Course 7.
Signs and symptoms in family physician practice

Cough

Frequency: it is the fifth symptom that determines the patient to request a medical consultation

singular symptom
or associated with
- expectoration
- hemoptysis
- chest pain
- dyspnoea
- fever

dry cough
- spastic irritant
- pharyngitis
- laryngitis
- acute bronchitis at onset
- pleurisy
- bronchial neoplasm

productive cough
- acute and chronic bronchitis
- pneumonia
- COPD
- bronchial neoplasm

acute cough
chronic cough - lasting over three weeks

upper respiratory tract infections
- acute cough

traheobronsitis / pneumonia
- acute dry cough, then productive,
  - mucopurulent sputum, chest pain, fever

pulmonary tuberculosis
- productive cough chronic
  - fatigue, weight loss, fever, night sweats

confirmation
sputum exam
radiology
IDR test

asthma
chronic dry / productive cough
wheezing, dyspnoea
confirmation
spirometry
pulmonary obstructive syndrome

chronic bronchitis
chronic productive cough
mucopurulent sputum
frequent exacerbations
moderate effort dyspnea

COPD
chronic productive cough in smokers
dyspnoea
bronchial rays
prolonged expiration

bronchial neoplasm
chronic dry / productive cough
chest pain
dyspnoea,
anorexia,
weight loss
smoker history
confirmation
X-ray, CT,
cytology, histological examination

Extrapulmonary causes

posterior rhinorrhea syndrome
X-ray of the sinuses
acute or chronic sinusitis
psychogenic cough
rare
exclusion diagnosis

gastroesophageal reflux disease
    regurgitation
    heartburn
    cough as an isolated symptom
    confirmation
    endoscopy
Antihypertensive treatment with ECA inhibitors
    chronic dry cough
    nocturne
Other causes of acute cough
    pulmonary embolism
    heart failure
    aspiration

Anamnesis

- upper tract infection = posterior rhinorrhea syndrome
- exposure to dust or allergens = asthma
- chronic cough with purulent expectoration in smokers = COPD, pulmonary neoplasm
- pyrosis, dysphonia, chronic night cough = BRGE

Physical examination

- rhinopharyngeal examination
    - rhinitis, sinusitis, posterior rhinorrhea
- wheezing, wheezing
    - asthma

Paraclinically

pulmonary radiography
    parenchymal formations

lung function tests
    obstructive syndrome

sputum exam
    purulent sputum
    chronic bronchitis
    pneumonia
    pulmonary abscess

Complications
- pain in the chest and abdominal walls
- urinary incontinence
- syncope by reducing venous return
- costal fractures = osteoporosis, metastasis, multiple myeloma

Treatment

elimination of exogenous irritants
- cigarette smoke - including passive exposure
- ionizing radiation
- industrial carcinogens
- ACE inhibitors

elimination of endogenous triggers
- posterior rhinorrhea
- gastroesophageal reflux

Specific treatment
- upper respiratory tract infections
- bronchial asthma = bronchodilators
- acute and chronic sinusitis = broad-spectrum, anti-inflammatory antibiotics

Non-specific treatment
- cough
- Codeine 10-20 mg per bone every 4-6 hours
- expectorant

Prophylaxis
- quitting smoking
- avoid exposure to irritating factors
- influenza vaccination
- pneumococcal vaccination

Chest pain

the most common causes of chest pain
life-threatening causes
- acute coronary syndrome
- aortic dissection
- pulmonary thrombembolism
- pneumothorax
- cardiac tamponade

other cardiovascular causes
- coronary anomalies
- tako tsubo syndrome
- pericarditis
- myocarditis
- hypertrophic cardiomyopathy
- mitral valve prolapse
- aortic aneurysm

other pulmonary causes
- pleurisy
- pneumonia
- neoplasm
- pulmonary hypertension

musculoskeletal causes
- shingles area
- disorders of the cervical spine
- scapula-humeral periarthritis
- rib fracture
- Tietze syndrome

gastrointestinal causes
- peptic ulcer
- cholecystitis
- pancreatitis
- esophageal spasm
- esophageal cancer
- Mallory-Weiss syndrome

Classification of chest pain according to intensity

intense chest pain
- myocardial infarction
- pericarditis
- pleurisy
- pneumothorax
- dissecting aneurysm of the aorta

lower chest pain
- stable angina pectoris
- chest pain
- chest pain with a psycho-neurotic component

Anamnesis

- the presence of pain at the time of examination
- location
- irradiance
- types of pain
- debut
- risk factors for coronary heart disease
- nonspecific symptoms
- factors that accentuate or relieve chest pain
- pain severity 0-10

typical angina - 3 characteristics
retrosternal pain, constricting, with irradiation in the arms, neck or jaw
appears in effort
give up at rest or NTG

atypical angina - two of three features
non-angina pain - one or none of the three characteristics

Clinical exam
emphasis on the cardiovascular and respiratory system

ECG
compulsory
wave inversion T = ischemia
ST elevation in two adjacent derivatives and ST sub mirror elevation = STEMI
ST elevation in aVR = left or coronary trunk injury
ST elevation with PR subdivision = pericarditis
sub-leveling ST = NSTEMI
BRS newly emerged = acute coronary event
S1Q3T3 = pulmonary thrombembolism

radiological examination

- mediastinum enlargement = aortic dissection
- enlargement of the cardiac shadow = pericardial collection
- Hamptom sign = pulmonary thrombembolism
- pulmonary condensation = acute bacterial pneumonia
- apical air collection = pneumothorax

Management

- coronary syndrome
- emergency - ambulance - cardiology clinic

Management of patients with stable angina
- advice for the treatment of stable angina
- counseling for prolonged angina that does not give up on NTG
- treatment: aspirin ?, statin, beta blocker (or calcium channel blocker)
- positive stress test = angiography

Prophylaxis
- healthy lifestyle
- fruits and vegetables
- vegetable fibers
- physical exercises
- normal weight
- control of high blood pressure
- control of hypercholesterolemia
- diabetes control
- stress management

Palpitations

cardiac arrhythmic causes
- sinus tachycardia
- atrial fibrillation
- atrial flutter
- atrial extrasystoles
- ventricular extrasystoles
- ventricular tachycardia

non-arhythmic cardiac causes
- valvular
- mitral valve prolapse

drug / chemical causes
- coffee
- alcohol
- smoking
- beta-agonists

extracardiac causes
- anemia
- hyperthyroidism
- pheochromocytoma
- increased normal cardiac activity

physical effort
febrile illness
emotional states

the most common causes: atrial and ventricular extrasystoles

Fast rhythm arrhythmias
supraventricular paroxysmal tachycardia
ventricular tachycardia
ventricular fibrillation

Slow rhythm arrhythmias
sinus bradycardia
atrioventricular blocks
sinus node disease

Predictors of heart palpitations
male
history of heart disease
lasting over five minutes
irregularity of palpitations

Anamnesis
consumption of coffee, alcohol, drugs
associated symptoms:
- dyspnoea, loss of consciousness, fatigue, headache = ischemic heart disease
- chronic fatigue, exertional dyspnea = heart failure, anemia, pulmonary thrombembolism

Physical examination
- listening to the heart at the same time as pulsing the radial artery
- increased thyroid volume, exophthalmia = hyperthyroidism
- palpitations in flares + high blood pressure = pheochromocytoma (vanilmandelic acid, metanephrine)

Paraclinically

Resting ECG
Holter recording, 24 hours
ECG recording of cardiac events (three days - one week)
implantable recorder, 6 months
echocardiography

Biochemistry
- hemolymphogram: anemia
- thyroid hormones: hyperthyroidism
- vanilmandelic acid, urinary metanephrine: pheochromocytoma

Reference to cardiologist
hypertrophic cardiomyopathy
left atrial dilation
severe ventricular dysfunction

The stress test
for arrhythmias that appear in the effort

Magnetic resonance
right ventricular arrhythmogenic dysplasia (syncope in background)

Electrophysiology study
stimulation of endocardial areas
allows ablation

Treatment
anti-arrhythmic treatment
treatment of the underlying disease
discontinuation of exciting foods or drugs

supraventricular tachycardia / atrial fibrillation
rhythm control
frequency control (60-80 bpm)
ablation therapy

ventricular tachycardia
implantable defibrillator
ablation

Dyspnea

tachypnea
16-18 / min
small amplitude

hyperpnoea
increasing the amplitude of the respiratory movements

bradypnea
below 10 / min

dyspnoea + prolonged expiration + wheezing = asthma, pulmonary emphysema
dyspnea = prolonged inspiration = upper airway obstructive disorders

Irregular breathing:
Cheyne Stokes breathing
- polyneus, bradypnea, apnea
- cerebral hemorrhage
- severe heart failure
- morphine poisoning
- meningitis

Kussmaul breath
- deep breath - apnea - abrupt expiration - apnea
- diabetic acidosis, uremia

Classification according to severity
- dyspnea at small efforts - grade I
- moderate efforts, regular activities - grade II
- small efforts, minimal household activities - grade III
- resting dyspnea - grade IV

orthopnoea
in clinostatism

Paroxysmal dyspnoea at night

Acute dyspnea
- bronchial asthma
- pneumonia
- acute pulmonary edema
- pneumothorax
- pulmonary embolism
- path of adult respiratory distress
- myocardial infarction
- panic attack
- damage to the phrenic nerve

Chronic dyspnea
- permanent dyspnea
- COPD

interstitial lung disease
pulmonary vascular disease
asthma with persistent obstruction

Episodic dyspnea
congestive heart failure
bronchial asthma
recurrent pulmonary embolism

Anamnesis
sensation of suffocation or thirst for air
heart failure
sensation of chest constriction
asthma
breathlessness
COPD
interstitial pneumopathy
neuromuscular diseases
dyspnea, coughing with exasperation
COPD
airway obstruction
wheezing
bronchial asthma
heart failure
intermittent dyspnea
gastroesophageal reflux
aspiration
recurrent pulmonary thrombembolism
dyspnea that is improving over time
deconditioning

Physical examination
decreased pulmonary sounds
pleural friction
pleural effusion
bronchial rales
CHF
wheezing
asthma
COPD
CHF
jugular distension, edema
CHF

tachycardia
- CHF
- anemia

hepatomegaly
- ascites
- hepatosugular reflux
- right HF
- pulmonary hypertension

digital clubbing
- lung cancer
- bronchiectasis
- pulmonary fibrosis

Investigations:
CBC
glucose
creatinine
electrolits
ECG
echocardiography
chest x-ray
functional respiratory exploration
pulse oximetry

BNP and NT-proBNP
cardiac cause vs. pulmonary cause

D- dimers
thromboembolism

Intestinal transit disorders

Diarrhea

increasing the frequency of stool
decrease the consistency of stool
liquid chairs

acute diarrhea
7-10 days

chronic diarrhea
over 3 weeks

Acute diarrhea - causes
infectious agents: E. enterotoxic or enterohemorrhagic coli, Staphylococcus aureus, Salmonella, Shigella, Camylobacter jejuni, Yersinia, Clostridium perfringens, rotaviruses, parvoviruses, Entamoeba, Giardia lamblia
bacterial toxins
food poisoning
drugs

Anamnesis
duration, frequency of stool
the presence of mucus or blood in the stool
presence of symptoms in other people
travel abroad

Clinical exam
dehydration - children, the elderly
abdominal sensitivity

Chronic diarrhea

malabsorption syndrome
- celiac disease
- Whipple disease
- mesenteric ischemia
- short bowel syndrome

maldigestion syndrome
- improper bile acid
- improper bile secretions

inflammatory diarrhea
- diverticulitis
- infectious diseases
- inflammatory bowel disease - Crohn's disease, ulcerative colitis
- ischemic colitis
- neoplasia

watery diarrhea
- carbohydrate malabsorption syndrome
- laxatives
- secretory diarrhea
- bacterial toxins
- diabetes
- hyperthyroidism
- drugs

the frequency does not correlate with the severity of the condition

signs of dehydration
- dry mouth
- intense thirst
- decreased urine volume
- fatigue

blood in the chair
- hemorrhoids
- invasive germ infections
- neoplasia

Physical examination

hyperpigmented urticaria = mastocytosis
Pap smear + peripheral neuropathy + orthostatic hypotension = amyloidosis
tremor + palpitations + tachycardia = hyperthyroidism

Laboratory investigations

hemolithogram, blood glucose, creatinine, ESR, C-reactive protein, electrolytes, bleeding time, electrophoresis
coproculture
coproparasitological examination
microscopic examination - inflammatory versus non-inflammatory diarrhea
bacterial cultures
sigmoidoscopy (proctite)
abdominal x-ray (megacolon)
colonoscopy (inflammatory disease, neoplasia)

Treatment
symptomatic (anti-diarrheal agents)
etiological when possible

Constipation

Risk factors
- old age
- female sex
- reduced education
- sedentariness

low socio-economic status
non-Caucasian ethnicity
certain medicines

Causes
low fiber diet
reduced fluid intake
immobilization

anal fissures
prolapse anal
hemorrhoid thrombosis

diabetes
hypothyroidism
Parkinson's disease

neoplasia
diverticulosis

diuretics
calcium channel blockers
anticholinergics
psychotropic agents

Anamnesis
recent change in intestinal transit - evaluation for neoplasia
weight loss
rectal bleeding
change the seat size
severe abdominal pain
family history of colon cancer
constipation with long history - functional disorders

Physical examination
elements of hypothyroidism, Parkinson's disease, depression
abdominal sensitivity
abdominal distension
solvable glue
inflammatory mass
examination of the perianal area
anal strictures
obstructive rectal formations

Laboratory tests
- CBC
- electrolytes
- TSH

occult bleeding test
colonoscopy
sigmoidoscopy

Treatment
- change of lifestyle
- education of daily defecation
- diet modification
- fiber supplementation - not sufficient in patients with obstructive or megacolon lesions
- laxatives - should be avoided for a long time

Headaches

intension
headquarters
pain characteristics
time
presence of associated symptoms
- nausea
- vomiting
- photophobia
- phonophobia

Primary headache
- migraine
- tension type headache
- trigeminal-vegetative headache

Secondary headache
- cranial / cervical trauma
- cerebral / cervical vascular pathology
- intracranial vascular disorders
- medicines / withdrawal
- infections
- homeostasis disorders: hypoxia, hypercapnia, high blood pressure, preeclampsia, eclampsia, hypothyroidism

skull pathology: bones of the skull, cervical disorders, ENT disorders, diseases of the teeth, diseases of the mandibular joint
mental disorders
neuralgia: trigeminal, glossopharyngeal, facial, occipital, optic nerve

Anamnesis
Onset
migraine stars in childhood, adolescence or young adulthood
the recent onset or modification of features requires further investigation
sudden onset = suspicion of cerebral vascular pathology
awakening cefaleea
excessive medication
sleep apnea syndrome

Physical examination
general
examination of the respiratory, cardiac, digestive system
neurological examination

Further investigations
cranial CT / MRI
electroencephalography
lumbar puncture

Blood Tests
CBC
ESR
C-reactive protein
metanephrines, urinary catecholamines
pulse oximetry
polysomnography

fundoscopy: hypertension, intracranial tumor formation
tonometry: glaucoma

Treatment
avoidance of irritating factors
rest in a quiet environment
dark room
antiemetic
analgesic
sumatriptan 100 mg