U2 Respiratory diseases

U3 Respiratory failure

#Causes of acute respiratory failure

 rheumatoid arthritis

systemic lupus erythematosus

+drug poisoning

vertebro - basilar insufficiency

acute coronary syndrome

#Clinical signs of respiratory failure

seizures

hyperthermia

hyperemia of the skin

severe hypotension, tachycardia

+cyanosis of the skin, shortness of breath

#The restrictive type of pulmonary hypoventilation occurs when:

swelling of the larynx.

+pleuritis

bronchiolospasm.

choking.

hypersecretion of the bronchial mucosa

#What of following symptoms is most characteristic of respiratory failure III degree:

+diffuse cyanosis

 tachycardia, tendency to hypotension

deep rare breath

moderate dyspnea during exercise

lack of cough reflex

#Indications for tracheal intubation

asthma attack

dyspnea alone

 chest pain

+ shortness of breath more than 40 per minute, apnea

 dyspnea on exertion

#All of the above applies to main types of hypoxic condition in acute respiratory failure, EXCEPT:

hypoxic hypoxia

tissue hypoxia

hemic hypoxia

circulatory hypoxia

+physiological hypoxia

#The earliest sign of acute respiratory failure

diffuse cyanosis

+dyspnea

cervical vein swelling

tachycardia

choking

#Obstructive respiratory failure develops as a result of

inhibition of the respiratory center

pulmonary edema

+ spasm of smooth muscle of bronchioles

spasm of the smooth muscles of the diaphragm

pneumosclerosis

#What of following does not apply to causes of acute respiratory failure

organophosphate poisoning

obesity 3 degrees

+foreign body of the stomach

botulism

epistatus

#The saturation of arterial blood with oxygen is normally within

+95-97%

94-91%

90-85%

84-80%

less than 80%

#The most simple and affordable method for determining the saturation of arterial blood with oxygen

+pulse oximetry

spirometry

glucometry

peak flowmetry

pneumotachometry

#Clinical signs of respiratory failure I degree are:

marble skin pattern

sharp excitability, anxiety

+moderate dyspnea on exertion

acrocyanosis

unstable hemodynamics

#The differential diagnosis of dyspnea in a 1 year old child includes

cystic fibrosis, pulmonary emphysema

pulmonary eosinophilic infiltrate

bronchial asthma, sarcoidosis, ascariasis

+ cystic fibrosis, congenital malformation

bronchiectatic disease, Goodpasture syndrome

#Failure of external respiration is accompanied by

 an increase in partial pressure of oxygen (pO2) and carbon dioxide (pCO2) in blood

an increase in partial pressure of oxygen pO2 and a decrease in pCO2 in blood

a decrease in partial pressure of oxygen pO2 and pCO2 in blood

+a decrease in the partial pressure of oxygen pO2 and increase in pCO2 in blood

an increase in partial pressure of oxygen pO2 and normal pCO2 in blood

#Centrogenic ventilation failure occurs when

lung pathology;

pathology of the internal respiration system;

+ pathology of the respiratory center in brain;

pathology of respiratory muscles;

pleural pathology.

#In inhibition of respiratory center … occurs.

diffusion form of respiratory failure

+ventilation form of respiratory failure

perfusion form of respiratory failure

obstructive pulmonary ventilation disorder

valve mechanism of bronchial obstruction.

#An obstructive type of hypoventilation develops with:

damage to spinal cord motor neurons.

limiting lung expansion during breathing.

decreased pulmonary surface.

+impaired airway patency.

inhibition of the function of the respiratory center.

#Obstructive respiratory failure may result from:

inhibition of the respiratory center.

pulmonary edema.

+emphysema

spasm of the smooth muscles of the diaphragm.

pneumosclerosis.

#Restrictive respiratory failure develops as a result of:

+diffuse pulmonary fibrosis.

swelling of the airways.

respiratory obstruction.

spasm of the smooth muscles of the bronchi.

airway Compression.

# An uncharacteristic sign of acute respiratory failure 2 degree is

nervous agitation

profuse sweat

spotted skin cyanosis

arterial hypertension

+number of breaths up to 40 in 1 minute

# Paradoxical breathing is seen in:

severe left ventricular failure

+diaphragmatic palsy

metabolic acidosis

COPD

\* Hypercapnia can see in (3):

 +severe asthma

 +hemorrhagic fluid

 +increased mesothelial cells

 increased deaminase

#In type II respiratory failure is associated with:

+Flail chest

pulmonary edema

interstitial lung disease

ARDS

# Example of type-I respiratory failure is:

 cardiogenic shock

 atelectasis

 myasthenia gravis

 +ARDS

# Most common symptom of Interstitial lung disease is:

 hemoptysis

 +dyspnea

 substernal discomfort

 wheezing

# Which parameter is almost same at apex and base of lung:

 pCO2

 + O2 concentration in blood

 ventilation

 perfusion.

\*Which of following is true for cystic fibrosis (3):

 + abnormal sweat gland function

 ultimately lead to bronchogenic carcinoma

 +exocrine pancreatic insufficiency

 +intestinal dysfunction

\*Respiratory acidosis is caused by all (3):

+chronic bronchitis

+COPD

puimonary hypertension

+interstitial lung disease

\* All of the following are sings of Cor pumonale (3)

feeble pulse

+elevated JVP

+hepatomegaly

+peripheral edema

# Diagnostic criteria for acute respiratory distress syndrome is:

PaO2/FiO2 ratio is </= 100

+PaO2/FiO2 ratio is </= 200

PaO2/FiO2 ratio is </= 300

PaO2/FiO2 ratio is </= 400

# Positive End-Expiratory Pressure (PEEP) is useful in:

pneumonia

ARDS

pulmonary edema

+all of the above

\* True regarding type-III respiratory failure are all (3):

+also known as perioperative respiratory failure

there is impaired CNS drive to breathe

+occurs as a result of atelectasis

+can be managed conservatively

#Respiratory failure is the inability of the respiratory system:

provide tissue respiration

oxygen transport

+provide normal blood gas composition

provide external respiration

#Respiratory failure is a pathological syndrome in which:

PaO2 less than 80 mm Hg and / or PaCO2 less than 45 mm Hg

+PaO2 less than 60 mm Hg and / or PaCO2 more than 45 mm Hg

PaO2 less than 60 mm Hg and / or PaCO2 more than 60 mm Hg

PaO2 less than 55 mm Hg and / or PaCO2 more than 50 mm Hg

\*The gas composition of the blood depends on (3):

+barometric pressure

+oxygen fractions in the inhaled air

+Patient age

gender

#Among the etiological factors of respiratory failure, the most common cause is:

+Chronic obstructive pulmonary disease

pulmonary fibrosis

diseases of the chest and respiratory muscles

pneumonia

#Classification of Respiratory failure by pathogenesis distinguishes:

acute and chronic

light, medium, heavy

damage to the central nervous system, damage to the neuromuscular system, damage to the chest, respiratory tract, alveoli

+hypoxemic and hypercapnic

\*A decrease in the partial tension of oxygen in the inhaled air can occur when (3):

+at high altitudes

for decompression sickness

+in case of poisoning with some gases

+near the fire

#Alveolar-capillary block syndrome is:

uneven ventilation-perfusion relations in different parts of the lungs

+violation of gas diffusion through the alveolo-capillary membrane

increase in "dead" space

intrapulmonary shunt

\*Mechanisms for the development of hypercapnia (3):

+decrease in minute ventilation

ventilation-perfusion imbalance

+increase physiological dead space

+carbon dioxide production increase

\*Mechanisms for the development of hypoxemia (2):

+violation of the perfusion of gases through the alveolo-capillary membrane

+ventilation-perfusion imbalance

increase physiological dead space

carbon dioxide production increase

#He first degree of respiratory failure corresponds to:

PaO2 80 mm Hg SaO2 95%

+PaO2 70-79 mm Hg SaO2 90-94%

РaO2 60-79 mm Hg SaO2 90-94%

РaO2 40-59 mm Hg SaO2 75-89%

#The third degree of respiratory failure corresponds to:

PaO2 80 mm Hg SaO2 95%

+PaO2 <40 mm Hg SaO2 <75%

РaO2 60-79 mm Hg SaO2 90-94%

PaO2 <40 mm Hg SaO2 <60%

#The second degree of respiratory failure corresponds to:

PaO2 80 mm Hg SaO2 95%

+PaO2 50 mm Hg SaO2 80%

PaO2 60-79 mm Hg SaO2 90-94%

PaO2 <40 mm Hg SaO2 <60%

\*Reasons for increased CO2 production (2)

+ cramps

+fever

reduced minute ventilation

increase in dead space

#Most commonly affected by hypoxemia

heart

 peripheral nervous system

+central nervous system

hemodynamics

#Clinical signs of hypercapnia:

dipnoea

cramps

fever

+tachycardia

#Harbinger of respiratory arrest:

1. paradoxical breathing

2. respiratory rate greater than 35 per minute

+3. respiratory rate less than 12 per minute

4.paradoxical pulse

#Respiratory Acidosis:

+pH <7.35

pH> 7.45

pH> 7.0

pH <7.45

#Respiratory alkalosis:

pH <7.35

+pH> 7.45

pH> 7.0

pH <7.45

\*Causes of diffuse bilateral dimming of the lungs on the radiograph (3):

+pulmonary hemorrhage

+aspiration

+acute distress syndrome

atelectasis

\*The reasons for the complete dimming of one pulmonary field on the radiograph(3):

+ pneumatox

+lung contusion

acute distress syndrome

+atelectasis