

Projekt: Digitální učební materiály ve škole, registrační číslo projektu CZ.1.07/1.5.00/34.0527

Příjemce: Střední zdravotnická škola a Vyšší odborná škola zdravotnická, Husova 3, 371 60 České Budějovice

Název materiálu: The Diseases of the Respiratory System

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Popis způsobu použití materiálu ve výuce:

Výuková elektronická prezentace, která je určena pro seznámení žáků se základními pojmy a popisem základních onemocnění dýchacího systému v tematické oblasti lidské tělo. Materiál může sloužit jako názorná pomůcka doplňující výklad učitele, ale také je vhodná pro domácí přípravu žáků (např. zpřístupněním formou e-learningu). Materiál obsahuje zpětnou vazbu ověřující pochopení látky v podobě závěrečného snímku s otázkami k tématu.

Tento výukový materiál je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Human body

The Diseases of the Respiratory System

Respiratory System Diseases

- We suffer from various respiratory system diseases. Some of them are mild, common respiratory infections.
- However, some of the diseases might be serious or even fatal.

Respiratory System Diseases

- The presence of air in the thoracic cavity is called pneumothorax.
- The presence of clear fluid is called hydrothorax.
- The presence of blood is called haemothorax.

Respiratory System Diseases

- Other respiratory system disorders include:
- Bronchitis
- Asthma
- Pneumonia
- Pulmonary embolism
- Tuberculosis
- Lung cancer, etc.

Acute Bronchitis

- Acute bronchitis is an inflammation of the trachea and bronchial tubes and frequently follows an upper respiratory tract infection or influenza.
- Factors that contribute to the development of the infection include exposure to a dusty, damp, or foggy environment, smoking, etc.

Acute Bronchitis

- The symptoms include a persistent dry cough that may last several weeks.
- Diagnosis of the disease is made from the symptoms and the chest X-ray examination.
- The treatment includes antibiotics, humidifying the air at night, cough suppressant medications, and increased fluid intake.

Chronic Bronchitis

- Chronic bronchitis results from frequent attacks of acute bronchitis or long lasting exposure to chemical irritation from cigarettes, smoke, and dust.
- There is no cure, although early treatment prevents progression and lung damage.

Asthma

- Asthma is a chronic disorder manifested by attacks of dyspnoea in which air in the alveoli is trapped (cannot be exhaled) and the entrance of fresh air is prevented.
- The main cause of asthma is from an allergy, such as hay fever, or from hypersensitivity to certain drugs, food, or substances inhaled.
- It usually begins in childhood or middle-age, but may start at any age. The second leading cause of asthma is emotional stress.

Pneumonia

- Pneumonia is an acute inflammation of the lungs usually due to bacteria like streptococcus, pneumococcus, or staphylococcus pneumoniae.
- Bacterial disease has a sudden onset of symptoms: fever, chills, chest pain, increased pulse and respiration, and painful coughing.

Pneumonia

- The therapy includes antibiotics (e.g. penicillin, tetracycline, or erythromycin), and analgetics to relieve chest pain (e.g. codeine is often prescribed).
- If the patient is dyspnoeic, the patient should be put on an oxygen supply and hospitalized.

Pulmonary Embolism

- The main cause of pulmonary embolism is a deep vein thrombosis. It is very dangerous and may cause sudden death.
- The symptoms include chest pain and breathing difficulty.
- The patient might be cyanosed, pale, and sweaty, with a rapid pulse and low blood pressure.

Tuberculosis

- Tuberculosis is an infectious disease caused by mycobacteria and can invade almost any of the body's tissues: bones, joints, kidneys, lungs, spine (mícha), etc.
- Pulmonary tuberculosis is the most common form.

Tuberculosis

- Until recently it was one of the world's most dangerous diseases.
- Mycobacteria is difficult to destroy and can live in dust for many years.
- Symptoms develop gradually and the disease requires a long antibiotic treatment.

Lung Cancer

- Lung cancer is more common in males than females.
- Cigarette smoking is considered to be an important causative factor, as well as atmospheric pollution and exposure to dust and chemical gases.

Lung Cancer

- Treatment may be surgical removal of the lobe or the lung (pneumonectomy), radiotherapy, or cytotoxic drugs.
- Prognosis depends on the location of the tumour, on the amount of metastases, and early recognition.

Questions:

- What are the main diseases of the respiratory system?
- What are the symptoms and treatment of bronchitis?
- What are the symptoms and treatment of pneumonia?

Questions:

- What are the symptoms and treatment tuberculosis?
- What is the treatment of lung cancer?
- What do you do if you have a cold?

Seznam použité literatury a pramenů:

1. *Atlas of Anatomy*. 4.vyd. Surrey: TAJ BOOKS LTD, 2004. ISBN 1-902328-40-X, s. 160-169.
2. TOPILOVÁ, Věra. *Medical English. Angličtina pro zdravotníky*. 1. vyd. Havlíčkův Brod: Nakladatelství Tobiáš, 1993. ISBN 80-85808-80-0, s. 77-84.