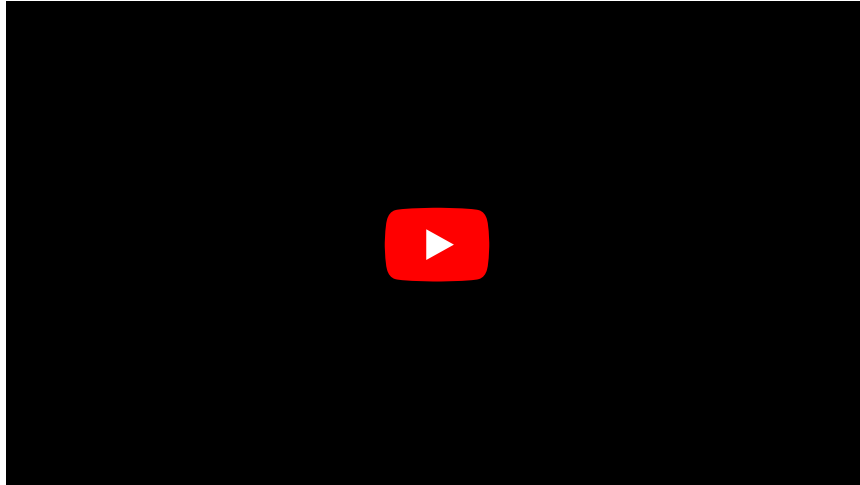


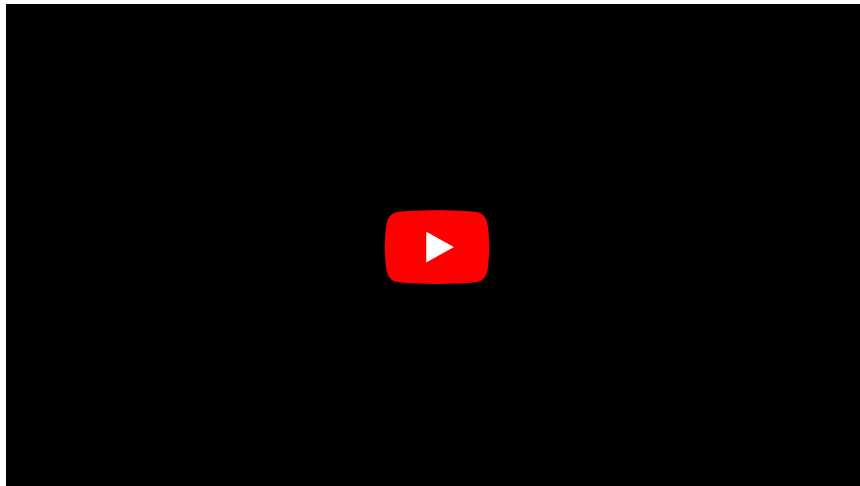
Chronic bronchitis

Chronic bronchitis is defined as **a chronic productive cough lasting at least three months in two consecutive years**, and at the same time, other possible causes of cough - pulmonary (bronchiectasis) and non-pulmonary (heart failure) are excluded. The disease is further characterized by an obstructive ventilation disorder.

Chronic bronchitis:



Chronic bronchitis 2:



Chronic bronchitis can be considered a component of chronic obstructive pulmonary disease (the other component being emphysema).

Etiology

▪ Endogenous causes

1. age (incidence increases with age) and male gender (men are affected twice as often as women),
2. individual predisposition – atopy, immune disorders,
3. sinusitis (sinobronchial syndrome),

▪ exogenous causes

1. **smoking** – represents probably the most significant risk factor,
2. **repeated respiratory infections** – mainly haemophilic and pneumococcal,
3. work and environmental pollution.

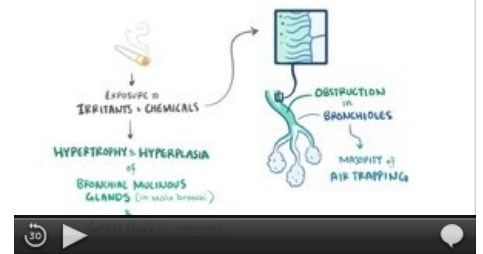
Pathology

Inflammatory infiltration of the wall of the bronchi, at the same time there are increased and hypertrophic mucus glands in the mucosa (overproduction of mucus). These changes lead to **a narrowing of the lumen of the bronchi** and thus to an obstructive air flow disorder.

Manifestations of the disease

Spirometric examination – obstructive pulmonary ventilation disorder

- Cough – mostly productive,
- **mucus hypersecretion** ,
- shortness of breath
- hypoxemia to cyanosis – a very advanced symptom,
- pulmonary hypertension – a very advanced symptom, essentially the result of a long-standing lung disease.



Definition, pathogenesis, symptoms, complications, treatment

Disease types

1. **Simple** chronic bronchitis
2. **Purulent** chronic bronchitis
3. **Obstructive** chronic bronchitis


Investigation

- **Medical history** (smoker, work environment, recurrent DCD infection),
- **physical examination** - may be completely without findings,
- **X-ray of the lungs** - to rule out infection, bronchogenic carcinoma,
- spirometric examination - reveals an obstructive lung ventilation disorder,
- bronchoscopy - in cases of uncertainty, suspicion of bronchogenic carcinoma .

Therapy

The therapy of chronic bronchitis is similar to the therapy of COPD, it involves the administration of inhaled forms of drugs, often in combination.

- **Inhaled corticosteroids** (ICS),
- **inhalation bronchodilators** ,
 - β 2 agonist (THIRD, SEVEN),
 - anticholinergic (SAME, OLD).

 For more information see *Chronic obstructive pulmonary disease (COPD)*.

Quitting smoking is an integral part of the therapy .

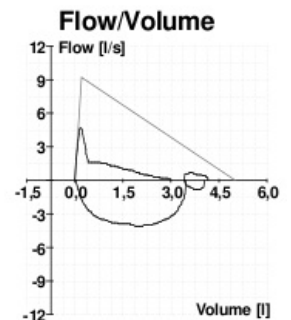
Links

Related Articles

- COPD

References

- KLENER, Pavel, et al. *Vnitřní lékařství*. 3. edition. Praha : Galén, 2006. 285 - 286 pp. ISBN 80-7262-430-X.



Spirometric examination – obstructive pulmonary ventilation disorder