etc.).

**Treatment.** Not shown operation patients in I-II stage of bronchiectasis, when strong and qualified conservative treatment can «break» the emerging pathological circle and lead to multi-year remission, and many patients and for practical recovery. The operation is not possible in patients with common (total) the nature of the defeat of the bronchial tree and little perspective when there is concomitant with obstructive respiratory failure, pulmonary heart.

The indication for surgical treatment of bronchiectasis is a localized form, i.e. when the function remote light divisions offset by sufficient survived a full lung parenchyma.

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions** on the topic:

**Lung abscess**

Definition of lung abscess "

Etiology and pathogenesis of lung abscess

Classification of lung abscess

The clinical picture of lung abscess

Methods of diagnosis, differential diagnosis of lung abscess: nagnoivshejsja cyst of the lung, lung cancer, bronchoectatic disease lung gangrene

Complications of lung abscess

Prevention of lung abscess.

**Bronchiectasis**

Definition of bronchiectasis»

Features of the structure of the lung bronchial tree

Etiology and pathogenesis of bronchiectasis

Classification, clinical picture

Diagnosis and differential diagnosis of bronchiectasis with: acute and chronic lung gangrene by lung, lung cancer, nagnoivshejsja cyst of the lung

Complications of bronchiectasis

Tactics of a physician at a prehospital stage providing medical care

Conservative and operative treatment

Preventing bronchiectasis

**b) Written homework**

Presented in the form of diagrams and tables

on topic: **lung abscess**

etiology of acute lung abscess;

classification of lung abscess;

the differential diagnosis of acute lung abscess;

complications of lung abscess;

preventive measures aimed at reducing the incidence of nagnoitelnymi lung disease.

under section: **bronchiectasis**

etiology of bronchiectasis;

classification;

diagnosis, differential diagnosis of bronchiectasis,

complications and treatment of this disease.

**Tests for self-control quality home training**

LUNG ABSCESS

1. Specify the three frequent complications of acute lung abscess:

a) empiema pleura

b) piopnevmotoraks

in) Phlegmon of the thorax

g) brain abscess

d) pulmonary haemorrhage

e) Amyloidosis

2. What are the main mechanisms of acute lung abscess:

and) violation of the drainage function of the bronchi

b) disorders of the circulatory system in a light

in) reducing protective mechanisms

g) virulent microflora

d) chronic respiratory infections

(e)) all of the above

3. Therapeutic tactics in acute patient by light in the stage of formation is as follows:

a) operative treatment

b) puncture of pleural cavity

) torakoplastika

g) conservative treatment

4. Acute lung abscesse illustrated surgical treatment in case of:

a) breakout in the pleural space

b) breakthrough in entering the tree

in) breakthrough in mediastinum

g) Phlegmon of the thorax

5. Specify the type of surgical intervention in chronic abscesse lung:

a) segmental resection

b) tamponadoj abscess cavity with Thoracotomy

drainage of the abscess cavity)

g) pulmonjektomija

d) Lobectomy

6. specify the types of x-rays, which should be used in the diagnosis of lung abscess:

and lung radiography panoramic)

b) review x-rays

in) magnetic resonance radiography

g) computed tomography

d) bronhografia

7. the patient with lung clinic developed by piopnevmotoraksa. Choose a method of treatment:

a) antibiotics

b) therapeutic Bronchoscopy

pleural cavity drainage)

g) Thoracotomy with readjustment of the pleural cavity

8. What are the factors of chronicity lung abscess:

a) defective treatment of acute lung abscess

b) the general weakening of the organism

in the presence of concomitant diseases), cardiovascular system

g) later seeking care

9. The differential diagnosis of lung abscess should be:

a) bronchoectatic disease

b) Pleurisy

in empyema)

g) lung cancer

h) acute exacerbation of chronic bronchitis

e) pneumonia

10. What are the phases of development of acute lung abscess:

a) prodromalnaja

b) elementary

in) formation

g) pronounced clinical manifestations

d) breakthrough

e) complications

BRONCHIECTASIS

11. For the diagnosis of bronchiectasis diagnosis methods are used:

a) Bronchoscopy

b) spirometry

) bronhografia

g) tomography

d) x-ray of thorax

12. When bronchiectasis uses the following types of operations:

a lower percentage) remove

b) segmental resection

) pulmonjektomija

g) remove upper lobe

13. Bronchiectasis develop due to:

a) congenital causes

b) chronic pneumonia

in) pulmonary tuberculosis

g) smoking

d) violations of the patency of the bronchi

14. To rescue bronchus tree is the most effective method:

a) respiratory gymnastics

b) antibacterial therapy

in) therapeutic Bronchoscopy

g) inhalation

d) massage the thorax

15. For bronchiectasis is characterized by phlegm:

a two-layer)

b) three-layer

c) bandages

g)-

16. Please indicate what stage the disease shows surgical treatment of bronchiectasis:

but) I Start

b) II and stage

) (II) b stage

g) III and stage

d) III b stage

17. Enter the three most frequent complications of bronchiectasis:

a) Amyloidosis

b) lung haemorrhage

) Lung abscess

g) piopnevmotoraks

d) lung cancer

18. Select diseases, with which to differentiate the disease: bronhojektaticheskuju

a) lung cancer

b) tuberculosis of the lung

Lung cyst)

g) mezhdolevoj Pleurisy

d) Bullous emphysema

e) chronic pneumonia

19. The following segments of the lung often are amazed when bronchiectasis:

a) upper lobe

b) with an average share of

in the bottom of the share)

g) all light

20. For bronchiectasis is characterized by the following clinical signs:

) "drumsticks"

b) hour glass "

lateral pectoral) nail plates

g) periosteoartropatija

d all of the above)

**7. Independent work in the practice**

1. the decision of various levels of situational tasks of mastering

2. Supervision of patients with an assessment of the results of the survey:

and) collect complaints

b) medical history of disease

in) assessment of the overall condition of the patient

g) identification of local disease

d) substantiate diagnosis

e) differential diagnosis

f) treatment algorithm

3. report of the patient group

4. reading and analysis of radiographs

5. Presentation of the themes mikroreferatov

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Endoscopic room.

LITERATURE

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial, m., 2006.

3. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. 2, m., geotar-media, 2005.

4. Struchkov v.i., Gostishhev v.k., Pods Y.v. purulent surgery guide m., 1984.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| Lung abscess | |
| 1-a, b, c | 6-a |
| 2-e | 7- |
| 3-g | 8-a |
| 4-a, b | 9-a, g, e |
| 5-a, d | 10, d |
| Bronchiectasis | |
| 11-b, g | 16-b, g |
| 12-a, b | 17-a, b, c |
| 13-a | 18-a, b, c, d, e |
| 14-b, g | 19- |
| 15-b | 20-d |

**Topic:** «Empiema pleura "

**1. the purpose of the practice:**

and learn to explore) of patients with diseases of the pleura;

b) to assess the results of clinical and diagnostic helper methods;

in) to conduct differential diagnosis;

g) appoint and justify the necessary treatment, to be able to predict the course and outcome of disease.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: surgical Anatomy of the thorax and pleura;

the etiology, pathogenesis, and pathological anatomy empiema pleura;

classification empiema pleura;

the clinical picture of acute and chronic empiema pleura;

Special methods of diagnosis: x-rays, x-rays, fistulografiju, thoracoscopy, bacteriological research methods;

hold differential diagnosis of chronic osteomyelitis with empiema ribs, sternum, spine;

principles of conservative and surgical treatment of acute and chronic pleural empyemas.

**3. To enter, you need to understand:**

causes that promote acute empiema chronic;

indications for operative treatment empiema pleura.

**4. To enter you must be able to:**

collect medical history and find out the causes of the disease;

When an objective study to identify signs of air or fluid in the pleural cavity;

perform functional tests.

**5. Theoretical reference.**

**Acute pleural empyema** occurs often enough. Acute empyema called purulent exudate accumulation in the pleural space. Emit the meta and parapnevmonicheskie, posttraumatic and postoperative empiema pleura. Secondary empiema pleura can be complications of certain lung diseases (cysts, acute nagnoivshihsja abscesses, bronchiectasis, etc.).

**Chronic pyothorax** develops in patients as a result of inadequate or delayed treatment of acute empiema pleura, or bronhoplevralnogo fistula, supports chronic gnano-destructive process.

For purulent inflammation of the pleura over 8 weeks from the onset of the disease is a sign of the transition in the chronic form of the disease.

**Classification.**

The most important classification criterion for determining the features of treatment and prognosis is the lack of communication of the pleural cavity with external Wednesday (closed pleural empyema) or its availability (open empiema pleura)-bronhoplevralnym, plevrokozhnym, plevroorgannym fistula.

Following significant classification criterion serves as the amount of content a pathological pleural cavity. Emit total empiema pleura (lung tissue during x-ray study does not define) Subtotal (determined by just the tip of the lung) and separate. On localization of separate empiema pleura are divided into: apical, parietal, basal, mezhdolevye, paramediastinalnye. Secrete parapnevmonicheskie empiema pleura (a combination of pneumonia, empiema pleura) and empiema pleura with destruction of lung tissue (lung abscess, gangrene of the lung). The so-called metapnevmonicheskie empiema pleura represent suppuration abacterial parapnevmonicheskogo Pleurisy or hydrothorax, recognized in a timely manner.

For the duration of the currents of the pathological process emit the acute, subacute and chronic jempiemu pleura.

**The clinical picture of** acute empiema consists of syndrome of Pyo-resorptive fever with hectic panache temperature curve, weakness, oznobami, headache. If there is no adequate treatment is developing multiple organ dysfunction syndrome, renal function of vital organs. Local symptoms characterized by vybuhaniem intercostal spaces in the area, empiema pastoznostju skin, thickening of the skin folds of the affected part of the thorax (a symptom of Vintriha), pritupleniem perkutornogo sound over destruction, lack of breathing noises during auscultation over a hotbed of defeat.

The clinical presentation of chronic empiema pleura is characterized by long over. The main complaints are ishudanie, loss of appetite, weakness, frequent coughing, fever, pain in the side and the existence of purulent discharge from the fistula at the chest. Sunken chest notes, narrowing mezhreberij, kyphoscoliosis, restriction of respiratory excursion. Perkutorno defines the sense, the lack of breathing noises from chest wall of fistula-pus.

**Differential diagnosis.**

Jempiemu pleura must be differentiated from specific (mikoticheskim, TB) pleural lesion when the primary process precedes development empiema pleura. In order to properly diagnose you must research meaningful exudate (Mycobacteria, fungi), punkcionnja biopsy of pleura, serological samples, thoracoscopy with biopsy. Also jempiemu pleura must differentiate the following pathological conditions: gidrotoraksom, haemorrhagic pleuritis subplevralnymi jehinokokkovymi cysts, chronic by light.

Hydrothorax occurs if levojeludockova congestive heart failure, and quite often the subject of differential diagnosis with acute empyema, as tends to infect and move in acute jempiemu pleura. The hallmark of with some commonality of x-ray pattern is the absence of phenomena gidrotorakse Pyo-resorptive fever and purulent intoxication. However, if questionable clinical and rentgenlogicheskoj picture helps pleural puncture with the study of the resulting content. For transsudata typical relative density 1001-1015, exudate, 1016-1025 May 30-50 protein content in g/l, transsudate-1-2 g/l assay Livolta on serozomucinov content in may always positive, cell composition in may dominated by leukocytes, transsudate 10-20 of them in sight, dominated by lymphocytes.

Nagnoivshijsja hemothorax is also predstadiej acute empiema pleura, since without adequate discharge his punkcijami he likely can go in acute jempiemu pleura. X-ray picture of them is similar. In the study received during puncture of blood samples run Petrova and Efendiyev (Petrova-identification of erythrocyte Lysis "lacquered blood-saline 1:5 punctate dilution. tube pour in some amount of blood from the pleural cavity and dilute with 5 x the amount of distilled water. In neinficirovannoj blood through 5 minutes there is complete hemolysis and the liquid becomes transparent varnish. If blood is pus fluid becomes cloudy with sediment hlopevidnym fibrin; Efendiyeva-change in the ratio of plasma and uniform. Punktat in vitro defend or centrifuged. When this formed two layers-upper (plasma), the lower layer-shaped elements. If no blood is the ratio between the plasma and formennami will be 1:1. In infected blood, this ratio is changing in the direction of fluid buildup and reduce draught-murk (fibrin).

Bloody pleural effusion should be differentiated with empyema. For lung cancer, complicated haemorrhagic purulent pleuritis, clinical signs of intoxication, the x-ray picture, very similar to acute empyema. If you do not want to treat Pleurisy punkcionnogo HS treatment or drainage, they even on the contrary can cause infection of the pleural space and development, empiema, hence the importance for determining therapeutic tactics of differentiation of these States .

The most reliable way is a diagnostic paracentesis. When the effusion Pleurisy hemorrhagic corresponds to the physical parameters transsudatu. In cell composition, while dominated by erythrocytes and neutrophils are found only isolated, you can also identify and atypical tumor cells. When bacteriological examination of the transudate is sterile.

Subplevralnye jehinokokkovye cyst-especially when inflammatory conditions are very similar to chronic empyema. However, they are characterized by discharge with phlegm breakages hitinovoj shell and child skoleksov, Latex-Agglutination positive for antigens cyst that corresponds to jepidanamnez. Nagnoivshajasja jehinokokkovaja cyst even when full-fledged conservative treatment Unlike nonspecific chronic empiema does not go into remission phase, because it cannot get rid of scrappy hitinovoj parasite capsules that support nagnoitelnyj process. There is expressed in peripheral blood Eosinophilia (20-25%), which is not typical for chronic empiema pleura.

Chronic lung abscess is similar to chronic empyema clinic chronic purulent infection, duration, circulatory flow and recurrent exacerbations and remissions. To differentiate these conditions can only be achieved by using x-ray studies. What sets them apart with chronic empieme cavity is stretched in the vertical direction, abscesse seeks to rounded contour, with chronic empieme wall cavity with increasing disease dates, with thin abscesse are thicker . Helps in the differential diagnosis of polipozicionnoe x-ray examination and Imaging.

**Treatment of** acute empiema pleura begin with the evacuation of pus from the pleural cavity, sanitizing it, antibacterial therapy. If conservative treatments do not effectively shows surgical treatment.

Treatment of chronic empiema must be integrated. Conservative treatment should be aimed at combating declares itself with hypoproteinemia, anemia, infection. Local treatment should provide good outflow of pus and eliminate the residual cavity. Appropriate regular washing cavity empiema antiseptics, antibiotics introduction proteolytic enzymes, etc. Operative treatment shown in the presence of bronchial fistula, the failure of conservative treatment. The main operations in chronic empieme pleura are: 1. tamponade pleural cavity, 2. torakoplastika, 3. decorticator lung, 4. radical pleurectomy.

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions on the subject of the lesson:**

**Acute pyothorax**

Definition of "acute pleural empyema.

Etiology and pathogenesis of acute empiema pleura.

The role of micro-and microorganism in the occurrence of acute empiema pleura.

Acute clinic empiema pleura.

Methods of diagnosing acute empiema pleura.

Differential diagnosis of acute empiema pleura with other kinds of Pleurisy.

Complications of acute empiema pleura.

Methods of treating acute empiema pleura.

**Chronic pyothorax**

The definition of "Chronic pyothorax.

Etiology and pathogenesis of chronic empiema pleura.

The clinical presentation of chronic empiema pleura.

Methods of diagnosis of chronic empiema pleura.

Differential diagnosis of chronic empiema pleura: serous Pleurisy, tuberculosis, aktinomikozom.

Principles of conservative treatment.

Indications for operative treatment.

Types of surgical interventions for chronic empieme pleura.

b) **Written homework:**

Presented in the form of diagrams and tables.

under section **Acute pleural empyema:**

etiology of acute empiema pleura;

classification of acute empiema pleura;

diagnosis of acute empiema pleura;

the differential diagnosis of acute empiema pleura;

complications of acute empiema pleura;

under section **Chronic pyothorax:**

etiology of chronic empiema pleura;

diagnosis of chronic empiema pleura;

methods of conservative and operative treatment of chronic empiema pleura.

**Tests for self-control quality home training**

ACUTE PYOTHORAX

1. What are the pathways of infection in the pleural space:

and-drop)

b) inflammatory diseases

) limfogennyj

g) alimentary

d) chest wound

2. Most common process should distinguish between:

and total pleural jempiemu)

b) osumkovannuju

in jempiemu of the pleura spillage)

g) diffuse pleural jempiemu

3. at the time of jempiemu are distinguished:

a) metapnevmonicheskuju

b) parapnevmonicheskuju

) retropnevmonicheskuju

g) abscess ruptures in the pleural space

4. Basic methods of instrumental Diagnostics of acute empiema is:

and chest x-rays)

b) chest x-ray

) bronhografia

g) imaging of the chest

d) pleural cavity

5. acute Complications empiema pleura:

a) sepsis

b) bronhoplevralnyj fistula

in) osteomyelitis ribs

g) Phlegmon of the chest wall

d) peritonitis

(e) all of the above)

6. what kinds of surgical treatment of acute empiema pleura

a) closed Thoracotomy without resection of ribs

b) closed Thoracotomy with rib resection

) torakoplastika

g) all of the above

7. What are the most effective methods of conservative treatment of acute empiema pleura:

a) pleural puncture

b) aspiration Bronchoscopy

in) antibiotics

g) active drainage of pleural cavity

d) comprehensive treatment

CHRONIC PYOTHORAX

8. specify the reasons for the transition of acute empiema chronic:

and) reducing protective forces of the organism

b) virulent microflora

in) late diagnosis

g) inadequate treatment of acute empiema

d) presence of broncho-pulmonary fistula

9. name the diseases with which it is necessary to carry out the differential diagnosis of chronic empiema pleura:

a) acute pyothorax

b) krupoznaja pneumonia

) jehinokokkovaja cysts

g) nagnoivshijsja hemothorax

d) bloody pleural effusion

e) gidrotoraks

10. What are the most effective radical interventions for treating chronic empiema pleura:

and pleural cavity for tamponade) A.v. Vishnevsky

b) torakoplastika by B.e. Limbergu

the decorticator easy) Delormu

g) total pleurectomy

11. To palliative treatments of chronic empiema pleura are:

a) torakoplastika

b) decorticator light

pleurectomy)

g) constant drainage aspiration

d) tamponade residual cavity

12. What are the methods of active drainage of pleural cavity:

(a)) on the Chest

b) Subbotin

in) vacuum drainage

13. What are the ways of preventing chronic empiema pleura:

a) early recognition and active treatment of acute empiema pleura

b) an integrated combined antibacterial treatment

curative gymnastics)

g) active application of Physiotherapeutic treatment

14. What are the main symptoms of chronic empiema pleura:

and for more empiema pleura) 8 weeks

b) for more than 4 weeks empiema pleura

not spadajushhejsja) cavity between the lung and the parietal plevroj

g) presence of pleural-cutaneous fistula

**7. Independent work in the practice session:**

1. the decision of various levels of situational tasks of mastering

2. Supervision of patients with an assessment of the results of the survey:

and) collect complaints

b) medical history of disease

in the assessment of the overall health status of patients)

g) defining symptoms

d) evaluation of instrumental methods of laboratory examination

e) diagnosis

f) differential diagnosis

w) defining treatment tactics and principles of conservative and surgical treatment

3. report of the patient group

4. reading and analysis of radiographs

5. Presentation of the themes mikroreferatov

**8. Venue of the sessions:**

1. the training room.

2. at the bedside.

3. dressing room.

4. X-ray or Endoscopy room.

**LITERATURE**

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial, m., 2006.

3. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. 2, m., geotar-media, 2005.

4. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| Acute pyothorax | |
| 1-b, c, d | 5-b, c, d |
| 2-a, b | 6-a, b |
| 3-a, b | 7-a, b, c, d |
| 4-b, g, d |  |
| Chronic pyothorax | |
| 8-b, g, d | 12-b. |
| 9-in | 13-a |
| 10-b, g | 14-a, b, g |
| 11-a, g, d |  |

**Topic:** "Lung cancer"

**1. the purpose of the lesson**:

Learn at the level of play from memory the etiology, pathogenesis, clinical picture, classification, methods of diagnosis and treatment of lung cancer.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: surgical Anatomy of the lung and pleura,

     classification of lung cancer;

clinical picture;

methods of laboratory and instrumental Diagnostics, the types and nature of complications;

the differential diagnosis;

methods of treatment.

**3. To enter, you need to understand:**

etiology and pathogenesis of lung cancer, addiction clinics from form and stage of the disease.

**4. To enter you must be able to:**

gather the complaints and identify objective symptoms of the disease, evaluate the data of laboratory and instrumental studies.

**5. Theoretical reference.**

**Lung cancer** is one of the first places among oncological diseases. Men are four times more likely to get sick than women.

**Classification**. Distinguish Central lung cancer-jendobronhialnyj and peribronhialnyj. Peripheral cancer-intralobular, subplevralnyj, "cavernous" Cupula cancer (the apex of the lung).

International Classification:

T-primary tumor

T0 -there is no evidence of primary tumor

T is -non-invasive (intraepithelial) cancer

T1 -tumor to 3 cm or less, with no signs of bronchial lesions proximal to the bronchus

T2 -tumor more than 3 cm or a tumor, causing atelectasis, obstructive Pneumonitis or spreading onto the root

T3 -tumor of any size with direct spread to adjacent organs or calling obturazionny pnevmonit all light or a pleural effusion

Tx -tumor not detected radiological or bronhoskopicheskim methods

(N) -regional lymph nodes

(N) 0 -no signs of lesions of lymph nodes

(N) 1 -signs of defeat peribronhialnyh lymph nodes

(N) 2 -signs of Mediastinal lymph node lesions

M-distant metastasis

M0 -there is no evidence of distant metastasis

M1 -signs of distant metastases

**The clinical picture** of lung cancer in the early stages of scanty, she later associated with developing complications. There are several typical clinical variants of its flow. Central Clinic cancer is diverse and is characterized by pain in the chest on the side of the lesion. Dry cough appears, subfebrilitet. Gradually increasing weakness, weight loss, anemizacija. Peribronhialnyj jerozivnymi growth is accompanied by bleeding. Hemoptysis occurs when running throughout the lung cancer. For peripheral lung cancer the most early and constant symptom is chest pain. Often the pain is constant, not associated with the Act of breathing. Then appears a shortness of breath.

When x-ray study of shadow tumors dense, with jagged, rough outlines, there are short shadows, dating back to the root of the lung cancer, the so-called "tracks"-a sign of sprouting along the way tumor lymph collectors and bronchi. During the disintegration of the tumor in the center of the shade detected cavity with polycyclic paths containing no liquid level.

With suspected cancer shows sputum examination for atypical cells, bronchoscopy with aspiration biopsy and cytological study.

**Differential diagnosis.**

Lung cancer should be differentiated: with inflammatory diseases, Lung cysts, Mediastinal tumors, lesions of tuberculous (teratomas, thymomas, cysts, lipomas, timomy).

Acute and chronic lung abscess. A common manifestation of intoxication, the clinic will be coughing up phlegm, rounded shadow on the radiograph. Unlike cancer of lung abscess intoxication less expressed. Phlegm does not have three-layer feature. On the radiograph cavity with thicker walls than at abscesse, and the inner contour of the izeden, it contains no liquid.

Hydatid disease of lung as lung cancer manifested on the radiograph round shadow. Unlike lung cancer with jehinokokkoze you can install epidemic anamnesis (contact with pets, large and small cattle) and for a long time there is no clinic. Manifestation in lung cancer process begins with subfebriliteta, weakness and dry cough that is the vexed nature with meager amounts of mucous sputum containing blood veins that atypical for cyst during a private bubble. In the subsequent condition of the patient deteriorates progressively increased until pneumorrhagia appears pulmonary hemorrhage, increasing phenomenon of cachexia, anemia, during germination of a tumour intercostal nerves or with metastatic vertebral body with their further destruction and development of radicular compression, developing atypical for hydatidosis pain syndrome. When jendobronhialnom tumor growth with time comes the obturation bronchus and development equity atelectasis. There is a sunken chest wall, her breath, vtjanutost and convergence of the intercostal spaces. For hydatid lung cyst is characterized by slow expansive growth and development atelektaticheskogo syndrome occurs only rarely.

In the blood of a patient with lung cancer marks the acceleration to the ESR 50-70 mm/h, which can also be observed in patients with jehinokokkom and light. In the analysis of sputum in patients with lung cancer in 83% of cases of microscopically define abnormal cells. Shadow rentgenograficheski cancer tumors of dense, irregular, rough, «landshaftoobraznymi» outlines, has short shadows-"tendrils", dating back to the root of the lung cancer, the so-called "tracks"-a sign of sprouting tumor lymph collectors and bronchi. During the disintegration of the tumor in the center of shadows appears cavity with polycyclic paths containing no liquid level. For Cyst on lung, the radiograph is characterized by rounded shadow, clear with smooth edges. Is sometimes a symptom of "detachment" and signs of defeat lymph collectors never defined.

Tuberculosis of lung, as in cancer, determined subfebrilnaya temperature, shortness of breath with exertion, coughing. Unlike cancer, tuberculosis of the lung detected epidemic anamneses. Tuberculosis within a few days the body temperature reaches 38.5on. After her decrease noted sweating after small voltages, and night sweats. Scanty sputum and until the formation of Caverns is missing hemoptysis. Microscopic examination of sputum determines the presence of m. tuberculosis. Radiographically tuberculosis identified miliarnye and endemic infiltrative "tricks", and during the disintegration of the cavern with the so-called "track" to the root of the lung.

When you localize in the area of the apex of the lung cancer (cancer of the Cupula) Unlike tuberculosis, is determined by the characteristic triad of symptoms (PTOSIS, miosis, enophthalmos) on the side of lesion (Horner), associated with the squeezing of the sympathetic trunk. When tuberkulome detects other radiographic signs of tuberculosis are traces of dissiminacii. Positive serological reaction of Mantoux test.

Mediastinal tumor (teratoma cysts, cysts, lipomas timomy) differ in slow flowing, lack of symptoms such as cough, chest pain, coughing up blood, exhaustion. The first signs of Mediastinal tumors squeeze is hollow and nameless veins (superior vena cava syndrome), accompanied by the emergence of cyanosis and edema of the face, neck and hands. When a tumor of the thymus (thymoma) progressive signs of myasthenia. Review lung radiography in multiple projections does not detect changes in them. An indirect sign is the offset of the mediastinum. Pnevmomediastinografija and mediastinoscopy with biopsy allows to determine the exact nature of the defeat.

**Treatment.** The main type of lung cancer treatment is prompt-radical pneumonectomy, Lobectomy. Contraindications to it may be due to the general condition of the patient: 1) dramatic depletion that typically indicates metastasis to other organs, 2) explicit, resistant to the therapy of pulmonary-cardiac or heart failure, 3) irreversible, highly pronounced changes in the liver and kidneys, 4) advanced age when there expressed the age-related changes.

Radiation therapy for lung cancer have used mainly in the treatment of patients, surgery and in the postoperative period in intercellular undifferentiated cancer if histologic diagnosis established only when histological remote study tumors.

**6. Self-study in extracurricular time** (preparation for practical occupation):

a) **annotated list of questions on the subject of the lesson:**

Etiology and pathogenesis of lung cancer.

What are the three main cancer symptom in the apex of the lung.

Name four forms of peripheral lung cancer.

Clinical classification of lung cancer.

The clinical picture of Central and peripheral lung cancer.

What are the methods of instrumental diagnosis of lung cancer

b) **Written homework:**

Presented in the form of diagrams or tables:

classification of lung cancer;

the differential diagnosis;

segmental structure of the lung;

instrumental methods of Diagnostics;

radiation treatments;

methods of surgical treatment.

**Tests for self-control quality home training.**

1. Symptoms of lung cancer are:

a) dry, barking, cough

b) dispnoe

in) breast and patting soreness spine

g) hemoptysis

d) recurrent pneumothorax

2. Basic x-ray sign peripheral lung cancer is:

a) rounded shadow in the light

b) rounded shadow with sharp contours

the rounded shadow Lane) to the root of the lung

g) atelectasis

d) offset of the mediastinum

3. Lung cancer early symptom is coughing up blood:

a) Yes

b) no

4. Triada Horner is characteristic for:

a) Mediastinal tumors

b) apex of the lung cancer

in) of lung abscess

g) hydatidosis

5. For Mediastinal tumors early symptom is considered:

and Horner symptom)

b) symptom Gräfe

in) a symptom of superior vena cava

g) hemoptysis

6. The most characteristic Cupula cancer is:

and hemoptysis)

b) pain in the sternum

Horner's syndrome)

g) hoarseness of voice

d) swelling in the neck and face

7. Lung cancer should be differentiated:

a) protracted pneumonia

b) pulmonary tuberculosis

in) with a benign tumor

g) with metastasis of other tumors in the lungs

d) with all of these

8. the main x-ray sign Central lung cancer is:

     a round shadow) the availability of lightweight

b) existence of "tracks" to the root of the lung

atelectasis)

g) high standing of diaphragm

d) offset of the mediastinum

9. Method to verify the diagnosis with syndrome average percentage is:

a) lateral tomography

b) bronhografia

in) dynamic observation

g) fibrobronchoscopy with biopsy

d) computed tomography

10. perifericheskomu lung cancer cancer does not apply:

a) segmental bronchus

b) pnevmopodobnyj

bronchoalveolar)

g) cavernous (polostnaja form)

**7. Independent work in the practice session.**

1. different levels of situational tasks Solution absorption.

2. Mikrokuracija assessment of patients the results of their examination:

and collect complaints);

b) medical history of illness;

in) assessment of general condition of the patient;

g) definition local signs and symptoms of the disease;

Dr.) paraclinical evaluation methods and symptoms;

e) conclusions on the diagnosis;

f) differential diagnosis;

w) defining treatment tactics;

and) principles of conservative and surgical treatment.

3. report of the patient group.

4. Read and parse rentgenoramm.

5. Presentation of the themes mikroreferatov.

**8. Venue of the session.**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**Literature**

1. Berezov J.e. esophageal cancer m., 1979.

2. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

3. Kuzin M.i. surgical diseases. Tutorial m., 2006.

4. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. 1-2, m., geotar-media, 2005.

5. Lecture of the Chair.

Annex

Answer test control standards.

|  |  |
| --- | --- |
| 1-d, e | 5-b |
| 2-in | 7-d |
| 3-b | 8-d |
| 4-in | 9-g |
| 5-d | 10-a |

**Topic:** «Varicosity veins of lower limbs

**1. the purpose of the practice:**

a) assimilate memory playback level etiology and pathogenesis of varicose veins;

b) skills training for clinical examination of patients with varicosity;

in) master the methods of diagnosis, differential diagnosis of the disease.

**2. To enter, you need to know:**

of course, normal and topographical human anatomy: the structure of human venous system avilable veins valve apparatus;

of course private surgery: causes of varicose veins, classification, methods of clinical diagnosis and instrumental examination;

the differential diagnosis of varicosity with other diseases of blood vessels, causing chronic venous insufficiency (postthrombophlebitic disease, lymphatic insufficiency, congenital angiodisplazii).

**3. To enter, you need to understand:**

pathological feature especially venous wall;

pathogenesis of varicose veins, depending on the type of lesions and the extent of the venous outflow.

**4. To enter you must be able to:**

properly collect medical history, to hold a clinical examination using functional tests on permeability of deep veins and veins valve apparatus viability;

properly assess the laboratory studies and diagnostic ULTRASOUND;

to substantiate the diagnosis of the patient, determine the method of treatment.

**5. Theoretical reference**

**Under the varicosity** refers to abnormal peripheral veins of extremities.

Varicosity in Russia suffers nearly 30 million. people, of whom 15 per cent have trophic disorders. High prevalence of the disease, a large number of recurrences require timely diagnosis and adequate treatment of varicosity.

Varicosity of the lower extremities is polijetiologichnoe disease which in the genesis of importance are: heredity, obesity, impaired nejrogormonalnogo status, lifestyle features, weakness, congenital venous wall angiodisplazii, excalation veins valve apparatus, etc.

**Classification**. The classification takes into account the varicosity: form of the disease, the severity of chronic venous insufficiency and complications arising from the disease. The following forms of varicose veins: 1. vnutrikozhnyj and subcutaneous varicose veins without pathological venous reset; 2. segmental varicose veins with reflux of superficial or incompetent perforate veins; 3. common varicose veins on surface and incompetent perforate veins; 4. varicose veins with reflux in the deep veins.

According to the degree of chronic venous insufficiency secrete: 0 art. -missing venous insufficiency; 1 art. -syndrome of "heavy legs"-transient edema; 2 tbsp. -persistent edema, hyper or hypopigmentation, lipodermatoskleroz, eczema; 3 tbsp. -venous trophic ulcer.

Complications-varicosity hemorrhage, thrombophlebitis, trophic ulcers.

**The clinical picture**. In the early stages of varicose veins usually appear gemangiojektazii or advanced esophageal subcutaneous veins. Only a few years or even decades may appear varicose in the basins of small or large subcutaneous veins.

When varicose disease begins with the emergence of common venous nodes, you can select two options for development of the disease: 1. the appearance of varicose veins in the lower leg indicates a preference to defeat the perforant veins; 2. the appearance of varicose veins initially on the thigh and anterior-medial surface of the tibia, the popliteal fossa indicates the leading role in the development of the disease high Weno-venous reset. Regardless, with a predominance of any dumping of leaking the disease, joining the symptoms of chronic venous insufficiency occurs in the same way.

In the majority of patients through 3-5 years after the appearance of varicose veins are marked functional disorders (complaints about the feeling of heaviness in the legs, pain in the leg, foot and lower leg sponginess) that occur at the end of the day. As the illness progresses, the rising phenomenon of venous insufficiency-swellings become more pronounced and persistent, increasing heaviness in the legs, show signs of violations as trophic zones hyperpigmentation, trophic ulcers, located mainly on the medial surface of the tibia. Often complicated varicose disease in later stages, thrombophlebitis, Phlebothrombosis, varicose bleeding sites.

Very important in clinical practice is the differential diagnosis of various diseases, involving the development of varicose syndrome.

As a result of the commonality of many clinical manifestations of various pathological conditions, especially, varicose and posttromboflebiticheskoj diseases, congenital venous Dysplasias, lymph outflow any major violations diagnostic difficulties.

When diagnosing varicose veins should solve the following tasks: 1. Confirm the presence of pathology of the venous system of the limbs; 2. identify reflux on subcutaneous and incompetent perforate veins; 3. assess the condition of the venous drainage in the deep veins; 4. differentiate the nature of pathological changes in the veins (depending on the disease). To meet these challenges, it is necessary to carefully collect medical history and patient complaints. The most characteristic manifestation of the defeat of the venous system of the lower limbs is fatigue in the legs after a long stay in ortostaze against. On clinical examination, you must examine both lower limbs, as well as the inguinal area and the front wall of the abdomen. Palpation to detect defects in the fascia of the relevant output insufficient perforant veins. Percussion sample allows you to diagnose valve insufficiency trunk subcutaneous veins. You should always determine the pulsating arteries of the extremities.

When performing various physical samples (Delbe Troyanova-Trendelenburg,-Pertesa, Pratt, Gahenbruha, etc.) the frequency of false positive or false negative results reaches 60%. In this regard, modern Diagnostics varicose veins should be based on the data of the special methods of instrumental studies.

Ultrasonic dopplerography is a priority, which allows you to reliably estimate the permeability of veins, as well as to identify the most pathological Weno-venous refluxes. The most informative survey is duplex angioscanning with color mapping subcutaneous and perforant veins. Application of ultrasonic methods to assess the condition of the lower limbs venous system allows you to dispense with Roentgen-contrast venography.

**Differential diagnosis**.

In clinical practice, most often have to the differential diagnosis of varicosity with posttromboflebiticheskoj Dysplasia, congenital disease, impaired lymph outflow, femoral hernia.

Postthrombophlebitic disease-varicose form it occurs mainly in the age of 40-60 years, usually after suffering previously deep Phlebothrombosis. Distinguish: occlusal, rekanalizacionnuju and mixed forms of the disease depending on the violation of the patency of the deep veins of the leg. The most commonly recycled varicose superficial veins appear a few months from the beginning of the sharp period of deep Phlebothrombosis and is localized on the tibia, hip, pubic hair and the anterior abdominal wall, depending on the level of okkljuzionnogo violations of venous outflow in the deep veins.

With the progression of chronic venous insufficiency in the clinical picture of the disease appears otechny syndrome, then signs of tissue trophism (hyperpigmentation or hypopigmentation, lipodermatoskleroz, eczema, trophic ulcers).

Emit: oedematous, ulcer, pain, varicose and mixed forms of the disease. Unlike varicose veins the first sign of the disease is a swelling, which after a night's sleep is significantly reduced. Feeling of heaviness in the legs, there is pain in the first few weeks of illness, and trophic disorders develop through 3-5 years are often circular nature, quickly progressing. A significant role in clarifying the nature of the venous outflow has ultrasound venous drainage system.

Congenital venous dysplasia resulting from violations of the Embryological Development of blood vessels. The most frequently encountered in clinical practice the sick infants and young children with low-flow-arterio-venous fistulae (shunts). Under the influence of blood pressure of the walls of veins, the veins become significantly increased in diameter and often on the lateral surface of the femur and tibia, appears varicose countrywide subcutaneous and skin veins. Varicose veins are often observed on the anterior abdominal wall and pubis. To touch the skin over enlarged veins hot. Swelling often noted in the distal limbs divisions and is ongoing. Patients constantly bothered by heaviness in the affected limb. Trophic disorders appear in 25-30 years of age and are located on the lateral surface of the tibia. The affected limb long healthy at 3-5 cm have acromegaly, hypertrichosis.

Unlike varicose veins in patients with marked vascular blemishes on the skin in the form of Hemangiomas, venous pulse is defined and often bugged systolic and diastolic Rumble in the ground arterio-venous fistulae. The most informative methods of research are angiography and ultrasound duplex angioscanning with color coding.

Violation of lymph outflow (elephantiasis, limfjedema)develops due to congenital hypoplasia of the lymphatic system of the limbs, or after repeated skin Erysipelas limbs, with limfangoitom and lifadenitom. Often the violation of lymphatic drainage associated with damage to the lymphatic vessels and nodes for injuries. Violation of lymph flow leads to increased lymph vessels distal to the occlusion, occurs lymph.

The disease develops slowly, swelling gradually growing, becoming dense and do not disappear after horizontal rest. Limb dramatically increased in volume, the skin tight folds. Sometimes there is lymph propotevanie on the skin.

In later cases, the swelling becomes thick due to the complete replacement of subcutaneous adipose tissue connective tissue. Disturbed trophism of tissues appear eczematous patches, ulcerations. Unlike chronic venous insufficiency swelling with elephantiasis continuous and dense. No grid varikozno expanded veins. Venous pressure is not promoted. According to the ultrasound deep veins intact. Superficial veins are not extended. Limfografija gives you the ability to determine the level of occlusion and the presence of dilated lymph vessels.

Femoral hernia. The disease is characterized by the appearance of singling out the round shape, located below the pupartovoj ligament. For femoral hernia can be passed from node venous extended confluence of great saphenous vein in the thigh. Hernias ' setting allows you to define a hernial gate. Femoral hernia is characterized by symptoms of kashlevogo Jolt and size increases during natuzhivanii. Unlike a hernia, if below vein review site with a finger or raise the lower extremity varicose spadaetsja node.

**Treatment** of varicose veins of lower extremities should be individualized depending on the nature of the disease, the prevalence and extent of chronic venous insufficiency.

In the early stages of the disease a comprehensive conservative therapy using venotroficheskih drugs and compression therapy.

Stages of chronic venous insufficiency expressed shows surgical treatment aimed at eliminating of the vertical and horizontal Weno-venous reset and remove varikozno expanded veins (the remaining operation-Trendelenburg, Bebkokka , Narata kommunikantnyh with ligation of veins on Kokketu, Linton).

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions on the subject of the lesson:**

The definition of "varicose veins".

Classification of the varicose vein clinic, etiology, Anatomy, patogemodinamike (CEAR).

What are the causes of development of primary varicose veins of lower extremities.

List the functional tests to determine the soundness of limb veins valve apparatus and deep venous patency.

Instrumental Diagnostics methods applied in patients with chronic venous insufficiency.

Differential diagnosis of varicosity with other diseases (elephantiasis, postthrombophlebitic disease, congenital angiodisplazija, etc.).

What are the methods of prevention of varicose veins.

Possible complications of varicose veins.

Methods for the treatment of varicose veins.

b) **Written homework**

Represented as diagrams or tables:

classification of varicose veins;

characteristics of the building the extremities veins valve apparatus;

survey methods of patients with varicosity (functional tests);

complications of varicosity;

methods of surgical treatment of varicose veins of the extremities.

**Tests for self-control quality home training:**

1. the superficial veins of the lower limbs are:

and) total femoral vein

b) large subcutaneous Vienna

small Vienna platysma)

g) superficial femoral vein

d) suralnye veins lower leg

2. To determine the patency of the lower limbs deep veins are carried out sample:

a) Pratt (I)

b) Pratt (II)

in) Remaining-Trendjelenburga

g) Fegana

d) Delbe-Pertesa

3. Most informative method for diagnosing varicose veins is:

a) sfigmografija

б) limb thermography

in radioindikacija with the mechennym nine fibrinoguenom)

g) duplex ultrasound

d) phlebography

(e)) poljarogrfija

4. What studies you can determine the status of the kommunikantnyh veins valve apparatus?

and the remaining trial)-Trendjelenburga

b) duplex scan of veins

phlebography)

g) sample Delbe-Pertesa

d) sample Shejnisa

5. What research can reveal the insolvency ostialnyh valves superficial veins?

(a)), the sample Shejnisa

b) sample Delbe-Pertesa

in the remaining sample)-Trendjelenburga

g) sample Pratt-II

d) sample Gahenbruha

e) duplex scanning

f) phlebography

6. Complications of varicosity include:

a) Lymphedema

b) bleeding

) varikotromboflebit

g) trophic ulcer

d) PE

7. For congenital venous dysplasia is characterized by:

and transient limb edema)

b) increased volume of limbs

in) hyperthermia of the skin in the area of varicose veins

g) the presence of dense Lymphoedema

d) trophic ulcers

8. For elephantiasis (Lymphedema) is characterized by clinical symptoms:

and varicose veins, subcutaneous)

b) trophic ulcers

in transient limb edema)

d) dense persistent swelling of limbs

9. Select the operations aimed at eliminating Weno-venous reset on perforant veins:

and-Trendjelenburga Remaining)

b) Bebkokka

) Kokketa

g) Linton

d) electrocoagulation superficial veins

10. Select the operations aimed at removal of superficial veins limbs:

and Madelunga operation)

b) operation Bebkokka

in Linton) operation

g) Remaining operation-Trendjelenburga

d) operation Narata

**COMPLICATIONS OF VARICOSITY**

Under the **acute thrombophlebitis** understand inflammation of the walls of the veins, with formation of a blood clot in her skylight.

Acute superficial thrombophlebitis of lower extremities varicose and posttromboflebiticheskoj is a complication of diseases. In this regard, the currently widespread got term-acute varikotromboflebit. Disease is relentless and often recurring for a long time. Development of thrombophlebitis contribute to significant changes in the walls of the veins increase clearance, slowing blood flow, changing the adhesive-aggregacionnyh properties of loose blood.

**Classification**. Distinguish: 1. acute superficial thrombophlebitis in the basin of the great saphenous vein; 2. acute superficial thrombophlebitis in the pool of small saphenous vein; 3. acute superficial thrombophlebitis in the pool of large and small subcutaneous veins. Most common are distinguished: a) local; b) progressing upward. Distinguished: uncomplicated and complicated (PULMONARY ARTERY THROMBOEMBOLISM, deep vein, periflebit and paravazalnaja Phlegmon).

**The clinical picture**. As a result of the surface location of subcutaneous veins acute superficial thrombophlebitis is bright the clinical picture. While prevail local symptoms: hyperemia skin, infiltration over the affected varicose Vienna, pain, lack of overall limb edema. The main symptom is pain in the course of trombirovannoj of Vienna, increasing tenderness, physical activity. On examination, the patient in a vertical and horizontal provisions palpiruemyj painful tension bar does not change size and configuration. Most patients general condition remains satisfactory. Particular attention should be paid to the localization of thrombophlebitis. The presence of an inflammatory infiltrate in the projection of the main stem large or small subcutaneous veins extending proximally to the mouth is defined as acute ascending thrombophlebitis. This condition is very dangerous due to increasing risk of thromboembolitic complications (TAL). The presence or absence of the ascending nature of thrombophlebitis and determines the tactics of treatment of each patient. Laboratory Diagnostics assign ancillary: analyses of the blood there is Leukocytosis, increased ERYTHROCYTE SEDIMENTATION RATE, hemostasis system is investigated. Crucial in confirming the diagnosis is given ultrasound duplex scanning veins (veins or ultrasound), which allows to determine with absolute accuracy the extent of thrombosis, its boundaries, set fixed flotiruet or thrombus (free floats). Later after determining treatment tactics prescribed ULTRASOUND EXAMINATION of abdominal cavity organs (often cause thrombophlebitis may be Cancer Pathology), x-rays of the chest.

**Differential diagnosis**.

Acute superficial thrombophlebitis should be differentiated from rozhistym inflammation, lymphostasis, primary varicose superficial veins, Phlebothrombosis.

Rojistoe inflammation is acute serum, progressive inflammation of the skin, less mucous membranes caused by Streptococcus mutans. Emit: jeritjematoznuju, bulleznuu, bullezno-necrotic forms of Erysipelas. Arise: pronounced swelling, hyperemia skin, sharp temperature rise of local and General, rezchajshie pain at the slightest touching the surface of the skin. Subsequently formed "bubbles" (Bulla) with izgyazwleniem and skin necrosis. Unlike the superficial thrombophlebitis Rózsa had no clear localization and communication with the venous system. When necessary, the ULTRASOUND of the veins, precluding acute thrombophlebitis.

Limfangoit **-** acute inflammation of the lymph vessels, which takes place in the form of a mesh or stvolovogo lesions, is the primary complication of Pyo-inflammatory process of the limbs. There is congestion in the form of longitudinal stripes, patients are experiencing itching, burning sensation. It is very important to identify the primary Pyo-inflammatory hearth, which can be localized on the fingers, foot or lower leg. Extension no superficial veins, unlike acute thrombophlebitis.

Lymphedema is a chronic disease due to a violation of lymph drainage in the skin, subcutaneous tissue, fascia. Disease develops slowly throughout lymphostasis distinguish two stages: stage 1, limfjedemy (II) stage fibrjedemy. Lymphedema is characterized by a gradual thickening of the lower limbs, the character of edema skin is dry, tight folds, no network varikozno expanded veins trophic violations tissues lead to the development of maceracij and jekzematoznyh plots.

Varicose superficial veins **-** disease of the lower limbs, accompanied by the emergence of crimping subcutaneous veins, increases, meshkovidnym expansion, gradual development of trophic disorders of the skin in the form of indurative induration, changes its color. Varicose superficial vein without inflammation is leaking like a slowly progressive disease with the development of chronic venous insufficiency. Inspection and palpation detects softly elastic, spadajushhiesja in a horizontal position, dilated veins, no infiltration and hyperemia, which is typical for superficial thrombophlebitis-vein ULTRASOUND method taped valve insufficiency perforans and ostialnyh, the absence of thrombosis.

Phlebothrombosis is thrombosis of deep veins, manifesting raspirajushhim swelling of limbs, pain. The skin becomes pale cianotichnuju color. "Inch" is determined by the difference of the circumference of the tibia and femur compared with a healthy foot. Missing hyperemia and ripple in the projection surface veins. Verified diagnosis ultrasound duplex scanning.

**Test questions**:

1. what are the causes that lead to the development of acute superficial thrombophlebitis.

2. Specify the major clinical differences of acute varikotromboflebita of lower limb Erysipelas.

3. What are the main clinical symptoms of thrombophlebitis and diagnostic methods.

4. Spend the differential diagnosis of acute thrombophlebitis with acute Phlebothrombosis.

**Tests for self-control quality home training**:

1. acute varikotromboflebit this:

a) inflammation and thrombosis of large or small subcutaneous veins

b) thrombosis of Portal vein

brachial veins phlebitis)

Mr. Parkes-Weber disease)-Rubashova

d) aneurysm of the common femoral vein

2. the diagnosis of acute varikotromboflebita the most informative is:

a) palpation

b) to venography

in) ULTRASOUND veins

g) rheovasography

d) all methods

3. acute varikotromboflebit differentiate with all diseases except:

a) lymphostasis

b) Erysipelas

Lymphangitis)

g) obliterating endarteritis

l) varicose veins

4. For acute varikotromboflebita characterized by all except:

and "syndrome) a peremejateisa hromota»

b) express an entire limb edema

in) availability of the varikozno expanded veins

g) pain in the course of trombirovannoj in Vienna

d) lower abdominal pain

**Acute Phlebothrombosis** is the removal of blood clots in the veins of the lumen in the absence of inflammation of the vessel wall.

Thrombosis of the lower limbs deep veins are almost always lead to serious consequences. Significant diameter large veins contributes to the formation of jemboloopasnyh and tromboobrazovanij in them often leads to pulmonary artery thromboembolism. In the long term in patients developing the disease postthrombophlebitic with varying degrees of development of chronic venous insufficiency resulting in disability of patients.

**Classification** is based on topical localization and extent of thrombosis in deep veins: 1. deep vein thrombosis tibia; 2. thrombosis of superficial femoral vein; 3. common femoral vein thrombosis; 4. segmental thrombosis of iliac vein; 5. common thrombosis of Ilio-femoral vegmenta; 6. systems of internal iliac vein thrombosis; 7. thrombosis of inferior vena cava: a) infrarenalnyj segment b) renal segment) hepatic segment.

**The clinical picture** of deep vein thrombosis (DVT) consists of a complex of symptoms, characterized by suddenly encountered a violation of venous drainage while maintaining the flow of arterial blood.

Edema, cyanosis of the skin of the affected limb, raspirajushhego nature of pain, local increase skin temperature, overflow subcutaneous veins, pain in the course of vascular bundle is characterized by varying degrees of acute thrombosis of any localization. Movement joints are limited slightly. Common symptoms of aseptic phlebitis and periflebita-subfebrilitet, weak, adinamia, leucocytosis marked a large number of patients. Clinical diagnosis in General and topical, in particular, is based on an analysis of symptoms caused by circulatory and largely depends on the localization of lesions-Shin, femoral vein or veins of the pelvis.

When a physical study of patients detected positive symptoms, Moses Homansa, Lovenberga. There has been an increase in the volume of the limb on the skin during the first 24 hours of the disease detected network extended subcutaneous veins. Symptoms of deep vein thrombosis depends largely upon the degree of narrowing of vessel by a blood clot. The most striking clinical manifestations are observed in full occlusion of veins.

To establish the topical diagnosis and determining the extent and nature of thrombosis defeat most informative studies a duplex ultrasound is a method angioscanning.

Stage pronounced clinical manifestations of acute venous thrombosis is characterized by edema, raspirajushhego nature of pain and change in the colouring of the skin of the leg. Since the swelling of a limb is the main sign of deep Phlebothrombosis, so increasingly differentiate deep veins defeat from other pathological conditions involving this symptom.

**Differential diagnosis**.

Acute deep vein thrombosis of extremities should be differentiated: the insufficiency of blood circulation, lymphostasis, anaerobic flegmonoj, acute arterial insufficiency syndrome long-term strength.

Circulatory insufficiency: swelling of the lower limbs develop severe heart pathology, slowly on both legs, accompanied by palpitations, shortness of breath, increased liver aszitom, oliguria. Swelling of the limbs, loose pastoznyj. Pain syndrome is not expressed, no cyanosis and symptoms Homansa and Moses. Application of heart medications, diuretics in congestive heart failure gives a quick positive effect.

Limb Lymphedema develops slowly, starting with the distal. Usually it is preceded by diseases such as Erysipelas, recurrent limfangoit, inguinal lymphadenitis, soft tissue tumors, surgical procedures and injuries within the zone of lymphatic drainage. Skin with lymphostasis pale, cool. Edema resistant, dense, reaches a considerable size. Permeability of veins with lymphostasis is not broken, no pain, no advanced subcutaneous veins.

Anaerobic Phlegmon occurs when the penetration of anaerobic microorganisms, due to penetrating wounds of soft tissues. For anaerobic Phlegmon is characterized by a significant and rapidly progressing swelling of tissues, the skin is brownish-yellow, sinjushnoj. Suggest the presence of anaerobic Phlegmon enables rapid onset, severe ripping pain in the limbs. The general condition of the patient deteriorates sharply due to intoxication. Sick excited, anxious, in consequence become apathetic, fall into oblivion. Quickly develops toxic hemolytic anemia. Diagnosis is based on the rapidly progressive deterioration, severe intoxication, the presence of gas in the tissues, quick growing swelling of limbs and ULTRASOUND results and bacteriological research.

Acute arterial occlusion. Swelling of the limb when ischemia occurs in later stages. Unlike DVT swelling in ischemia subfascialnyj. Acute ischemia begins with severe pain, accompanied by loss of sensitivity, cold limbs. Subcutaneous veins spavshiesja. Swelling of limb development precedes deep paresis. No pulsation of the arteries of the affected limb. Rapidly developing muscular Contracture and gangrene of limbs.

Extended fabrics-crushing syndrome represents ischemic muscle necrosis, followed by the development of severe kidney and liver failure. The appearance of edema preceded by prolonged compression of soft tissues limbs. Excepted limb initially pale, cold. Only Sinjushny fingers stop. Dramatically reduced sensitivity. Pulse on peripheral arteries is not defined. The next day the condition of patients with progressive worsening due to self-poisonings, noted weakness, drowsiness, alternating with excitement, there is vomiting, thirst, pain, jaundice, delirium. The characteristic symptom is oliguria urine red, it defines a Myoglobin. Fabric oedematous limb, tight, tense, active movements are absent, a deep sensitivity.

**Test questions**:

1. list the causes leading to the development of acute deep Phlebothrombosis.

2. what are the main clinical manifestations of acute deep Phlebothrombosis.

3. Instrumental research methods used in the diagnosis of deep Phlebothrombosis.

4. specify the disease, you must carry out the differential diagnosis of acute deep Phlebothrombosis.

**Tests for self-control quality home training**:

1. Acute deep Phlebothrombosis of lower leg level positive symptoms are:

a) Samujelsa

b) Moses

) Goldflama

g) Homansa

d) Lovenberga

2. Most informative method of instrumental Diagnostics of acute deep Phlebothrombosis is:

a) rheovasography

b) to venography

in) duplex angioscanning

g) radiography

3. Differential diagnosis of acute deep Phlebothrombosis limbs should be:

a) rozhistym skin inflammation

b) lymphostasis

in acute blood circulation violation) limb

g) long-term tissue crushing syndrome

h) acute sciatica

4. For ileofemoralnogo Phlebothrombosis is characterized by:

a) pronounced swelling of entire limb

b) contravention of movements in joints of limbs

skin temperature increase) limb

g) cold limbs

5. For deep Phlebothrombosis is characterized by:

and) reducing skin sensitivity

b) increase skin sensitivity

in) preservation of skin sensitivity

**7. Independent work in the practice session:**

1. different levels of situational tasks Solution absorption.

2. Mikrokuracija of patients with varicosity (complaint history, assessment of general condition, paraclinical examination methods, substantiation of diagnosis, differential diagnosis, treatment).

3. report of the patient group.

4. reading flebogramm.

5. Presentation of the themes mikroreferatov.

**8. Venue of the sessions:**

1. Training room.

2. At the bedside.

3. Cabinet of ULTRASOUND Diagnostics.

4. Dressing.

5. Operating.

**LITERATURE**

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial m., 2006.

3. Savelyev V.s. Phlebology. Guide for physicians m., "medicine", 2001.

4. Savelyev v.s., Kiriyenko A.i. surgical diseases. Tutorial, t. 1-2, m., geotar-media, 2005.

5. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-b | 6-b, c, d |
| 2-a, d | 7-b, c, d |
| 3-d, e | 8-g |
| 4-b, c, d | 9-b, g |
| 5-b, d, e, f | 10-a, b, c, d, e |
| Acute thrombophlebitis | |

|  |  |
| --- | --- |
| 1-a | 3-g |
| 2-in | 4-a, b, c, d |
| Acute Phlebothrombosis | |
| 1-b, g, d | 4-a |
| 2-in | 5-in |
| 3-b, c, d |  |

**Topic:** "Obliterating diseases of arteries limbs»

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, classification, clinical signs of Obliterative diseases;

b) skills training, clinical examination anamnesis in patients with Obliterative diseases;

Learn paraklinicheskoj techniques) diagnosis, differential diagnosis and treatment of patients with Obliterative diseases of the arteries.

**2. To enter, you need to know:**

of course, normal and topographical human anatomy: the structure of the arteries of various types, topographic location of arteries limbs;

of course private surgery: etiology and pathogenesis of Obliterative arterial diseases, obliterating disease classification, clinical manifestations of Obliterative diseases, methods of instrumental Diagnostics, differential diagnosis obliterating endarteritis, obliterating atherosclerosis, Raynaud's disease, Buerger's disease, acute circulatory disorders in the limbs. Basic principles and methods of treatment.

**3. To enter, you need to understand:**

etiology and pathogenesis of various diseases of arteries of extremities, obliterating the clinical manifestations of Obliterative arterial diseases.

**4. To enter you must be able to:**

correctly and consistently collect medical history, to identify early signs of Obliterative diseases, evaluate the results of instrumental methods of examination of the patient.

**5. Theoretical reference**

**Classification** . Obliterating diseases of arteries limbs are: 1. obliteriruty endarteriit, 2. obliterating atherosclerosis, 3. Raynaud's disease (angiotrofonevroz), 4. Buerger's disease (migrating obliterans). According to the degree of circulatory disorders in limb entails the following stage of the disease (Pokrovsky A.v.): 1-stage compensation of blood circulation; 2A phase-subkompensacija circulation; stage 2B-initial circulatory decompensation; III stage-circulatory decompensation; IY stage-destructive changes in the tissues of the limb.

**The clinical picture of**clinical picture of disease depends on the nature of the vascular lesions of the limbs and the degree of circulatory disorders in the region, krovosnabzhaemym affected vessels. (I) disease stage-functional compensation (spastical form)-the patient it may take more than 1000 m before the advent of peremejateisa hromota; 2A-stage or subcompensation stage, the intensity increases and peremejateisa hromota occurs when passing 200 meters; stage 2B-peremejateisa hromota occurs when passing from 50 to 200 meters; 3 phase-phase decompensation. Pain in the extremities appear alone, intermittent claudication occurs when passing 25-50 meters. 4 stage-stage of the destructive changes. Pain in the limbs become permanent, intolerable.

**Differential diagnosis**.

Case endarteriitom more often males under the age of 40 years. Important etiological factors are: chronic intoxication, round limbs, smoking, stress. Sick obliterating endarteriitom have a youthful appearance. Defeat begins with small vessels of the extremities, usually after a nervous overstress and fatigue. At the beginning of the disease indicated fatigue, cold extremities, paresthesia. The disease evolves to become permanent, pain appear trophic disorders.

For obliterating endarteritis is characterized by the following symptoms: symptom and trial Oppelja-Burger, a symptom of stiffness of fingers-Krakow, symptom, Burdenko, Samujelsa Goldflama, panchenko.

Instrumental methods of the diagnosis in the early stages of the disease define changes ripple and the volume of blood vessels, the reovazogramme decline in blood and reduce collateral blood flow. Doppler determines the sharp decrease in peripheral blood in flotation. The dilatation noted obliteration distal arteries. The walls of arteries are smooth, and they gradually narrow lumen. Collateral blood flow is not expressed.

In anamnesis in patients often marked transferred infectious diseases. Characteristic obliterating endarteritis is the appearance of necrosis in preserved ripple on the femoral and popliteal arteries affected limb.

Obliterative atherosclerosis. Develops after the age of 40 years. Patients look older than their age. The disease develops slowly, as connected with the violation of carbohydrate and lipid metabolism. The emergence of diseases contribute to trauma, cooling the body. Often patients with violations of coronary and cerebral circulation, they suffer from hypertension, diabetes. Marks constant paleness of limbs. Circulation distal limbs for prolonged periods of time is compensated. Often taped Leriche syndrome, i.e. blockade at the level of the bifurcation of the aorta and common iliac arteries. Also as with obliteriruuschem endarteritis expressed symptoms of ischemic Samujelsa, Goldflama, panchenko, Burdenko and others. For obliterating atherosclerosis characteristic symptom "empty veins", manifested in the desolation of venous trunks after the lifting of the lower limbs. In the blood of patients have hypercholesterolemia.

On reovazogramme detected a decrease in blood flow on main arteries, with collateral blood flow is maintained. According to doplerografii, there was a reduction in the flotation index and vascular lesion on segmentarnomu type. The angiogrammah identifies the dense, izedennost aorta deformed outlines main arteries, often contains plots of vascular calcifications. Often missing pulse on femoral vessels. In the absence of pulse on femoral arteries do not always have plots necrosis on foot.

Raynaud's disease (angiotrofonevroz). Suffer, usually young women (aged 20 to 30 years) psihostenicheskoj Constitution or suffering from neurosis. Small-calibre arteriol spasm occurs, particularly in the area of the phalanges and toes, nose, ears. Pulse on peripheral arteries preserved large trunks are not affected. Pain, pallor and cold toes appear suddenly, are often intense conditions of low ambient temperature Wednesday. In the later stages of the Blanching of the skin is replaced by cyanosis and then develop nutritional disorders in the form of dry zones of necrosis in the area of the surface layers of nail phalanxes of fingers. In a period of pronounced symptom with cold stress and symptom of Krakow.

Buerger's disease (thromboangitis migrating). The disease occurs in young men after suffering superficial thrombophlebitis. In the course of superficial veins appear plots in the area of seals trombirovannyh inflamed veins with pain by palpation. After weakening of acute inflammation of the same zone thrombophlebitis appear in other parts of the superficial venous network. After some time (2-6 months) sick note cold extremities, paleness of skin, and then expressed signs of arterial blood supply is intermittent claudication, positive ischemic symptoms, trophic disorders. The cause of the disease is autoimmune process with the defeat peripheral vascular epithelium with subsequent tromboobrazovaniem in their lumen. The clinic and the stage of the disease are similar to manifestations in obliterans endarteritis, however, when the migrated trombangiite marked periods of remission and exacerbation of the process. The disease is progressive and often ends with the development of irreversible trophic violations tissues and gangrene of limbs.

Acute circulatory extremities. Develops suddenly. Precede: atherosclerosis, myocardial infarction, abnormal heart valves, the active phase of rheumatism, slowing blood flow, giperkoaguljacionnyj syndrome, trauma, inflammatory changes receptacles. Cause of acute circulatory disorders are thrombosis and embolism.

When emboliah major arterial trunks intensive pain spreading occurs distal to the place of destruction. Pulse below the obstacles is absent. Skin pale colouring, cold to the touch. Broken motor function of limbs and all kinds of sensitivities, hyporeflexia. For progressive, stormy.

When tromboobrazovanii, the lumen of the vessel is observed in the clinic prodrome: cramps, paresthesia, numbness in the extremities.

When the instrumental study noted a sharp decline in circulation below the level of the blockade. The arteriogrammah visible level of the blockade as a sharp Cliff kontrastirovannogo trunk receptacle. Collateral blood track is not defined.

**Treatment.** Since the diagnosis, a painful disease of the arteries of a patient in need of lifetime medical monitoring, conservative treatment and prevention.

Treatment should be strictly individual and differentiated, taking into account the nature, prevalence, disease stage and extent of regional tissue hypoxia.

Optimal is a complex multi-component therapy aimed at eliminating all causal factors and mechanisms of pathogenesis of limb ischemia.

The surgery doesn't preclude patients from having a prolonged conservative treatment, which must be at least 2 times a year courses 1-2 month. You must respect the principle of treatment combining medication treatment with non-medicamental methods (physical therapy, spa treatment, remedial gymnastics, diet, etc.).

The inefficiency of conservative therapy should be considered as indications for surgical treatment.

The main directions in the complex treatment of Obliterative limb diseases are as follows: 1) removal of provocative factors; 2) removal of vascular spasm; 3) improving blood rheological properties; 4) antioxidant therapy; 5) Suppression of cytokines and free radicals; 6) immunotherapy; 7) normalization of lipid metabolism; 8) normalization of Neurotrophic and metabolic processes in tissues; 9) stimulation of development of collaterals; 10) caution the progression of the underlying disease; 11) treatment of opportunistic diseases; 12) symptomatic treatment of pain and inflammation.

Surgical treatment of Obliterative arterial diseases aims to restore arterial blood flow, or the development of collateral circulation paths (endarterectomy, autovenous bypass surgery, vascular prosthesis, aorto-femoral and etc. types of bypass surgery, sympathectomy, osteoperforacija, etc.).

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions on the subject of the lesson:**

Definition of obliterating diseases of the arteries.

Classification of Obliterative arterial diseases of the limbs on the types and stages of the disease process.

Causes leading to the development of obliterating endarteritis obliterans and atherosclerosis.

Features of vascular lesions characteristic obliterating endarteritis, Raynaud's disease, arteriosclerosis, Buerger's disease.

List the angiographic signs characteristic obliterating endarteritis obliterans and atherosclerosis.

Specify the clinical and evolutive particularities characteristic obliterating endarteritis, obliterating atherosclerosis, Buerger's disease, Raynaud's disease.

Differential diagnosis of Obliterative arterial diseases of the limbs (arteriosclerosis obliterans endarteritis, Raynaud's disease, Buerger's disease). The value of ULTRASONOGRAPHY in the differential diagnosis of Obliterative arterial diseases.

b) **Written homework:**

Presented in the form of diagrams or tables:

Anatomy of the arterial bed limbs;

Clinical classification of Obliterative diseases;

functional examination of patients with pathology of the arteries;

principles of treatment of Obliterative arterial diseases;

methods of operative treatment of Obliterative arterial diseases of the limbs.

**Tests for self-control quality home training:**

1. Leriche Syndrome is:

and brahiocefalnyj non-specific inflammation)

b) atherosclerotic occlusion of abdominal aorta bifurcation

in microangiopathy) distal limb

g) migrating obliterans

d) inferior vena cava occlusion

2. Symptom "plantarnoj" ischemia is not specific to:

and posttromboflebiticheskoj disease)

b) atherosclerosis obliterans

in Raynaud's disease)

g) obliterating endarteritis

d) diabetic angiopathy

3. In the diagnosis of arteriosclerosis obliterans most informative method is:

a) sfigmografija

b) thermography

b) ultrasonic dopplerography

g) aorto-Arteriography

d) rheovasography

4. In the surgical treatment of syndrome of Lerish best method:

and lumbar sympathectomy) for Diecu

b) thrombectomy catheter Fogarty

thoracic sympathectomy) for Ognevu

g) angioplasty

d) aorto-bifemoralnoe bypass

5. When obliterans endarteritis most often affects:

a) arc of the aorta and brahiocefalnyj barrel

b) thoracic aorta

in tibial artery)

g) bifurcation of the aorta

d) femoral artery

6. Chronic Arterial ischemia characterized by all except:

a) baldness limb

b) skin pigmentation

nail deformities)

g) atrophy of the skin

d) cyanosis I finger

7. high "intermittent claudication and impotency are signs:

and Raynaud's disease)

b) diabetic angiopathy

obliterating endarteritis)

Mr. Leriche syndrome)

d) ileofemoralnogo Phlebothrombosis

8. the patient with an obliterating atherosclerosis IY stage, occlusion of the femoral, popliteal and leg arteries, gangrene of the foot operation of choice is:

a thigh-level amputation)

b) lumbar sympathectomy

Vascular reconstructive surgery)

g) large gland transplantation Microsurgical Shin

d) conservative treatment

9. For obliterating atherosclerosis III stage is characterized by:

and varicose veins, subcutaneous)

b) trophic ulcer on the lower leg

in) "intermittent claudication" through 500 meters

g) absence of pulsations in the common carotid artery

d) pain in a limb at rest

10. the most effective drug for the treatment of Obliterative arterial diseases and diabetic angiopathy is:

a) papaverine

b) heparin

) vazoprostan

g) caffeine

d) trental

**7. Independent work in the practice session:**

1. different levels of situational tasks Solution absorption.

2. Mikrokuracija patient obliterating disease of the arteries of the lower limbs with the evaluation of the results of the survey:

a) complaints

b) medical history, life

the General status assessment)

g) local symptoms

d) paraclinical examination methods

(e)) justification the diagnosis

f) differential diagnosis

w) principles of treatment

3. report of the patient in a group.

4. Read and parse the angiograms, ULTRASOUND diagnostic data.

5. Presentation of the themes mikroreferatov.

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. the Cabinet of ULTRASOUND Diagnostics.

4. Dressing.

5. Operating.

**LITERATURE**

1. Evtihov r.m., Putin m.e., Shulutko A.m., etc. Clinical surgery. Publisher group "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial m., 2006.

3. Saveliev v.s., Kiriyenko A.i. surgical diseases. Tutorial. M., geotar-media, 2005.

4. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-b | 6-b |
| 2-a | 7-g |
| 3-g | 8-a |
| 4-d | 9-d |
| 5-in | 10- |

**Topic:** "Portal hypertension»

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, classification of portal hypertension;

b) skills training for clinical examination of patients with portal hypertension;

in) master diagnostic techniques, tactics and principles of treatment of patients with portal hypertension.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: the structure of the venous vascular bed, the portal circulation, Porto kavalnye anastomoses;

of course private surgery: etiology and pathogenesis of portal hypertension, classification, clinical manifestations of the various forms of violations of the portal circulation. Know methods of diagnosis of portal hypertension, principles and methods of treating the disease and its complications (bleeding from esophageal varices, ascites, gemorroidalnoe bleeding, etc.).

**3. To enter, you need to understand:**

features of clinical manifestations of the various kinds of embargo violations influence blood circulation, Portal Portal circulation to the liver and other vital organs.

**4. To enter you must be able to:**

properly and gradually collect medical history and life of the patient, to identify objective signs of disease, assessing the general condition of the patient and the extent of the violations of the liver, assess data instrumental research methods;

be able to justify a diagnosis of the disease, to hold the differential diagnosis types of blockade of the portal circulation, determine the method of treatment of the patient.

**5. Theoretical reference**

**Portal hypertension or portal hypertension syndrome** is a complex of diseases that occur when the difficulties of blood outflow to the portal system. Depending on the localization process are distinguished: nadpechenochnyj, vnutripechenochny, vnepechenochnyj and mixed types of blockade of the portal system. Clinical manifestations and portopechenochnogo bloodstream distinguish three stages: 1) compensated (moderate increase portal pressure, splenomegaly with hypersplenism or without it; 2) subcompensated (high portal pressure splenomegaly, esophageal varicose veins of the esophagus and stomach); 3) asthma (splenomegaly, esophageal varicose veins oesophagus and stomach bleeding from them, ascites).

1.**Nadpechenochnaja blockade** of the portal circulation includes:

and Chiari) disease (congenital anomaly of hepatic veins);

b Budd Chiari syndrome) (inferior vena cava thrombosis or stenosis at the level of its hepatic veins);

b) cirrhosis peak.

**Clinic.** Acute onset, rapid appearance of ascites, liver enlargement, pain, high fever. The general condition of patients, as a rule, it is heavy. 110-120 pulse beats per minute. The abdomen is dramatically increased in volume. The liver protrudes from under the rib edge on 15-20 cm, soft elastic consistence with a smooth surface and a rounded edge. In the early days of the disease, not the spleen then quickly grows in size and reaches the navel. There is a decrease in liver function: bilirubinemija, giperfibrinemija, low prothrombin index (60-70%), increased protrombinovogo time (30-70 s). Pressure in the liver and spleen high (up to 500 mm of water). On the splenoportogramme- selezenochnaja and hepatic Portal vein bypasses are visible have been expanded. Vnutripechenochnye branch of the portal vein kontrastirujutsja to very small vessels. Often pronounced reflux of the contrast in brajeechne veins.

Cirrhosis cirrhosis or heart Peaks is observed in Rheumatoid heart Vice sdavlivajushhem pericardite. Patients complain of weakness, shortness of breath, pain in the heart and stomach.

Clinic. The disease develops gradually, aching heart, rapid breathing, pains in the right podreberie, increasing swelling in the lower extremities. Patients-moderate. Pronounced cyanosis. Expanded the boundaries of the heart. Changed the rhythm of the heart and muted tones. The pulse of small filling. Enhanced peripheral venous pressure. The liver is enlarged, its surface smooth. The spleen is enlarged. X-rays determined the contours of cardiac calcification shadows (pancirnoe heart) or a significant increase in heart when his evils.

     II. **Vnutripechenochnaja blockade of** hepatic circulation is divided into:

a) cirrhosis (Portal, postnekroticheskij, biliary, mixed);

b) liver tumors (vascular, parasitic, Gland);

in the) liver fibrosis (Portal, scarry, after injuries and inflammatory processes).

Vnutripechenochnaja blockade of hepatic blood flow-clinic cirrhosis. Increasingly ill men aged 30-50 years. History moved hepatitis (Botkin's disease), obstructive jaundice, malaria, etc. Unlike the nadpechenochnoj blockade vnutripechenernm block or cirrozah disease develops gradually and reaches its full development through the 1-2 year.

Clinic. Complaints of patients are limited to increasing weakness, rapid fatigue, drowsiness. There are disorders of the digestive tract: belching, nausea, loss of appetite, flatulence, constipation. In the stage of decompensation expressed exhaustion, swelling. Sick-reduced supply, the skin is dry. On the skin of the torso are "spider veins (Telangiectasia). Abdomen increased in volume due to ascites. The liver is enlarged, dense, hummocky with sharpened edges (hypertrophic) or reduced (atrophic). Ascites most commonly seen in portal hypertension vnutripechenochnoj against the backdrop of severe general condition of the patient, unlike the vnepechenochnoj blockade of Portal blood flow. Spleen speaks at 8-15 cm of the hypochondrium, dense, painless.

Decline in the performance of the liver: gipoproteinemia, desproteinemia, azotemia (50-80 mg%), bilirubinemija, gipofibrinogenemia, prolonged bleeding, decrease in blood coagulation; signs gipersplenizma: lakopenia, anemia, thrombocytopenia. Notes the high vnutripechenochnoe pressure (300-500 mm of water). When x-rays detected varicose veins of the esophagus and cardiac stomach Division. Splenoportografija shows, unlike nadpechenochnoj blockade dramatic impoverishment of intravascular picture splenoportalnogo extension of venous trunk, good permeability, its development of collateral circulation.

Histology-connective tissue overgrowth, fatty degeneration of liver cells. Postnekroticheskij cirrhosis: foci of necrosis, bands of connective tissue between them. Biliary cirrhosis: pronounced cholestasis in intrahepatic ducts, degenerative changes in the liver tissue. Development of fibrous tissue.

     III. **Vnepechenochnaja blockade** of the portal circulation includes:

and fleboskleroz, obliteraciju), thrombosis of Portal vein or its branches, kavernoznuju transformation of Portal vein;

b) congenital stenosis or atresia Portal vein;

) obliteraciju stenoses or splenic vein;

g) total splenoportalnogo thrombosis Riverbed or double block.

Manifests itself mainly in the form of two variants of clinical evolution: splenomegaly with hypersplenism and esophageal expanded veins oesophagus, splenomegaly with hypersplenism or without it. The third option is quite rare and splenomegaly, hypersplenism, advanced varicose veins oesophagus and stomach, aszitom, developing bleeding followed.

Are more likely to develop the disease at a young age of 30 years, unlike the vnutripechenochnoj blockade of the liver, which occurs in persons aged 30-50 years.

Vnepechenochnoj in the etiology of portal hypertension are significant children's infections, pupochnyj sepsis, congenital anomaly of portal system.

Clinic. Often the first symptoms of the disease are accidentally discovered splenomegaly or suddenly emerged bleeding from esophageal varices. The course of the disease is a lengthy, benign before the bleeding. Often fatal bleeding can occur. In between bleeding patients feel good, unlike other forms of portal hypertension. One of the recurring symptoms of vnepechenochnogo block is splenomegaly. Liver not enlarged, her soft consistency. Spleen big sizes, painless, movable. No ascites. There are signs gipersplenizma: lakopenia (2-3 x 109/l), anemia (50-60 g/l), thrombocytopenia (60-90 thousand). The functional liver samples, unlike other types of portal hypertension are not violated. X-ray of the stomach-taped varicose veins oesophagus and stomach. Splenoportografija detect narrowing of the splenic and portal vein, the contours of their jagged and twisted. Instead of a trunk of Portal vein kontrastiruetsja vein of convoluted conglomerate. Pronounced collateral blood flow. Splenoportometrija detects high vnutriselezenochnoe pressure (500-600 mm of water) and normal pressure vnutripechenochnoe (120 mm water pillar), unlike other types of blockade of the portal circulation.

Vnepechenochnaja form portal hypertension, flowing with clinical bleeding may mistakenly be treated as disease Verlgofa. However, isolated splenomegaly and hypersplenism are not specific to the disease Verlgofa.

     IY. **Mixed form of** portal hypertension include:

a) cirrhosis with secondary thrombosis of the portal vein;

b) Portal vein thrombosis with secondary Portal cirrhosis develops against the backdrop of liver disease.

In cirrhosis of the liver, complicated Portal vein thrombosis, the clinical picture of the disease corresponds to the stage of decompensation with cirrhosis of the liver.

When primary thrombosis of the portal vein of liver cirrhosis with further development, the clinical picture of disease reminds manifestations of portal hypertension, but unlike it develops acute or subacute. Diagnosis is based on medical research and needle liver biopsy. If this is diagnosed vnepechenochnaja blockade of Portal blood flow and hepatic cirrhosis.

**Treatment.** Treatment based on syndrome of portal hypertension treatment lies with the underlying disease.

When predpechenochnoj form syndrome patients shows surgical treatment: Splenectomy, imposing direct portokavalnyh vascular anastomoses (splenorenal, mezenteriko-kavalnogo or direct portocaval anastomosis).

In the treatment of portal hypertension syndrome vnutripechenerngo best is direct vascular anastomoses portokavalnyh overlay, which aims for a rapid reduction of portal pressure by discharging blood in the inferior vena cava system. Good treatment results allow to reach a combination Splenectomy with omentorenopeksiej or, omentogepatodiafragmopeksiej.

Treatment of hemorrhage from esophageal varices begin with conservative measures: Esophageal tamponade probe Blakemore tube and Hemostatic therapy.

When the failure of conservative therapy use different kinds of surgical procedures aimed at disunity Gastroesophageal anastomosis portokavalnyh zone.

**6. Self-study in extracurricular time** (preparation for practical occupation)

a) **annotated list of questions on the subject of the lesson:**

Definition of portal hypertension.

Portal hypertension classification, characteristics of the portal circulation.

Causes of portal hypertension.

Clinical manifestations of the various forms of portal hypertension.

Differential diagnosis of portal hypertension: heart failure, diseases of the biliary tract, parasitic liver disease (echinococcosis), liver tumors, blood diseases, gastric ulcer.

The role of splenoportografii and ultrasound in the differential diagnosis of portal hypertension.

Portal hypertension-related complications (bleeding, ascites, peritonitis, etc.).

Survey methods of patients with portal hypertension.

Medical tactics in the treatment of hemorrhage from esophageal varices in portal hypertension.

Medical treatment of patients with different forms and stages of portal hypertension.

b) **Written homework:**

Presented in the form of diagrams or tables:

classification of portal hypertension;

the differential diagnosis;

diagram of the portal circulation.

To know:

survey methods of patients with portal hypertension;

complications of portal hypertension;

methods of surgical treatment of portal hypertension;

methods to stop bleeding from esophageal varices;

types of radical operations when portal hypertension;

types of palliative operations with portal hypertension.

**Tests for self-control quality home training:**

1. For portal hypertension is characterized by symptoms:

a) heart failure

b) ascites

respiratory failure)

g) splenomegaly

d) hypersplenism

e) expansion of Porto kavalnyh anastomoses

f) hypertension

2. Clinical manifestations and as blood flow portopechenochnogo emit:

a) bessimptomnuju

b) compensated

in) complications

g) decompemsated

d) subcompensated

e) hidden

3. nadpechenochnoj blockade of the portal circulation is:

a liver tumor)

b) Portal vein atresia

b) cirrhosis

g) cirrhosis Peak

d) disease-Chiari

4. vnutripechenochnoj blockade of the portal circulation are:

and) liver fibrosis

b Budd Chiari syndrome)

in) cirrhosis Peak

g) thrombosis of Portal vein

d) Portal vein thrombosis with secondary Portal cirrhosis

e) disease-Chiari

5. vnepechenochnoj blockade of the portal circulation is:

a) congenital Portal vein stenosis

b) Portal vein atresia

the splenic vein stenosis)

g) liver fibrosis

d) liver tumors

e) cirrhosis

6. Most informative method for diagnosing portal hypertension is:

a) laboratory biochemical tests

b) computed tomography

c cholangiogram)

g) splenoportografija

d) celiakografija

e) ultrasound of the liver

f) liver scintigraphy

7. For gipersplenizma syndrome is characterized by:

and spleen)

b) increase blood cell counts

in) decrease in blood cell counts

g) ascites

d) expansion of Porto kavalnyh anastomoses

e) digestive disorders

8. The pressure in the portal vein of healthy person is:

a) 5-10 mm Hg.

b) 10-15 mm Hg.

in) 16-25 mm Hg.

g) 26-35 mm Hg.

d) 36 and above mm Hg.

9. Radical operations for the treatment of portal hypertension include:

and establishment of direct Porto) kavalnyh anastomoses

b) Splenectomy

hepatic artery ligation)

splenic artery ligation, Sir)

d) operation of ECCA

e) operation Tanner

10. For final stop bleeding from varikozno expanded veins oesophagus, apply the following methods:

a probe into the esophagus), Blakemore tube

b) operation Linton

Tanner operation)

g) operation Kalba

d) gastrectomy

**7. Independent work in the practice session:**

1. different levels of situational tasks Solution absorption.

2. Mikrokuracija assessment of patients the results of their examination, differential diagnosis, substantiation of diagnosis, determining treatment tactics, principles of conservative and surgical treatment.

3. report of the patient group.

4. Read and parse splenoportogrammy.

5. Presentation of the themes mikroreferatov.

**8. Venue of the sessions:**

1. the training room.

2. at the bedside.

3. in the study of ultrasound and computer Diagnostics.

4. Operating.

**LITERATURE**

1. Evtihov r.m., Putin m.e., Shulutko A.m., etc. Clinical surgery. Publisher group "GEOTAR-media, 2006.

2. Kuzin M.i. surgical diseases. Tutorial. M., 2006.

3. Operative Surgery. Prof. I. Littmanna, Budapest 1985.

4. Savelev Vladimir, Kiriyenko A.i. surgical diseases. Tutorial, t. 1-2 m., geotar-media, 2005.

5. Saveliev V.s. Guide for emergency surgery the abdominal organs. M., 2004.

6. The lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1-b, g, d, e | 6-b, g, d |
| 2-b, g, d | 7- |
| 3-d, e | 8-b |
| 4-a | 9-а, d |
| 5-a, b, c | 10-b |

**Topic:** «Diseases of esophagus»

**1. the purpose of the practice:**

Learn at the level of play from memory the etiology, pathogenesis, classification, clinical picture, methods of diagnosis of esophageal cancer.

**2. To enter, you need to know:**

etiology and pathogenesis of esophageal cancer.

**3. To enter, you need to understand:**

gather the complaints and identify the symptoms of the disease, evaluate the data of laboratory and instrumental studies.

**4. To enter you must be able to:**

hold the differential diagnosis of esophageal cancer with ahalaziej, esophagitis, peptic ulcer, burns stricture scar.

**5. Theoretical reference.**

**Esophageal cancer** is 80-90% of the diseases of the esophagus. Among other malignancies takes place 6 (5.1%), esophageal cancer conducive factors are: feeding habits (abuse of hot, spicy food, frequent use of coarse food containing small bones), leading to chronic inflammation of the mucosa of the esophagus; cicatrical stricture, diverticula, benign tumors, achalasia.

**Classification**. Esophageal cancer is localized predominantly in the field of physiological contractions: in mid-thoracic-65%, nizhne-breast-23%, upper breast and cervical-9%.

There are three macroscopic types of esophageal cancer: ulcerative and infiltrative, papillomatoznyj.

Microscopically-squamous cell orogovevaniem with or without orogovevanija and adenocarcinoma.

International classification.

T-primary tumor

Tx -insufficient data to assess the primary tumor

Ton -the primary tumor is not defined

T is -carcinoma in situ

T1 -tumor grows the mucous membrane or submucosal layer

T2 -tumor grows muscular layer

T3 -tumor grows adventiciju

T4 -tumor grows adjacent structures

(N) -regional lymph nodes

(N) x -insufficient data to assess the defeat of regional lymph nodes

(N) 0 -no regional lymph node metastasis

M-distant metastasis

Mx -not enough information to determine the of distant metastases

M0 -no distant metastasis

M1 -there are distant metastases

**The clinical picture**. Signs of esophageal cancer is divided into primary (local symptoms), secondary (if neighbouring organs and tissues) and shared. The primary symptom is dysphagia occurs in 95% of patients. In the initial stages of the disease indicated peremezhajushhaja dysphagia. In the subsequent progressive dysphagia-difficulty swallowing appears growing solid food, semi-liquid and finally, liquid. Esophageal cancer pain localized in the sternum, in mezhlopatochnom space in epigastralna area. Exhaustion and dehydration occurs. Further degradation of the tumor comes imaginary well-being-the phenomenon of dysphagia temporarily reduced. There is an increasing sljunotechenija. In connection with the festering stuck food over the tumor appears bad breath.

Secondary include: hoarseness of the voice from the germination of a tumour recurrent nerve, the vagus nerve compression can cause tachycardia, coughing fits, vomiting. To common grounds-poor appetite, weight loss, weakness.

When rentgenograficheskom study in the initial stages, discover breach esophageal motility, rigidity of the wall are not unfolding plot folds of mucous. Later-wall deformation defect filling with uneven contours, narrowing the lumen. When pnevmomediastinografii-signs of germination of a tumour in the adjacent organs and tissues or lymph nodes in the mediastinum. Using ezofagoskopia identifies direct and indirect signs of cancer of the esophagus. Direct featured include detection of tumors. Exo-tumor looks like a knobby mass covered with grayish or krovjanistym. When infiltrativnoj form note local rigidity of wall of the esophagus, its bleeding. The telltale signs of cancer include discoloration of mucous at selected sites, localized absence of wrinkling or not unfolding, mucosal infiltration. For morphological diagnosis confirmation is carried out on a suspicious tumor biopsy of tissue sections or aspirates and scrapings for cytological research. Mediastinoscopy can detect and take a biopsy of Mediastinal lymph nodes metastases.

**Differential diagnosis**.

The differential diagnosis of esophageal cancer with Cardia should be ahalaziej, divertikulami, jezofagitami, cicatrical contractions of the esophagus, peptic ulcers of esophagus benign esophageal tumors intramuralnymi. In the differential diagnosis of diseases of the esophagus, it must be understood that common symptom of these diseases is dysphagia.

**Achalasia** occurs at a young age. Slower disease progression within a few years. The phenomenon of obstruction of the esophagus may occur and stop suddenly; equally bad passes food any consistency. Often observed paroxysmal dysphagia-liquid food is delayed, while a strong flowing without obstruction. General condition in achalasia long-term remains relatively good. The esophagus expands, can contain a large amount of food masses that erupt when the regurgitation. For differential diagnosis can be applied Pharmacology with nitroglycerin, atropinom and azetilholinom. In contrast to x-ray the cancer study is determined by the view expressed by the length of the contraction of the cardiac portion of the digestive canal with smooth, precise contours "mouse tail" symptom. The upstream Division esophagus greatly expanded. Peristalticheskaja wave fades, not reaching the Cardia, while cancer is not suprastenoticheskogo extension and contraction is fuzzy, uneven paths. When ezofagoskopia is always detected the remains of food, dramatically thickened folds, slightly hyperemic, edematous mucosa. Biopsy clarifies morphological diagnosis.

**Esophageal Diverticula** are characterized by slow progression of disease. In the first stage there is a feeling of awkwardness when swallowing, light scratching pain, cough, reinforced salivation. In the second stage (often several years later) taped dysphagia and regurgitation. In the third stage of the phenomenon of dysphagia and regurgitation are amplified, appears with an unpleasant smell eructations, pain behind the breastbone, strong cough when eating, weight loss. Radiographically, with mnogoosevom study is determined by the bulging one of the walls of the esophagus and filling its contrasting substance. Distinguish between pulsionnye and traction diverticula. Pulsionnye diverticula have irregular contours, sometimes with a gas bubble above the horizontal level. Traction diverticulum is easier to identify when the horizontal position of the patient, because the contrast is not delayed weight in triangular protrusion. When ezofagoskopia detects a bulging wall of the esophagus, in the third stage, usually with inflammation of mucous.

**Diseases of the esophagus.** The beginning is usually acute with severe pain in the sternum, growing swallowing hot and solid food. In chronic course of patients complain of clumsiness when swallowing, burning sensation. After a prolonged course of illness occur as a result of dysphagia phenomena cicatricial esophageal lumen narrowing. Rentgenograficheski in acute ezofagitah discover a thickening of the mucosal folds, slowing down passage of the contrast material. Sometimes the delay it and regurgitation. When reflux-ezofagite visible graininess of the contours of the lower esophagus, narrowing it and throwing contrasting suspended from the stomach into the esophagus. If ezofagoskopia discover a thickened folds of mucous, izgyazwlenia, late stage-cicatricial stricture.

**Scar contractions of the esophagus** after Burns acids and alkalis also manifested dysphagia. In some cases, when the time of burning patients was not noticed, there are difficulties in diagnosis. Hallmarks of cicatricial contractions are: overall satisfactory, good appetite, with progressive dysphagia.

Unlike cancer strikture esophagusx-ray examination reveals is not smooth, but its sharp contours, with long and multifaceted plots destruction. Esophagoscopy lets see belesovatye scars with smooth, shiny surface, granulated surface. Biopsy is required.

**Peptic ulcers of the esophagus.** Unlike esophageal cancer esophageal ulcer peptic most frequent symptom is pain behind the breastbone or in the epigastric area. Pain occurs or gets worse during meals. The course of the disease is slow, undulating. Aggravation often occur in spring and autumn periods. When x-ray examination detected the presence of niches with inflammatory shaft. Esophagoscopy with biopsy allows a differential diagnosis.

**Benign intramuralnye tumor of the esophagus.** Mediastinal tumors are rare. clinically manifested three types of symptoms: bronchial compression, the compression of blood vessels and neurogenic. esophageal dysphagia arises when squeezing. Compression of the trachea and large bronchi can lead to asphyxia When compression of the great vessels in patients appears characteristic of puffiness of the face and neck, exophthalmos, redness or cyanosis-person. On the skin of the chest wall konturiruyutsya advanced and intense venous trunks. When squeezing or defeat nerve trunks observed Horner Syndrome, pain, parastezii, diaphragm paresis or paralysis, laryngeal nerves, violation of pototdelenija. Classic sign-dysphagia is increasing very slowly, over a number of years. Overall condition is not violated. Roentgenoscopy and GASTRODUODENOSCOPY does not detect changes in the mucosa of the esophagus.

**Treatment.** Cervical cancer and verhnegrudnogo divisions of the esophagus treatment is recommended for radiation.

Sredegrudnogo esophagus cancer operation Dobromyslova-Toreka or esophageal resection is performed with a soustja between the rest of the esophagus and displaced to the right pleural space stomach (Lewis).

Of palliative operations take gastrostomu, rekanalizaciju prosthesis or Palliative resection.

**6. Self-study in extracurricular time** (preparation for practical occupation).

a) **annotated list of questions on the subject of classes**:

Predisposing factors conducive to the development of esophageal cancer.

What are the main clinical features of esophageal cancer.

Specify whether the radiological picture of achalasia is different from cancer of the esophagus.

Instrumental research methods used for diseases of the esophagus.

b) **Written homework:**

Presented in the form of diagrams or tables:

classification of diseases of the esophagus;

the differential diagnosis;

blood supply of the esophagus;

complications;

methods of surgical treatment.

**Tests for self-control quality home training.**

1. In the initial stages of esophageal cancer when x-ray study discover:

and esophageal motility)

b) symptom of "niche"

in lot wall rigidity)

g) is not smoothening out the folds of the Mucosa

d) significant expansion of upstream Division

2. The principal method for differential diagnosis of Esophageal diverticula are:

a) esophagoscopy

b) contrast x-ray study

in) ULTRASOUND

g) radionuclide study

d) computed tomography

3. Cenkerovskij esophageal diverticulum is localized:

(a)) in the field of Carina

b) above the diaphragm

in) in the upper third of the esophagus

g) pharyngoesophageal junction-pishhevodnom transition

4. The most dangerous complication of hiatal hernia is:

a) bleeding

b) Cardia insufficiency

in) impairment of stomach

g) reflux esophagitis

5. Radiological symptoms of achalasia are all, except:

a) a considerable length narrowed part of esophagus

b) symptom of "niche"

accumulation defect)

g) symptom "mouse tail"

e) rigidity and not smoothening out the folds of the mucosa in the exposed area

6. When the cervical esophageal diverticuli shows:

a) invaginacija diverticulum

b) tube feeding

in the diverticulum) remove

g) endoscopic dissection in place of constriction below diverticulum

d all of the above)

7. In patients with izvitymi and multiple burn the esophagus obstructions buzhirovaniju preference:

) "blind" through the mouth

b) under the supervision of jezofagoskopa

) retrogradnomu

g) hollow radiopaque buzhami on a metal conductor

d) "buzhirovaniju without end" through gastrostomu

8. what degree of dysphagia clinic meets if passes any food, but the patient is forced to drink her water?

and 2 degrees)

b) 3 degrees

4 degree)

9. What are the contraindications to radical surgery for esophageal cancer:

and) presence of Comorbidities

b) depletion

in) cardiac and respiratory failure

g) expressed liver and renal failure

10. in the tumor in nizhnegrudnom or abdominal operation Division of choice is:

and Anastasia Dobromyslova) operation-Toreka

b) resection of the esophagus and proximal stomach

Lewis operation)

**7. Independent work in the practice session.**

1. different levels of situational tasks Solution absorption.

2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) medical history of disease

in) assessment of the overall condition of the patient

g) definition local signs and symptoms

Dr.) paraclinical evaluation methods and symptoms

e) conclusions on the diagnosis

f) differential diagnosis

w) defining treatment tactics

and) principles of conservative and surgical treatment.

3. report of the patient in a group

4. Read and parse the radiographs

5. Presentation of the themes mikroreferatov.

**8. Venue of the session.**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**Literature.**

1. Berezov J.e. esophageal cancer m., 1979.

2. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

3. Kuzin M.i. surgical diseases. Tutorial m., 2006.

4. Surgical diseases: training: k. (ed. V. Savelyeva, A.i. Kiriyenko.-2 Ed., Corr.-М.: 2006.

5. Shalimov A.a. Saenko V. digestive tract Surgery Kiev, 1987.

6. Lecture of the Chair.

Annex

Answer test control standards.

|  |  |
| --- | --- |
| 1-a, b, g | 5-b |
| 2-b | 7-d |
| 3-g | 8-a |
| 4-a | 9-b, c, d |
| 5-b, c, d | 10-b |

**Topic:** "Breast disease»

**1. the purpose of the practice:**

and learn to explore) of patients with diseases of the breast;

b) to assess the results of clinical and diagnostic helper methods;

in differential diagnosis) to convene, appoint the necessary treatment.

**2. To enter, you need to know:**

of course, normal and topographic Anatomy: surgical Anatomy of the breast, etiology, pathogenesis of mastitis, clinical picture, methods of diagnosis, treatment of mastitis;

define mastitis, etiology, pathogenesis, classification, clinical picture, diagnosis, treatment;

benign breast diseases-etiology, pathogenesis, classification, clinical picture, research methods, treatment;

breast cancer-precancerous stages of breast cancer, a classification way of metastasis, clinical picture, diagnosis, treatment;

the differential diagnosis of breast cancer with mastitis, mastopathy, benign breast disease, prevention of diseases of the breast.

**3. To enter, you need to understand:**

the importance of knowledge breast health clinic;

diagnosis and treatment of breast disease.

**4. To enter you must be able to:**

collect the medical history of the patient with diseases of the breast;

conduct a survey of the patient with diseases of the breast;

evaluate the data of laboratory and instrumental research methods;

hold differential diagnosis.

identify methods of treatment of diseases of the breast.

**5. Theoretical reference**

**Mastitis** is a acute inflammation of the breast tissue.

**Classification:** on the nature of inflammation are distinguished: negnanye (serous and infiltrative) and fatigue (abscedirujushhij, infiltrative-abscedirujushhij, flegmonoznyj and gangrenous) forms of acute laktacionnogo mastitis. Depending on the location of the epicenter inflammation happens: subcutaneous, subareoljarnym, intramammarnym, retromammarnym and total, when affects all divisions of the gland.

**The clinical picture.** For a typical clinical presentation of acute serous mastitis is characterized by acute onset, usually on 2-4 week post-natal period. Body temperature quickly rises to 38-39° c, often accompanied by chills.

Develops general weakness, weakness, headache. There is pain in the breast, but there may be variants of clinical evolution of mastitis, in which common phenomena precede local. When inadequate therapy beginning on mastitis during the 2-3 days goes into infiltrativnuju form. In the mammary gland palpated pretty tight, painful infiltration. The skin over the infiltration is always swollen. Transition in the form of a purulent mastitis occurs within 2-4 days. The temperature rises to 39oc appear shivers, picking up signs of intoxication: lethargy, weakness, poor appetite, headache. Picking up local signs of inflammation: the swelling and soreness in the defeat, softening in the area of infiltration with infiltrative-purulent form of mastitis. 20% of patients have purulent mastitis manifests itself in the form of abscedirujushhej form. While the predominant options are furunculosis and abscesses areola, rarely meet intramammarnyj and retromamarnyj abscesses, constituting a cavity, limited a connective tissue capsule. At 10-15% of patients with purulent mastitis is leaking like a flegmonoznaja form. The process captures a large portion of the gland with the fusion of its fabric and the surrounding tissue and skin. Overall status of new mothers in such cases is critical. The temperature reaches 40oc, there are stunning shivers expressed intoxication. Mammary gland dramatically increases in volume, swollen skin, flushed with sinjushnym ottekom, palpation gland sharply painful. Flegmonoznyj mastitis can be followed by septic shock.

Rare gangrenoznaya fora mastitis is extremely severe with sharply expressed intoxication and necrosis of the breast. Outcome of gangrenous mastitis is unfavourable.

When any form of mastitis in the best interests of the child, breastfeeding should be discontinued. Indication for suppressing lactation when mastitis include:

        rapid progressive process, despite the intensive therapy;

        mandochagovy infiltrative-purulent and abscedirujushhij mastit;

        flegmonoznaja and gangrenoznaya forms of mastitis;

        any form of mastitis with recurring throughout;

        latent mastitis does not amenable to combination therapy, including surgical dissection.

**Differential diagnosis.**

Differentiate acute purulent mastitis should be breast cancer, lactostasis, breast fibroadenomatozom, galaktocele, parasitic lesions of the breast, specific breast infection (tuberculosis, syphilis).

Breast cancer has some commonality with acute suppurative mastitis in the following situations: the accession of purulent complications during the disintegration of the tumor in the later stages of the process flow and when the so-called mastitopodobnoj form of breast cancer. General upon accession of purulent complications during the disintegration of the tumor is the presence of sharp pain, redness and infiltration of the affected mammary gland and, in some cases, when an abscedirovanija-voltage fluctuations. Distinguish these conditions allows the lengthy course of disease in breast cancer, the presence of several months surround education in iron, sometimes with the formation of ulceration, the presence of enlarged regional lymph nodes, signs of distant metastasis in flat and spongy bones of the skeleton. Typically, these patients were treated at this disease, received radiation and chemotherapy. Often, it is the patient preklimaktericheskogo and menopause, having abortions in history, in the postpartum period is limited kormivshie breast-feeding. However, when later cancer treatment is sometimes difficult to differentiate the vulgar laktacionnyj not klamaktericheskij mastitis and septic complications of tumor in the breast. Histological study of tissue can help, suspicious at the tumor, as well as the instrumental studies (ultrasound, x-ray of the spine, pelvis and thorax, CT) to diagnose and indirect signs of tumor growth.

Mastitopodobnaja form of breast cancer is vysokozlokachestvennyh nizkodifferencirovannyh cancers occur, usually at a young age, most often during hormonal adjustment in puberty. Disease in this form of cancer is developing extremely fast, growing as cancerous intoxication, and local changes in the mammary gland, early signs of distant metastasis. Common with purulent mastitis is some external similarity of local symptoms: the presence of diffuse edema, mild redness of the breast, signs of lymphatic flow disorders of the body (skin type "lemon peel), however, against the background of changes, resembling flegmonoznuju form of mastitis is missing signs of intoxication, prolonged worries festering throughout the process (a few weeks in the absence of local speakers from the breast), signs of cancerous intoxication, weak pain syndrome, the patient's young age (11-15 years) and the appearance of this clinic outside of pregnancy and lactation.

Fibroadenomatoz of mammary glands is an extremely common pathology as a climacteric, preklimaktericheskogo, as well as child-bearing age. Some doubts in differential diagnosis when fibroadenomatoze may occur when its diffuse melkouzlovoj drobinchataja breast form» expressed sore syndrome, especially increasing ovulation phase of the menstrual cycle. Difference is the absence of background pain giperemia, infiltration and fluctuations, regularity of occurrence of such complaints and increased them in the middle of the menstrual cycle, the absence of signs of purulent intoxication, usually age patients more than 45 years, the absence at the moment of pregnancy and lactation. In doubtful cases are useful breast ultrasound and thermography. When mastite on breast thermograms visible region of very high heat up in the projection of the hearth of inflammation. Temperature gradient may reach 3oc. Normally, according to the nature of the disease, we see hyperemia in axillary projection, reflecting the reactions of the lymphatic system to inflammation, and accordingly is not present when fibroadenomatoze.

Galaktocele (retencionnaja cyst breast slices) occurs relatively rarely and develops several months after cessation of lactation. Patient notes the roundish, with clear contours, elastic, mobile education in the mammary gland. Unlike mastitis skin over him not missing perifokalnaja hyperemic infiltration and swelling of the lymph nodes are not enlarged, regional, mobile and painless. Sometimes positive symptom Kenig. Secondary development of the infected galaktocele clinic transformed into typical manifestations of breast abscess and almost indistinguishable from itself in acute mastite. Incline toward the diagnosis of nagnoivshegosja galaktocele can only be familiar with the data previously found palpiruemom education.

Parasitic lesion of the breast (jehinokokkovye cysts) are fairly rare: manifest the presence of round, movable, elastic education in the mammary gland. From purulent mastitis is also a distinct lack of signs of local and General purulent infection. Help diagnose can ultrasound, CT, as well as jepidanamneza, history of hydatidosis other bodies, positive reaction Latex-Agglutination with Antigen cyst. Quite rare when the giant size of parasitic cysts may be clearly defined symptom "gidatid" shake with palpation undulirujushhej gland.

In the last decade owing to the deteriorating socio-economic conditions once again became topical issue on the possibility of specific infections (tuberculosis, syphilis), defeat its various bodies, and in particular, breast.

Tuberculosis of the breast lesion can be observed in secondary disseminirovannyh forms of the disease. It is manifested by the presence of dense "cold" infiltrations, an increase in regional lymph nodes, the formation of multiple "lattice fistula with meager kazeoznym otdelemam, lack of acute onset. Distinctive features of nonspecific mastitis is the lack of local hyperemia, sickliness and fluctuations, common symptoms of purulent-septic process, signs of pulmonary tuberculosis, relevant data, jepidanamneza positive data of serological reactions.

Syphilis breast cancer can be a manifestation of the tertiary, gummoznogo period of disease, when in iron has a tight limited infiltration-Gunma. Unlike purulent mastitis when it lacks hyperemia, oedema and pain by palpation and there are positive serological reaction to antigens pale Treponema, a long period of illness. Also affect mammary gland can and primary syphilis with the formation of primary sifilomy (solid shankra) in place of the primary affect pathogen (usually in the area the areola). This classic picture small sores with thick edges and pink rounded bottom, painless by palpation. Serological reaction with another negative characteristic of the kind of sores to distinguish it from nonspecific nagnoitelnogo process (numerous abscess) paraareoljarnoj area.

**Dishormonal mastitis.** The largest value among the dyshormonal breast disease is disease of the breast, or fibroadenomatoz, which often lies pathological proliferation of mammary epithelium, collagen stroma transformation on the background Iron body and its subsequent gialinoza with the formation of cysts. When disease preventive care visits is found more than a quarter of all women, but most often between the ages of 30 to 50 years as fibrocystic form.

Leading etiological factors conducive to the emergence of mastitis, are violations of the regulatory activity of the hypothalamic-gipofizo-adrenal system. A small number of genera, short and inadequate lactation, abortion, inflammatory diseases of the uterus and ovarian follicular ovarian cysts become causes, predraspolagatmi to mastitis. These women appear different menstrual irregularities, violation of genetic function, anovuljarnye cycles.

Pathogenesis of mastitis is largely driven by the persistirujushhim action of prolactin, a breach of the ratio of estrogen and progesterone, the increased levels of follikulinstimulirujushhego hormone and estrogen outside natural mammogeneza.

Morphological picture of mastitis is represented by the combination of proliferative, Dystrophic and atrophic changes in the epithelium of duct, idiosyncratic changes miojepitelija connective tissue stroma and glandular breast body.

**Classification.** Distinguish between diffuse and anchor forms of mastitis.

**The clinical picture.** Clinical manifestations of mastopathy are: pain, discharge from the nipple, mammary gland seals. In the first phase of development of the disease patients celebrate the pain in one or both breasts appearing in premenstrual period that combined with swelling breasts. Pain may be spontaneous or occur only when pressure is applied. You may experience discharge from the nipple-molozivnye, serous, bleeding sometimes. One of the symptoms is breast-seal-determined by palpation in the position of the patient standing, when dolchatost can be detected, stippling ("drobinchataja chest), tjazhistost breast tissue. By palpation in the position of the patient lying on his back, with iron prizhatii the disc to the chest seal disappears (a negative symptom of Keninga). In the second phase of mastitis frequency of pain becomes less distinct, and little changes in mammary glands depends on the menstrual cycle. There are three clinical forms of mastitis: diffuse, nodular, cystic. Nodular form of mastitis is a defeat not just iron body and its individual segments and shares. It is characterized by the definition during the feelings of one or (more often) multiple painless seals, not changing throughout the menstrual cycle. Preemptive cystic degeneration of the duct allows to select third-kistoznuju form of mastitis.

Diagnosis of mastitis is based on clinical, radiological and morphological studies. Beskontrastnoe x-ray examination of the breast-a mammogram-allows you to confirm the presence of mastitis, clarify the predominance of Adenomatosis, cysts or fibrous changes observed Dynamics influenced by treatment, identify tumors emerging against the backdrop of mastitis. When it detects a large cystic formations use pnevmokistografiju which gives the opportunity to clarify the completeness of emptying the cyst and identify vnutrikistoznye tumor formation. Morphologic characteristics of mastitis can be obtained by cytological study discharge from the nipple, needle biopsy hotbeds of seals.

**Benign tumors.** In the mammary gland may develop epithelial and not epithelial benign tumors most often develop in the mammary gland epithelial benign tumors-fibroadenoma. Among epithelial uterine fibroids are discovered, lipomas, limphangiomas.

A Papilloma lactiferous ducts and develop collective sinuses. Characteristic of this tumor in the central zone of the seal gland, discharge from the nipple: brownish, yellowish-green, less bloody. To diagnose papillomas use defluvium and duktografiju. The treatment is surgical.

Gynecomastia-disgormonalnoe disease breast cancer in males, which is increased to the size of a woman's breasts through glandular hyperplasia and connective tissue. The disease can develop at any age, usually after the age of 40.

Among the Etiologic factors of importance has reduced androgenic activity in testicular atrophy, cryptorchidism, testicular tumors, orhite, tumors of the adrenal gland and improvement of estrogenic activity.

The basis of the pathogenesis of Gynecomastia lie violations physiological ratios of male sex hormones and estrogen.

Distinguish between diffuse and anchor shape of gynecomastia. To diffuse the characteristic increase in breast cancer, the appearance of painful seals, which is located behind the areola. Seal is in relation to the subject fabrics, skin of the breast and areola are not changed.

When anchor characteristic form definition by palpation of dense, smooth, rolling aytsevidnyi education with a smooth surface. Accurate diagnosis of true Gynecomastia provides education punctate or remote study drug.

It is also necessary to carry out a differential diagnosis of dyshormonal mastopathy with retentive area breast Cyst (galaktocele).

Galaktocele is formed by blockage of one or more of the milk ducts after lactation or after suffering mastitis. Galaktocele develops gradually and is a retention cyst with growths of polipoznymi epithelium. By palpation in breast cancer is determined by the elastic, painless still education. From nipple stands out the secret of the grey-green or bloody color. Cytological study is determined by the epithelial cells, erythrocytes, leukocytes. Under controlled mammography seen cystic formation in the major dairy operations.

**Breast cancer** is a malignant tumor, primary site which arises in the parenchyma or exit the ducts of the glands. Breast cancer is one of the most frequent malignant diseases. Among oncological diseases in women takes place 2-3. The disease primarily affects middle-aged women and in the preklimaktericheskom period (36-40%), at the young age of only 1.5% -2. Often the tumor is located in the upper outer quadrant of the breast, rarely in the upper inner and lower quadrants. At present, the established view of the leading role of dyshormonal violations, primarily high estrogenic activity as one of the causes of this cancer localization.

**Classification:** allocate an anchor and diffuse forms of breast cancer. To diffuse form include: swelling and infiltrative, mastitopodobnaja, rozhepodobnaja, ironshell form. Distinguish 4 stage breast cancer: stage 1 tumour less than 3 cm in diameter, is not transferred to the surrounding tissue and skin, without defeat lymph nodes; II stage: a-swelling not exceeding 5 cm in diameter, passes on cellulose and has symptoms of seam with the skin, lymph nodes are not impressed. B-tumor of the same size and smaller, but with the defeat of the solitary axillary nodes of the first order; (III) stage: a-tumor more than 5 cm in diameter with germination or izgyazwleniem skin or infiltration into the fascial and muscular layers, but without regional lymph nodes metastasis, b-tumor of any size with multiple metastasis to the axillary, Subclavian or parasternalnye lymph nodes; IY -stage common breast lesion with metastatic spread over the skin, extensive izgyazwleniami. Tumor of any size, fixed tightly to the chest, with metastases in regional lymph nodes or without them. Any breast tumor with distant metastases (lung, pleura, bones, liver, etc.).

**Clinical picture**: the first clinical signs of breast cancer appear when you move the tumor tissue and skin. By palpation is detected in mammary gland tight junction. Tumor infiltrates spiralled gland extends dairy, strokes mezhtkanevym peeps, lymphatic and blood vessels. The rapid growth of tumors is observed at a young age (especially if the tumor originated during pregnancy, after childbirth, abortion). When small tumours in gland body characteristic symptom "wrinkled skin, created by shortening the Cooper ligament. This symptom to distinguish cancer from mastitis. For Central tumor localization node appears under the same circumstances, narrowing the areola, nipple, rejection of his umbilicus toward the site. Striking a positive symptom Kenig: node does not disappear when pridavlivanii his lying to the chest wall. When expressed infiltration of tumor cells in the primary survey detected evidence of a violation of the lymph circulation in the podareoljarnom Plexus-symptoms umbilikacii, platforms, with a central localization, which is a symptom of Pribrama (deformation nipple, his umbilicus), Krause (swollen areola). Symptom of "lemon rind indicates far before the process, as occurred as a result of a cancerous embolism of deep lymphatic vessels with swelling of the skin. In skirroznyh forms of cancers noted smartness gland tumor site grows. When you distribute a tumor to the edge of the iron disk nipple moves toward her.

Diffuse forms of breast cancer more malignant. On clinical manifestations: allocate mastitopodobnuju, swelling-infiltrativnuju, rozhepodobnuju, like a form. The first two are typical for young adults, especially during pregnancy and lactation, rapidly progressing. Ironshell form more common for older women, despite the fact that the tumor is growing more slowly, this form is prognostically unfavorable.

Paget's cancer is detected in patients aged 45-70 years and is characterized by lesions of the nipple, which flows with the formation of scales and plaques with either izgyazwleniami, moknushhimi, jekzemopodobnymi changes, mixed with itching, sensation of pokalyvanij, vague pain in the nipple.

Diagnostics. Of great importance in the diagnosis of early forms of breast cancer occupy special research methods-rentgenomammografija, various kinds and biopsy cytological studies. Also have not lost their value the traditional methods of clinical diagnosis of tumors in the relatively early stages.

**Differential diagnosis.**

Differential diagnosis of breast cancer should be carried out with fibroadenomoj, cystic, fibrous, nodular mastopathy, galaktocele, tuberculosis and sarcoma of the breast.

Fibroadenoma of the breast is manifested opuholevidnym education as determined by palpation. When cancer tumor dense, hummocky, limited mobile with vtjazheniem skin over the tumor as a symptom of the "umbilikacii" or "lemon peel. When otgranichena tumor-like adenoma from surrounding tissues, smooth, sometimes with hemispherical surface, dense, with good smeshhaemostju. Unlike cancer fibroadenoma may be multiple and appear in both the mammary glands. Axillary and nadkljuchichnye lymph nodes have not changed. Fibroadenoma unlike cancer develops more often at a young age, being associated with giperplaziei prostate gland tissue dishormonal. It develops slowly over several years, practically without disturbing the patients.

Mastitis or fibrocystic fibrous, unlike breast cancer, there are a few days before the onset of menstruation. The pain can be intense and irradiirovat in the arm and shoulder. By palpation of the gland indicated mild soreness and diffuse seal breast plot outlines. After menstruation pain disappears, the intensity of the pain decreases. By palpation in the gland seals, plots are defined without clear boundaries as a heavyweight, fine grit. From the selection of various nature occur nipple.

Nodular disease occurs over the age of 30 years and manifested clear entities in the mammary gland. Nipple-selection of different nature. Beskontrastnaja mammography-is determined by the uneven form off of her shadow less intense shades of ducts. Resolution method for tumors of 0.5 cm in diameter on duktogramme-defect filling his narrowing obturation. Thermography-body temperature over cancer site on -2 1.5° c higher than over benign formations. Is set to increase in the temperature of the skin over lymph nodes (podkrylcovymi, podkljuchichnymi, nadkljuchichnymi, parasternalnymi) in the presence of metastases in them.

Breast cyst Retencionnaja (galaktocele) is formed as a result of blockage of one or more of the milk ducts after lactation or after suffering mastitis. Galaktocele develops gradually and is a retention cyst with growths of polipoznymi epithelium. By palpation in breast cancer is determined by the elastic, painless, still education. From nipple stands out the secret of the grey-green or bloody color. Cytological study identifies epithelial cells, erythrocytes, leukocytes. Under controlled mammography seen cystic formation in the major dairy operations. Galaktocele may ozlokachestvljatsja and should be monitored over time.

Breast cancer it is necessary to differentiate from tuberculosis of the breast, which is most commonly manifested tuberculosis granulomas. While in the mammary gland is determined by a single node, gradually widening, moderately painful. Later after the formation of the host tissue glands and melt formed svischeve moves with purulent otdelemam kroshkovatym. When analyzing the pus from fistulas can detect the Bacillus Koch. Breast tuberculosis identified enlarged axillary lymph nodes, painful at palpation, in the form of conglomerates, unlike cancer when metastases are dense, not formed into packets. History should be taken into account (contact with TB patients).

Breast Sarcoma unlike cancer differ fast and malignant growth, most commonly seen in young age. Education is an uneven density, with patches of softening, krupnobugristuju swelling, without clear boundaries, large size. Skin over Ewing as would be stretched slightly hyperemic unlike cancer, unless there was a change of the skin in the form of lemon peel (Lymphedema). Helps in differential diagnosis puncture aspiration biopsy, with subsequent histological, cytological study punkcionnogo or aspiration of material.

**6. Self-study in extracurricular time** (preparation for practical occupation).

**a)** **Annotated list of issues:**

Mastitis:

Definition, etiology and pathogenesis.

Classification, clinical picture.

Treatment of mastitis.

Mastitis:

Definition, etiology, pathogenesis.

Classification, clinical picture, diagnosis.

Treatment of mastopathy.

Benign breast tumors:

Classification.

The clinical picture.

Diagnostics.

Treatment.

Breast cancer:

Definition.

Stages of breast cancer.

Classification.

The clinical picture.

Ways of metastasis.

Diagnostics.

Differential diagnosis of breast cancer with mastopathys, benign tumors of the breast.

Treatment of breast cancer.

**b) Written homework:**

Presented in the form of diagrams and tables:

diagnosis of breast disease;

treatment of breast cancer.

**Tests for self-control quality home training:**

1. breast Tumor diameter of 1.5 cm with enlarged armpit lymph nodes belong to the stage:

(a)) 1

b) 2 and

in) 2 b

g) 3A

d) 3B

2. For breast cancer are not characteristic of metastases:

a) light

b) in liver

in) in the brain

g) in navel

e) dice

3. the most effective method of research with breast cancer less than 0.5 cm is:

a) mammography

b) ULTRASOUND

in) thermography

g) palpation

d) radioisotope diagnosis

4. Lying breast tumor disappears if a vision problem:

a) umbilikacii

b) Kenig

) Pajra

g) Pribrama

d) "orange peel"

5. the most frequent tumor in Nodular form of breast cancer:

a) verhnenaruzhnom quadrant

b) verhnevnutrennem quadrant

) nizhnevnutrennem quadrant

g) nizhnenaruzhnom quadrant

6. When mastitis:

a) symptom Kenig negative

b) symptom Kenig positive

7. When anchor mastitis shows:

and) conservative treatment

b) operative treatment

8. When swelling and infiltrativnoj form of breast cancer in lymph nodes:

as early metastases appear)

b) late metastases appear

9. When the stage 2 breast cancer tumor reaches a size:

and up to 2 cm)

b) 2-5 cm

in) 1 cm

g) 5-7 cm

d) more than 8 cm

10. breast cancer symptoms:

a) symptom Keninga

b) symptom Pribrama

in the symptom of "umbilikacii") of the skin

g) offset nipple

d) leather over the tumor in the form of orange-peel

e) skin over the tumor in the form of "lemon peel»

**7. Independent work in the practice session:**

1. the decision of various levels of situational tasks of mastering

2. Mikrokuracija patients with evaluation of the results of the survey:

and) collect complaints

b) medical history

in) assessment of the overall condition of the patient

g) defining symptoms

d) assessment laboratory-instrumental research methods

e) diagnosis

f) differential diagnosis

w) conservative and operative treatment

3. Presentation topics mikroreferatov.

**8. Venue of the sessions:**

1. the training room.

2. At the bedside.

3. Dressing Room.

**LITERATURE**

1. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR media", 2006, 2011

2. Kuzin M.i. surgical diseases. Tutorial.-m., 2006.

3. Savelyev v.s., Kiriyenko A. surgical diseases. Tutorial: geotar-media.-2005.

4. Lecture of the Chair.

Annex

BENCHMARKS TEST CONTROL ANSWER

|  |  |
| --- | --- |
| 1 in | 6 and |
| 2 a b c | 7 b |
| 3 and | 8 and |
| 4 b | 9 b |
| 5 and | 10 a b c d e |

**Topic:** "Thyroid disease.

**1. the purpose of the practice:**

a) assimilate memory playback level etiology, pathogenesis, clinic and diagnose endemic, sporadic and diffuse toxic goiter, thyroiditis, thyroid cancer;

b) learn to the differential diagnosis of these diseases.

**2. To enter, you need to know:**

classification of diseases of the thyroid gland;

the clinical picture of endemic, sporadic, diffusive-toxic goiter, acute and chronic Thyroiditis, thyroid cancer;

methods of instrumental and laboratory diagnosis of thyroid diseases;

differential diagnosis of thyroid diseases;

conservative therapy methods;

methods of surgical treatment.

**3. To enter, you need to understand:**

the particularities of etiology and pathogenesis of thyroid disease.

**4. To enter you must be able to:**

collect medical history;

identify the objective symptoms of thyroid disease;

evaluate data instrumental and laboratory studies required for the diagnosis of thyroid diseases.

**5. Theoretical reference**.

**ENDEMIC AND SPORADIC GOITER**.

Goiter is limited or diffuse thyroid enlargement.

Endemic goiter occurs in people living in geographical areas where the biosphere is poor in iodine. Endemic area is called when the incidence of goiter more than 10% of the adult population.

**Classification of** diseases of the thyroid gland, includes:

1. Congenital abnormalities of the thyroid gland

2. Endemic goitre (and endemic cretinism)

3. Sporadic goiter

4. Diffuse toxic goiter

5. inflammatory diseases of the thyroid gland (acute and chronic tireodity)

6. damage

7. malignant tumors

Allocate five degrees increase thyroid. 0 degree-the thyroid gland not nearly palpable; (I) degree-iron palpated, but not noticeable to the eye when swallowing; (II) degree of iron easily palpable and visible when swallowing; (III) degree has a diffuse increase in the soft tissues of the anterior surface of the neck-"thick neck"; IY degree clearly visible goiter, the contours of the gland; Y degree-a huge, going abroad or dangling on his chest, In the form of increased goiter are distinguished: diffuse, nodular and mixed goiter. Functionally-eutireoidnyi (with the normal function of the thyroid gland), gipotireoidnyj (with reduced function), gipertireoidnyj (with high function) and gipotireoidnyj with evidence of cretinism.

On gravity secrete: light, moderate and heavy forms of thyrotoxicosis. By stage of disease (s. Milk) allocate: nevroticheskuju, nejrogormonalnuju, visceral and distroficheskuju.

**Sporadic goiter** develops in areas with sufficient flow of iodine in the body and occurs as a result of insufficient intake of iodine in the gut, hormonal irregularities etc as endemic goitre, sporadic classified according to size, shape and functional manifestations. The clinical picture it does not differ from the clinical picture of endemic goiter.

**Nodular toxic goiter** -Ray vsledstie autonomously functioning thyroid adenomas in the form of one or more nodules.

There are partially zagrudinne, retrotrahealnye, nadgortannye, guttural, lingual extension shhitovidnye gland.

**The clinical picture** eutireoidnyi goitre is very poor: complaints about the sense of awkwardness in the neck, difficulty in breathing, rarely change vote. Breathing is the most frequent symptom of zagrudinnogo goiter. When inspecting these patients we can mention expansion of veins of the neck. the breach breathing leads to development changes characterized as "zobnoe heart". Impaction of the sympathetic trunk is Horner's syndrome (PTOSIS, miosis, enophthalmos), modified half of the body sweating on the side of the compression. When thyroid palpation mild, often unevenly, movable.

ULTRASOUND allows to ascertain the size and structure of the thyroid gland, specify the number, size and structure of the node formations, but not judging the malignancy of these nodes. According to ULTRASOUND, 30-50% healthy people identifies nepalpiruemye nodes (diameter less than 1 cm).

B. aspiration puncture biopsy in diagnosis of benign and malignant nodes. All of the anchor education more than 10 mm must be punktirovat.

X-ray study allows you to set a delay on the level of barium aberrant goiter, esophageal offset lateral or anterior direction. Detection of elevated TSH suggests a patient of hypothyroidism.

**Diffuse toxic goiter.** The disease develops severe, often the cause is trauma.

The main symptoms are: diffuse thyroid enlargement, tachycardia, exophthalmos. Patients complain of general weakness, irritability, tearfulness, fast fatigability. Objectively stated voltage, smaller tremor of the fingers. Thyroid moderate density, moveable, painless. Define positive eye symptoms: Gräfe, Kocher, Delrimplja, Mobius, Shtelvaga. The uptake of radioactive iodine on 4.6 and 12:00 am increased. When ULTRASOUND iron diffusely increased. The concentration of total T4, free T3. TSH is significantly reduced, sometimes to complete absence.

**Thyroid cancer** can occur in childhood and youth ages, but usually after the age of 40. Women have in 4 times more often than men. The most frequent differentiated forms of thyroid cancer, which include papillary (62%) and follicular (18%) cancer. Undifferentiated forms (gigantokletochnyj, solid, small and large-cell carcinoma) are seen less frequently.

The most benign period has papillary thyroid cancer. It usually manifests itself in the form of a single dense node in the thyroid gland, rarely watch multiple nodes; metastasises in cervical lymph nodes, less celebrated metastasized thyroid share second, extremely rare in the bones and lungs. Tumor growth is very slow. In the surrounding tissue grows late, in the presence of metastases in the lymph nodes of the neck, the last for a long time remained mobile. Jeutireodinoe is typically stored state.

Follicular cancer-dense, rounded shape, expand metastasises in the bones, lungs, rarely in the brain. Incremental cancer (aberrant) thyroid glands along the sterno-kljuchichno-soscevidnyh muscles, there is usually in young age, develops slowly. Has papilljarnoe or papilljarno-follicular structure.

**Classification**. There are four clinical stage, malignant tumors of the thyroid gland: stage 1-a small tumor in one of the lobes of the gland without metastases; 2-stage tumor of the same size, but there are operations of cervical lymph nodes metastases; stage 3 is a small tumor inoperable regional metastasis or large, stationary, swelling with or without metastases; stage 4-fixed or flexible tumor with distant metastasis.

Method of diagnosis of thyroid cancer is its radioisotope research. Radioactive iodine does not accumulate or weakly accumulates in the tissues of the tumor. ULTRASOUND has diagnostic value in the study of education in the thyroid gland, exceeding the value of 0.5 cm. Puncture site for cytological study increases the accuracy of diagnosis. Undifferentiated cancer forms when radioimmunologicheskim method is detected change in level of calcitonin. Scintigraphy allows you to identify the location of the "cold" and "hot" nodes. The minimum size of the nodule, tapped on the skanogramme is 1 cm. Definitive diagnosis is based on histological examination.

**AUTOIMMUNITY**

Autoimmune thyroiditis (Hashimoto thyroiditis). At the heart of the disease lies education autoantibodies to thyroglobulin and thyroid tissues.

Slow growth, more or less dense goiter, weakness, gradually develops hypothyroidism symptoms associated with the squeezing of the surrounding tissues. Goiter with surrounding tissue does not heat, its surface is smooth, but sometimes rough. Lymph nodes of the neck is not increased. It is not uncommon to find abnormal clinical forms of the disease: there is light it is possible in the future, thyrotoxicosis, a unilateral process of type hub netoksicski goitre.

In the diagnosis of autoimmune goiter discovery play a role of increasing levels of gamma-globulin, tesselation Xerography, a positive reaction on prednizolonovuju trial-a decrease in the size of goiter.

Thyroiditis chronic fibrous (goiter Riedel). In the thyroid gland develops chronic productive process with the growth of connective tissue lymphoid infiltrates, often with a dash of eosinophils.

Clinically detected a gradual increase and compaction of the thyroid gland. Less-one share. The surface of the gland is uneven, goiter is very tight-"iron", in advanced cases, it welds with the surrounding tissue, the skin over the movable neck lymph nodes, goiter is not increased. Palpation is painless, but pain is sometimes mentioned, irradiirujushhaja in the ear, hoarseness of the voice, violation of swallowing and dry cough that is associated with involvement in process of recurrent laryngeal nerve, the esophagus and the trachea.

Acute purulent thyroiditis develops when hit by infection in the thyroid gland by hematogenic osteomyelitis.

The disease begins acutely. Concerned about the spontaneous, sharp pain in the neck, increasing tenderness, speaking and swallowing. Chills, fever, painful at first dense, and then fluctuating a tumor on his neck. Weakness, sweating, tachycardia. Leucocytosis, increased ERYTHROCYTE SEDIMENTATION RATE. Accumulation of iodine-131 in the normal or reduced.

Tireodit subacute. Refers to viral diseases. Disease often precede flu, measles, flu.

In the area of the anterior surface of the neck pains, spreading to the lower jaw, ears, back of the neck. Notes: general weakness, sweating, fever and shivering. Iron heavy, intense and sharply painful. In the analysis of blood is determined by increased SEDIMENTATION RATE.

**Differential diagnosis**.

Different types of Autoimmunity should be differentiated with diffuse toxic goiter. A common symptom is diffuse thyroid enlargement. In contrast with diffuse thyroiditis toxic goiter thyroid by palpation is painless. Identifies signs of thyrotoxicosis, positive symptoms, Delrimplja Graefe, Shtelvaga, Mobius. In the analysis of blood missing signs of inflammatory response. Radioactive iodine uptake is promoted, and the level of T4 and T3 upgraded almost all patients.

The key forms of endemic and sporadic goiter should be differentiated thyroid cancer. Thyroid cancer is determined by a dense, bugristoe education, relatively fast growing. In the later stages it malopodvizhnoe, spajano with the surrounding tissue. Popping pain spreading to shoulders, ear or back of the neck, difficulty in swallowing, voice alteration, expansion of subcutaneous veins of the neck, face, chest, Horner's syndrome. Metastases occur in the lymph nodes of the neck, lungs, mediastinum and bones. When scanning identifies cold sites. ULTRASOUND detects signs of malignancy in the amount of more than 5 mm. B. puncture allows a biopsy and cytology.

Unlike the thyroid cancer endemic and sporadic Zoba administration are not accompanied by the defeat of the regional lymph nodes. The key forms of these diseases when scanning accumulate radioactive iodine-hot pockets.

**Treatment.** Indications for surgery in hub zobe depend on morphological structure of education. With a hub operation in zobe, colloidal volume hemithyroidectomy, shows a large amount of not less than 3 degree. When follicular and papillary adenoma thyroid, bearing in mind the possibility of malignization, also shows a hemithyroidectomy. Operation absolutely shows in zobe 4 and 5 degree regardless of its morphological structure. If diffuse toxic goiter operation subtotal thyroid resection volume shows in the absence of the effect of conservative therapy, with heavy thyrotoxicosis with 4-5 degree, regardless of the degree of thyrotoxicosis.

**6. Self-study in extracurricular time** (preparation for practical occupation).

a) **annotated list of questions on the subject of the lesson:**

Causes leading to development of endemic goiter.

Causes leading to the development of chronic thyroiditis.

The clinical picture of diffuse toxic goiter.

The clinical picture of thyroid cancer.

Instrumental and laboratory diagnostic methods applied in thyroid diseases.

Instrumental Diagnostics methods used in thyroid cancer.

b) **Written homework:**

Presented in the form of diagrams or tables:

classification of diseases of the thyroid gland;

perfusion underactive thyroid;

the differential diagnosis;

complications;

methods of surgical treatment.

**Tests for self-control quality home training:**

1. the patient with endemic goitre diffuse visible increased right share of the thyroid gland. Specify the magnification of the thyroid gland, which corresponds to this clinical picture:

(a)) 1

b) degree 2

in) 3

g) degree 4

d) degree 5

2. For goitre when scanning characteristic identifying pockets of increased accumulation of isotope iodine-131:

a) Yes

b) no

3. Positive eye symptoms of Delrimplja, Shtelvaga, Graefe, Mobius is characteristic for:

and hypothyroidism)

b) goiter II degree

in hyperthyroidism)

g) thyroid cancer

4. the main laboratory signs of diffuse toxic goiter are:

a) reduction in the level of calcium in the blood

b) increased TSH and T3

in the T4 and T3)

g) decrease T4 and T3

5. the emergence of "symptom hoarseness of voice" with zobe Riedel explains:

a) involvement of the facial nerve

b) involving the trachea and esophagus

in the presence of metastases)

g) involvement of recurrent laryngeal nerves

6. What are the clinical symptoms of chronic fibrous Thyroiditis:

a) by palpation iron tight

b) skin over movable goiter

in the neck, enlarged lymph nodes) sedentary

g) hoarseness of voice

7. Cramps, symptom Hvosteka and Trousseau after strumektomii speak for:

a) hypothyroidism

b), tireotoksicski Kriz

recurrent laryngeal nerve injury)

g) hypoparathyreosis

d) thyrotoxicosis

8. A complication, not typical for operations on the thyroid gland is:

a) bleeding

b) air embolism

in) fat embolism

g) damage to the trachea

d) recurrent nerve damage

9. To identify malignant tumors of the thyroid gland does not apply:

and trepanobiopsy)

b) thick needle biopsy

in) trial excision

g) determination of antibody titer to the thyroid gland

d) fine needle biopsy

10. When toxic thyroid adenoma shows an operation:

a) thyroid resection

b) thyroid lobe resection

in) wedge resection of thyroid gland

**7. Independent work in the practice session.**

1. different levels of situational tasks Solution absorption.

2. Mikrokuracija assessment of patients the results of their examination:

and) collect complaints

b) medical history of disease

in) assessment of the overall condition of the patient

g) definition local signs and symptoms

Dr.) paraclinical evaluation methods and symptoms

e) conclusions on the diagnosis

f) differential diagnosis

w) defining treatment tactics

and) principles of conservative and surgical treatment.

3. report of the patient group.

4. Read and parse the radiographs.

5. Presentation of the themes mikroreferatov.

**8. M place of carrying out of trainings:**

1. the training room.

2. At the bedside.

3. Dressing Room.

4. Operating.

**Literature.**

1. Mikhail Balabolkin Endocrinology (tutorial for subordinatorov and interns) m., 1989.

2. Evtihov r.m., m.e., Putin Shulutko A.m. et al. clinical surgery. Prise Gr. "GEOTAR-media, 2006.

3. Kuzin M.i. surgical diseases. Tutorial m., 2006.

4. Potemkin Vladimir Jerdokrinologija (tutorial), m., 1986.

5. Surgical diseases: training: k. (ed. V. Savelyeva, A.i. Kiriyenko.-2 Ed., Corr.-М.: 2006.

6. Lecture of the Chair.

Annex

Answer test control standards.

|  |  |
| --- | --- |
| 1-in | 6-a, b, g |
| 2-b | 7-g |
| 3-in | 8- |
| 4-in | 9-d |
| 5-g | 10-b |