

Differential diagnosis of dyspnea/PGS (VPL)

Template:PGS

Shortness of definition

Dyspnea is a subjective feeling of the need for increased respiratory effort. It is one of the main symptoms in pneumology.

Degrees of shortness of breath - classification according to WHO

1st degree - shortness of breath when walking quickly on the level, walking uphill, up stairs.

2nd degree - gets short of breath when walking normally on level ground with peers.

3rd degree - must stop and breathe while walking on the level while walking at his own pace.

4th degree - short of breath at rest.

Differential diagnosis

Intrathoracic causes:

- **cardiac etiology** (most often);
 - detailed diff. dg. and the diagnostic procedure of cardiac-related shortness of breath;
 - treatment of acute pulmonary edema;
- **chest**;
 - obesity;
 - scoliosis;
 - accident;
 - rib fracture;
- **bronchial etiology**;
 - asthma bronchiale;
 - COPD;
 - foreign body aspiration (more often in the upper respiratory tract);
 - bronchogenic carcinoma;
- **pulmonary parenchyma**;
 - hypoxemia when the area where gases diffuse is reduced, due to the increase in dead space;
 - emphysema;
 - atelectasis;
 - partial lung resection;
 - pneumonia;
 - extension of diffusion at;
 - pulmonary fibrosis;
 - Wegener's granulomatosis;
 - silicosis;
- **pleura**;
 - pneumothorax;
 - hydrothorax;
 - hemothorax;
 - pleural tumor;
 - mesothelioma;
- **pulmonary vessels**;
 - pulmonary embolism;
 - pulmonary infarction;
- **neck disease - stenotic**;
 - swelling of the vocal cords;
 - narrowing of the trachea (due to oppression – goiter...).

Extrathoracic causes:

- **oxygen transport disorders**;
 - chronic anemia – at Hb 50–80 g/l;
 - CO poisoning, HCN poisoning;
- **hyperventilation syndrome** - psychogenic tachypnea causes respiratory alkalosis and tetany;
- **metabolic acidosis**;
 - compensatory hyperventilation (e.g. in diabetic coma...);
 - uremia (deepened intensive breathing without pauses, Kussmaul breathing);
 - shock;
- **central nervous system**;

- encephalitis;
- brain tumor;
- CNS ischemic damage;
- overdose of barbiturates (Cheyne-Stokes respiration);
- **neuromuscular etiology**;
 - myasthenia gravis;
 - Guillain-Barré syndrome;
 - poliomyelitis;
 - amyotrophic lateral sclerosis;
 - paresis nervus phrenicus;
 - poisons – strychnine, curare, anticholinesterase toxins;
 - tetanus;
 - botulism;
- **inhalation damage**;
 - poisoning by smoke from a fire or during welding;
 - Th.: inhalation of a corticoid (*beclometasone*, *budesonide*, *fluticasone*, *flunisolide*) – 500–1000 µg repeatedly after 10 minutes, until the difficulties subside (it is best to apply with a "walker" – fewer errors when applying by the patient);
 - send to hospital immediately.

Diagnostics (briefly)

- Medical history – lung or heart disease, attacks of shortness of breath (asthma bronchiale...), difficulties at night or during the day, seasonal occurrence of difficulties (allergic asthma...);
- physical examination of the lungs;
- examination of the cardiovascular system;
- ECG examination (suspected arrhythmias, MI, pericarditis, pulmonary embolism);
- laboratory examination – KO (leukocytosis, anemia, in chronic hypoxia relative polyglobulia), glycemia (diabetic coma);
- pulmonary function - distinguishing restriction and obstruction + control of the development of the disease.

Links

References

- GESENHUES, S – ZIESCHÉ, R. *Vademecum of the physician*. 1. Czech edition. Prague : Galen, 2006. ISBN 80-7262-444-X.