U2 Circulatory system disease module

U3 Symptomatic arterial hypertension

#WHAT IS IDENTIFIED OFTEN IN PATIENTS WITH ESSENTIAL HYPERTENSION AND NEUROGUMORAL DISORDERS:

increased uric acid content

hyperglycemia, hyperinsulinemia

decreased activity of sympathoadrenal system

 decreased activity of renin-aldosterone system

+ increased production of endothelin and decreased production of nitric monoxide.

# WHAT IS DETERMINED OFTEN IN PATIENTS WITH ESSENTIAL HYPERTENSION AND METABOLIC DISORDERS:

+increased content of uric acid, decreased activity of renin-aldosterone system

hyperglycemia, hyperinsulinemia

decreased activity of the sympathoadrenal system

increased production of endothelin and decreased production of nitric monoxide

# WHAT IS DETERMINED OFTEN IN PATIENTS WITH ESSENTIAL HYPERTENSION AND METABOLIC DISORDERS:

decreased level of natriuretic peptides in blood

+decreased activity of kallikreinkinin system

dyslipidemia

increased level of alpha cholesterol

#WHAT IS DETERMINED OFTEN IN PATIENTS WITH ESSENTIAL HYPERTENSION AND METABOLIC DISORDERS:

decreased level of natriuretic peptides in blood

decreased activity of kallikreinkinin system

+dyslipidemia

increased level of alpha cholesterol

#OPTIMAL LEVEL OF ARTERIAL PRESSURE (MMHG) ACCORDING TO CLASSIFICATION OF WORLD HEALTH ORGANIZATION IS:

SBP below 140, diastolic - below 90

SBP below 120, diastolic - below 85

+SBP below 120, diastolic - below 80

SBP 140-150, diastolic - 94-100

SBP 160-180, diastolic - 94-100

#GRADE 1 AH (MMHG) ACCORDING TO CLASSIFICATION OF WORLD HEALTH ORGANIZATION IS:

SBP below 140, diastolic - below 90

SBP below 120, diastolic - below 85

SBP below 120, diastolic - below 80

SBP 140-150, diastolic - 94-100

+SBP 140-159, diastolic - below 90-99

 # GRADE 2 AH (MMHG) ACCORDING TO CLASSIFICATION OF WORLD HEALTH ORGANIZATION IS:

SBP below 140, diastolic - below 90

SBP below 120, diastolic - below 85;

SBP below 120, diastolic - below 80

+SBP 160-179, diastolic - 100-109

SBP 160-180, diastolic - 94-100

#NORMAL LEVEL OF ARTERIAL PRESSURE (MMHG) ACCORDING TO CLASSIFICATION OF WORLD HEALTH ORGANIZATION IS:

SBP below 140, DBP below 90

+SBP below 130, diastolic - below 85

SBP above 200, diastolic - above 110

SBP above 180, DBP above 110

#GRADE 3 AH (MMHG) ACCORDING TO CLASSIFICATION OF WORLD HEALTH ORGANIZATION IS:

SBP below 140, diastolic - below 90

SBP below 130, diastolic - below 85

SBP above 200, diastolic - above 110

+SBP above 180, diastolic - above 110

SBP above 160, diastolic - below 80

#ISOLATED AH ACCORDING TO CLASSIFICATION OF WORLD HEALTH ORGANIZATION IS:

SBP below 140, diastolic - below 90

SBP below 130, diastolic - below 85

SBP above 200, diastolic - above 110

SBP above 180, diastolic - above 110

+SBP above 140, diastolic - below 90

#SIGNS INDICATING HEART DISEASE IN AH:

+diameter of cavity of left atrium - 4.8 cm

thickness of interventricular septum -10 mm

height of R-wave in V1 - 30 mm

ratio of arteries and veins diameter of retina 1: 1

narrowing of lumen of carotid arteries by 30%

#SIGNS INDICATING DAMAGE OF ARTERIES IN AH:

paroxysms of atrial fibrillation;

+narrowing of left carotid artery by 30%

albuminuria 100 mg per day

proteinuria 400 mg per day.

#SIGNS INDICATING KIDNEY DAMAGE IN AH:

dysuric disorders

polydipsia, polyuria

hypokalemia

+albuminuria 100 mg per day

#FACTORS Predisposing to onset of hypertensive disease:

+age

amount of sodium chloride consumed

amount of sodium chloride consumed

psychosocial stress

alcohol abuse

#Potassium-sparing diuretics include:

ethacrylic acid

chlortalidone

furosemide

+4) spironolactone

Triamterenum

#LOOP DIURETICS:

+act in upward section of Henle loop

increase excretion of the body mainly K, Cl

severity of diuretic effect depends on blood aldosterone

inhibit carbonic anhydrase

increase renal blood flow

#FACTORS INCREASING ARTERIAL PRESSURE: A. AGE; B. GENETIC FACTORS; C. OBESITY; D. GROWTH; E. SODIUM CHLORIDE CONSUMPTION; F. MAGNESIUM AND IRON CONSUMPTION; G. PSYCHOSOCIAL OVERLOADS; H. ALCOHOL ABUSE:

true A, C, D, E

+true C, E, F, H

true A, B, D

true A, B, C

#BASIC HEMODYNAMIC FACTORS DETERMINING LEVEL OF ARTERIAL PRESSURE: A. FREQUENCY OF HEART RATE; B. cardiac output; c. VASCULAR RESISTANCE; D. atrial natriuretic peptides; E. CORTICOSTEROIDS; F. ENDOTELIN; g. prostacyclin, BRADIKININ; H. NITRIC OXIDE; I. Catecholamines, angiotensin:

+true A, B, C

) true H, G

true A, B, C, D

true A, B, D

#FACTORS RISING LEVEL OF ARTERIAL PRESSURE:

atrial natriuretic peptides

+endothelin

prostacyclin

bradykinin

nitric oxide

#BASIC HEMODYNAMIC FACTORS DETERMINING DIASTOLIC ARTERIAL PRESSURE LEVEL:

heart rate

cardiac output

+state of vascular tone

circulating blood volume

#FACTORS RISING LEVEL OF ARTERIAL PRESSURE:

+endothelin

prostacyclin

bradykinin

nitric oxide

#FACTORS REDUCING LEVEL OF ARTERIAL PRESSURE:

+atrial natriuretic peptides

corticosteroids

endothelin

catecholamines,

angiotensin

HUMORAL FACTORS DETERMINING TONUS OF VASCULAR WALL:

adenosine triphosphate

endothelin

nitrogen monoxide

+angiotensin

#FACTORS DETERMINING TONUS OF VASCULAR WALL

adenosine triphosphate

adrenaline, norepinephrine

+bradykinin

natriuretic peptides

#MAIN FACTORS WITH NEGATIVE INFLUENCE ON HEART (MYOCARDIAL HYPERTROPHY) IN PATIENTS WITH HYPERTENSION DISEASE:

organ damage is more correlated with SBP

+organ damage is more correlated with DBP.

angiotensin I

level of bradykiniN

#MAIN FACTORS WITH NEGATIVE INFLUENCE ON VESSELS (REMODELING) IN PATIENTS WITH HYPERTENSION DISEASE:

+endothelin

angiotensin I

absence of decrease in BP at night time during daily monitoring

ctivity of sympathoadrenal system

27. VASCULAR COMPLICATIONS, ASSOCIATED WITH AH IN PATIENTS:

ventricular tachycardia

sudden cardiac death

+acute encephalopathy

pulmonary embolism

#VASCULAR COMPLICATIONS IN PATIENTS WITH AH RELATED TO ARTERY ATHEROSCLEROSIS:

acute encephalopathy

hemorrhagic stroke

+ventricular tachycardia, sudden cardiac death

pulmonary edema in patient with left ventricular ejection function of 50%

#VASCULAR COMPLICATIONS, ASSOCIATED WITH AH IN PATIENTS:

atrial fibrillation

myocardial infarction

ischemic stroke

+nephrosclerosis

intermittent claudication

#VASCULAR COMPLICATIONS IN PATIENTS WITH ARTERIAL HYPERTONIA ASSOCIATED WITH ARTERY ATHEROSCLEROSIS: A. Atrial fibrillation; B. Myocardial infarction; C. ischemic stroke; D. nephrosclerosis; E. intermittent claudication:

+true A, B, C, E

true A, E

true C, D

true A, B, C, D, E

#REASONS FOR ISOLATED SYSTOLIC HYPERTENSION AS INDEPENDENT DISEASE:

aortic valve insufficiency

arteriovenous fistula

Paget's disease

systolic hypertension in young

+systolic hypertension in elderly

#REASONS FOR ISOLATED SYSTOLIC HYPERTENSION AS SYMPTOM OF ANOTHER DISEASE:

+aortic valve insufficiency;

aortic valve stenosis

subaortic stenosis

pulmonary artery stenosis

#INDICATIONS FOR HOSPITALIZATION OF PATIENTS WITH AH:

AH detected in patient under 20 years old

+refractory hypertension to combinated therapy

isolated systolic hypertension

masked hypertension

WHAT RISK FACTORS INFLUENCING FORECAST SHOULD BE TAKEN INTO ACCOUNT FOR RISK STRATIFICATION IN PATIENTS WITH AH:

+grade of increase in BP (1-3 grade)

women in menopause

stroke, transient ishemic attack

painless depression of ST segment detected on ECG Holter

# WHAT END-ORGAN DAMAGE INFLUENCING FORECAST SHOULD BE TAKEN INTO ACCOUNT FOR RISK STRATIFICATION IN PATIENTS WITH AH:

grade of increase in BP (1-3 grade)

men - over 55 years old, women - over 65 years old

overweight;

+narrowing of arteries of retina

#WHAT END-ORGAN DAMAGE INFLUENCING FORECAST SHOULD BE TAKEN INTO ACCOUNT FOR RISK STRATIFICATION IN PATIENTS WITH AH:

content of total cholesterol in blood is more than 6.5 mmol

content of total cholesterol in blood is more than 5.2 mmol

+left ventricular hypertrophy;

congestive heart failure

# REDUCING BP LEVEL TO NORMAL LEVEL IN PATIENTS WITH ITS ASYMMETRY ON RIGHT AND LEFT HANDS IS DANGEROUS BECAUSE OF:

development of coronary thrombosis

development of acute aneurysm of thoracic aorta

impaired renal function

+development of ischemic stroke and myocardial infarction

38. ABSOLUTE DIAGNOSTIC CRITERION OF AH AT PHEOCHROMOCYTOMA IS:

+presence of signs of adrenal tumor and overproduction of catecholamines

increased plasma concentration of aldosterone

high level in urine of 5-hydroxyindoleacetic acid

low levels of catecholamines in blood flowing through renal veins, and its concentration in urine

#HORMONE WITH HIGH PRESSIVE ACTIVITY IS:

calcitonin

+adrenaline

insulin

aldosterone

prolactin

#ENDOGENOUS REASON FOR DEVELOPMENT OF HYPERTENSION CRISIS IS:

acute cerebral ischemia with sharp decrease in BP

sudden withdrawal of antihypertensive drugs

resuscitation during and after operations

excess salt intake

+disorders of urodynamics in prostate adenoma

#EXOGENOUS FACTOR CONTRIBUTING TO DEVELOPMENT OF HYPERTENSIVE CRISIS: IS

exacerbation of coronary heart disease

sharp violation of renal hemodynamics

+psycho-emotional stress

sickle cell crisis

sharp violation of renal hemodynamics

 #HYPERTONIC CRISES COMPLICATION IS:

 chronic coronary syndrome

 acute right ventricular failure

 +stroke

 thromboembolic syndrome

 aortic aneurysm

#HOSPITALIZATION IS required AT:

+newly detected uncomplicated hypertonic crisis

increased SBP> 180 mmHg

nausea, repeated vomiting

dizziness

#THE MOST QUICK REDUCTION OF BP IS NECESSARY TO CARRY OUT IN PATIENT WITH HYPETONIC CRISIS, COMPLICATED BY:

hemorrhagic stroke

+dissecting aortic aneurysm

myocardial infarction

atrial tachycardia

ischemic stroke

#OPTIMAL TIME TO ACHIEVE TARGET BP IN HYPERTENSIVE CRISIS, COMPLICATED BY ACUTE LEFT VENTRICULAR INSUFFICIENCY IS:

+no more than 20 minutes

within 2 hours

within 1 hour

do not reduce BP <160 | 90

within 12-24 hours

#REFRACTORy (RESISTANT) AH IS CONDITION WHEN TREATMENT USING THREE DRUGS

including peripheral α-blocker, does not allow to reduce SBP and DBP less than 140 and 90 mmHg respectively

+including diuretic, does not allow to reduce SBP and DBP less than 140 and 90 mmHg respectively

including central α-adrenergic agonist, does not allow to reduce SBP and DBP less than 140 and 90 mmHg respectively

including diuretic, does not allow to reduce SBP and DBP less than 130 and 80 mmHg respectively

#ADDITIONAL RECOMMENDATION FOR PATIENTS WITH REFRACTORy AH IS:

direct renin inhibitor

surgical treatment

imidazoline receptor blocker

peripheral α-blocker

+spironolactone

#SURGICAL TREATMENT OF AH APPLICABLE IN RUSSIA IS:

stimulation of carotid sinus baroreceptors

formation of ileofemoral arteriovenous fistula

+radiofrequency renal artery denervation

denervation of carotid sinus

#DRUG OF CHOICE IN ACUTE HYPERTENSIVE ENCEPHALOPATHY IS:

diuretic (furosemide)

alpha-blocker (urapidil).

+sodium nitroprusside

nitroglycerin

antipsychotics (droperidol)

#DRUG OF CHOICE IN ACUTE LEFT VENTRICULAR INSUFFICIENCY ON THE BACKGROUND OF HYPERTENSIVE CRISIS IS:

+nitroglycerin

β-blocker (metoprolol, esmolol)

alpha-blocker (urapidil)

ACE inhibitors (enalaprilat)

antipsychotics (droperidol)

#WHAT IT IS PREFERRED FOR AORTIC DISSECTION AS COMPLICATION OF HYPERTENSIVE CRISIS:

nitroglycerin

+β-blockers

sodium nitroprusside

alpha blockers

diuretics

#WHAT IT IS PREFERRED FOR ACUTE CORONARY SYNDROM AS COMPLICATION OF HYPERTENSIVE CRISIS:

sodium nitroprusside

alpha-blockers

diuretics

+β-blockers (metoprolol, esmolol)

#In uncomplicated hypertensive crises speed reduction of BP:

should not exceed 25% for first 6 hours

should achieve target BP within 2 hours

should achieve target BP within 20-30 minutes

+should not exceed 25% in first 2 hours

#GESTATIONAL AH IS:

a condition caused by pregnancy and manifested by increase level of BP ≥120/80 mmHg after 20th week of pregnancy

increase BP ≥140/90 mmHg determined before pregnancy

+condition caused by pregnancy and manifested by increase BP level ≥140/90 mmHg after 20th week of pregnancy, disappearing within 6-12 weeks after childbirth

increase BP ≥140/90 mmHg determined before pregnancy and does not disappear within 6-12 weeks after childbirth

#PREECLAPSY IS CHARACTERIZED BY DAILY PROTEINURIA:

30 mg/l

+300 mg/l

300 mg/dl

200 mg/dl

CRITERIA FOR SEVERE PRE-CLAMPSIA ARE:

 BP≥170/110 mmHg

proteinuria 5.0 g/l, impaired renal function

+BP ≥160/110 mmHg, proteinuria 5.0 g/l, impaired function of kidney and liver

thrombocytopenia, hemolysis

#DRUG OF CHOICE FOR AH IN PREGNANCY IS:

+methyldopa

direct renin inhibitors

angiotensin converting enzyme inhibitors

angiotensin receptor blocker

non-dihydropyridine calcium antagonists

#WHAT TACTICK IS REQUIRED FOR PATIENTS WITH ACUTE ISCHEMIC STROKE AND BP > 220/120 MMHG WITHOUT THROMBOLITIC THERAPY

+it is recommended to reduce BP by 15% during first 24 hours

after onset of stroke

reducing BP is not recommended

it is recommended to reduce BP by 25% during first 24 hours

after onset of stroke

it is recommended to reduce BP to target level within first 24 hours after onset of stroke

immediate AHT is recommended

#FOR PATIENTS WITH AH AND TRANSITOR-ISCHEMIC ATTACK

it is recommended to reduce BP by 15% during first 24 hours

after onset of stroke

reducing BP is not recommended

it is recommended to reduce BP by 25% during first 24 hours

after onset of stroke

it is recommended to reduce BP to target level within first 24 hours after onset of stroke

+immediate AHT is recommended

#WHAT TACTICK IS REQUIRED FOR PATIENTS WITH ACUTE ISCHEMIC STROKE AND AH USING THROMBOLITIC THERAPY

it is recommended to reduce BP by 15% during first 24 hours

after thrombolysis

it is recommended to reduce BP by 25% during first 24 hours

after thrombolysis

reducing BP is not recommended

+it is recommended to reduce and maintain BP less than 180/105 mmhHg during first 24 hours after thrombolysis

immediate AHT is recommended

#IN PATIENTS WITH ACUTE INTRACEREBRAL HAEMORRHAGE WITH SBP <220 MMHG:

it is recommended to reduce BP by 15% during first 24 hours

+immediate decrease BP is not recommended

it is recommended to reduce BP by 25% during first 24 hours

it is recommended to reduce and maintain BP less than 180/105 mmHg during the first 24 hours

immediate AHT is recommended

#IN PATIENTS WITH ACUTE INTRACEREBRAL HAEMORRHAGE WITH SBP <220 MMHG:

it is recommended to reduce BP by 15% during the first 24 hours

+it is recommended to lower BP to less than 180 mmHg in 4.5 hours

it is recommended to reduce BP by 25% during the first 24 hours

immediate decrease BP is not recommended

immediate antihypertensive therapy is recommended

#IN ALL PATIENTS WITH AH FOR STROKE PREVENTION … ARE RECOMMENDED:

+1) blocker of RAS, CCBs or thiazide/thiazide-like diuretic

blocker of renin-angiotensin-system, ACE inhibitor or thiazide/thiazide-like diuretic

β-blocker, calcium channel blockers or thiazide/thiazide-like diuretic

an imidazoline receptor blocker, CCBs or thiazide/thiazide-like diuretic

imidazoline receptor blocker, ACE inhibitor or thiazide/thiazide-like diuretic

#IF THERE ARE SYMPTOMS OF INCREASED SYMPATHOADRENAL ACTIVITY AND HYPERTENSIVE CRISIS, THE DRUG OF CHOICE IS:

thiazide/thiazide-like diuretic

calcium channel blocker

+imidazoline receptor blocker

ACE inhibitors

blocker of renin-angiotensin-system

#IN ABSENCE OF INCREASED SYMPATHOADRENAL ACTIVITY IN HYPERTENSIVE CRISIS, THE DRUG OF CHOICE IS:

thiazide/thiazide-like diuretic

calcium channel blocker

imidazoline receptor blocker

+ACE inhibitors

blocker of renin-angiotensin-system

#IN PATIENTS WITH AH AND PERIPHERAL ATHEROSCLEROSIS, IT IS RECOMMENDED

 combination of RAS blocker with calcium channel blocker

+combination of RAS blocker with ACE inhibitor

β-blocker

imidazoline receptor blocker

clonidine