

Independent work of a student

Theme: «Bronchitis»

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Plan

What is the bronchitis?

The types of bronchitis

Anatomy of the bronchioles

Who can get bronchitis?

Causes

What is Affected by Bronchitis?

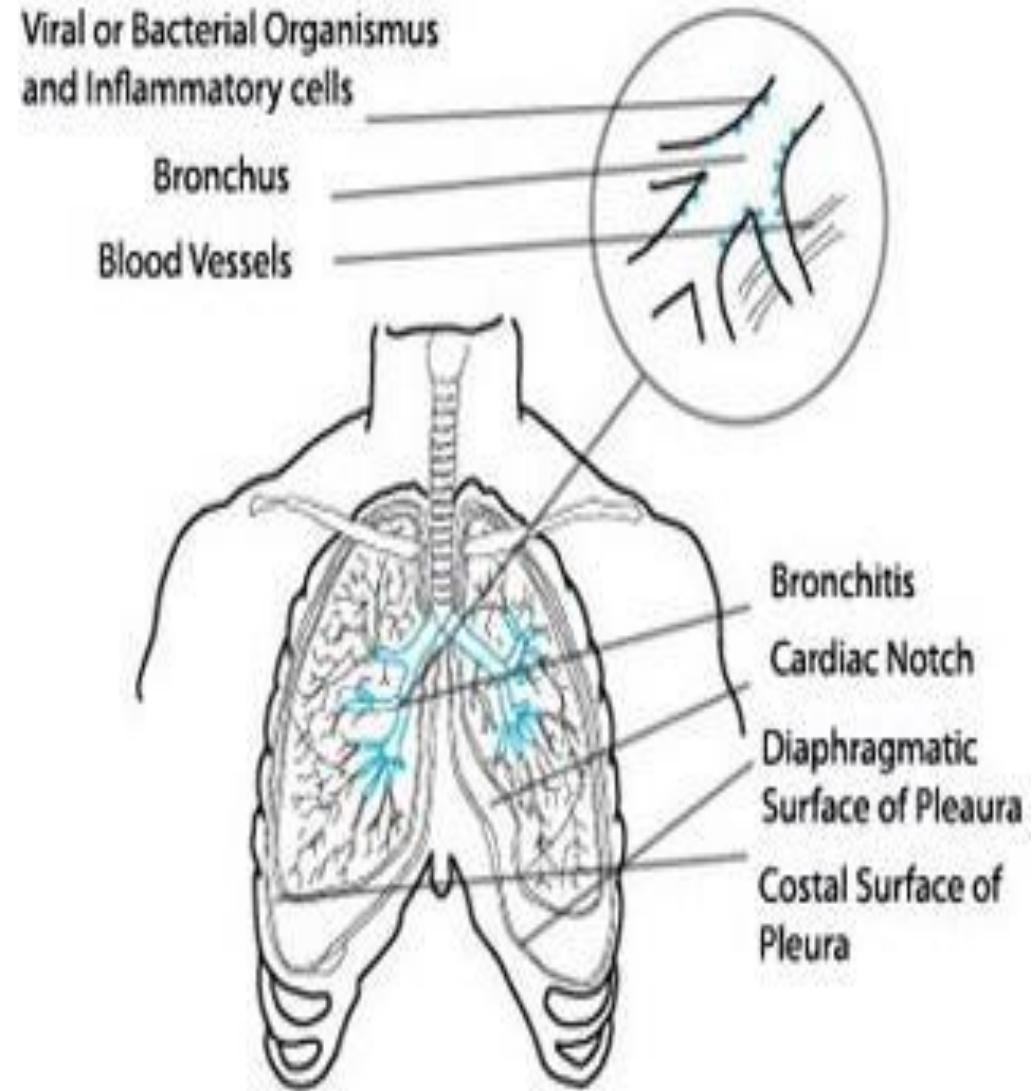
What are symptoms of bronchitis?

What diagnostic methods are available?

Side effects of treatment

References

Bronchitis is an inflammation or swelling of the bronchial tubes (bronchi), the air passages between the mouth and nose and the lungs. More specifically, bronchitis describes a condition where the lining of the bronchial tubes becomes inflamed. Individuals with bronchitis have a reduced ability to breathe air and oxygen into their lungs; also, they cannot clear heavy mucus or phlegm from their airways. This article will cover the causes, symptoms, treatments, and prevention of bronchitis.



- There are two types of bronchitis:

- Acute Bronchitis:

- Lasts 1-3 weeks

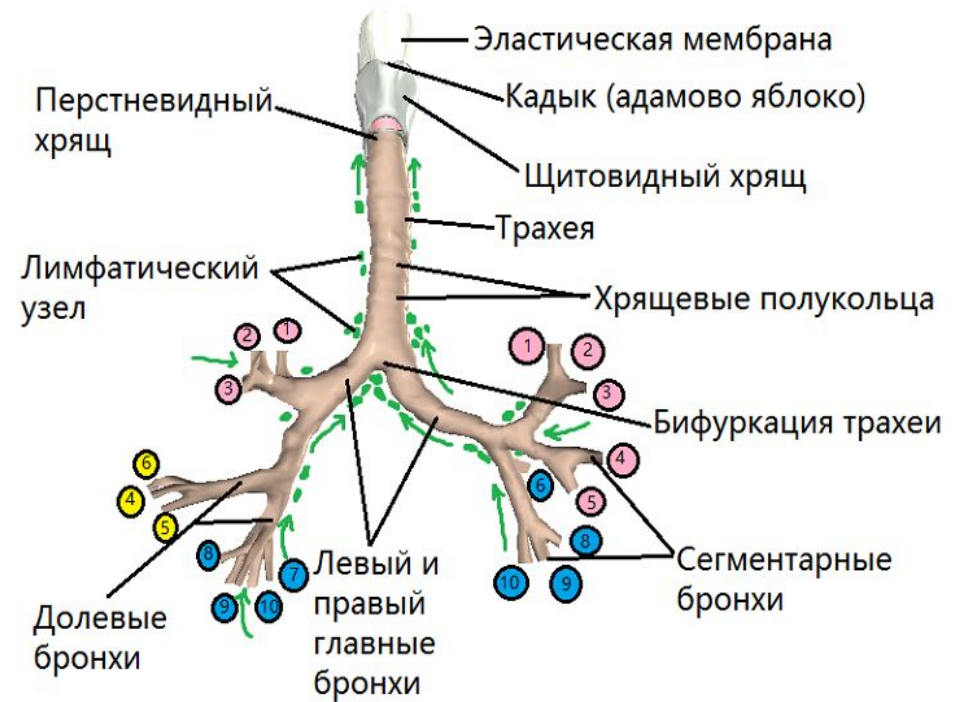
- Chronic Bronchitis:

- Lasts at least 3 months

- A type of chronic obstructive pulmonary disease (COPD)



The **primary bronchi**, in each lung, which are the [left](#) and [right bronchus](#), give rise to [secondary bronchi](#). These in turn give rise to [tertiary bronchi](#) (*tertiary* meaning "third"). The tertiary bronchi subdivide into the bronchioles. These are histologically distinct from the tertiary bronchi in that their walls do not have [hyaline cartilage](#) and they have [club cells](#) in their epithelial lining. The [epithelium](#) starts as a [simple ciliated columnar epithelium](#) and changes to [simple ciliated cuboidal epithelium](#) as the bronchioles decrease in size. The diameter of the bronchioles is often said to be less than 1 mm, though this value can range from 5 mm to 0.3 mm. As stated, these bronchioles do not have hyaline cartilage to maintain their patency. Instead, they rely on [elastic fibers](#) attached to the surrounding [lung](#) tissue for support. The inner lining ([lamina propria](#)) of these bronchioles is thin with no glands present, and is surrounded by a layer of [smooth muscle](#). As the bronchioles get smaller they divide into terminal bronchioles. These bronchioles mark the end of the [conducting zone](#), which covers the first division through the sixteenth division of the [respiratory tract](#). [Alveoli](#) only become present when the conducting zone changes to the [respiratory zone](#), from the sixteenth through the twenty-third division of the tract.



Who can get bronchitis?

- People of all ages and ethnicity can get chronic bronchitis but it's most common in people over 45 years old and people who smoke
- Women are twice as more likely to be diagnosed with chronic bronchitis
- Acute bronchitis is most common in elderly people, infants, and young children



Causes

- Bronchitis is caused by the inflammation of the bronchial tubes.
- Acute bronchitis is usually caused by viruses. Typically the same viruses that cause colds and the flu.
- Chronic bronchitis is usually caused by smoking, air pollution, dust, or toxic gases.
- Tonsillitis is similar to bronchitis except tonsillitis is the inflammation of the tonsils.
- It is also caused by bacteria and viruses.



What is Affected by Bronchitis?

Bronchitis affects the bronchial tubes in the lungs. Acute bronchitis is temporary whereas chronic bronchitis is the long term inflammation of the bronchi. Bronchitis is usually accompanied by other upper respiratory infections such as tonsillitis.



Healthy Lung



Smoker's Lung

What are symptoms of bronchitis?

For both types of bronchitis the symptoms are:

- Coughing
- Production of mucous
- Shortness of breath and wheezing
- Slight fever and chills
- Tiredness
- Sore throat/chest



What diagnostic methods are available?

- Chest x –ray
- Sputum test
- Pulmonary function test
- Pulse oximetry



What treatments are available?

- For acute bronchitis, most cases are resolved without medical treatment in 2 weeks
- Doctors may prescribe:
 - Antibiotics
 - Cough medicine
 - An inhaler
- Chronic bronchitis cannot be cured but the treatments available are:
 - Antibiotics
 - Pulmonary rehabilitation
 - Pneumonia and flu shot
 - Lung volume reduction surgery



Side effects of treatment :

Different types of antibiotics have different side effects. Common side effects include:

- Nausea, vomiting, and upset stomach.
- Dizziness or headache.
- Severe watery diarrhea and abdominal cramps.
- Persistent cough, which may produce mucus
- Wheezing
- Low fever and chills
- Sore throat
- Body aches
- Breathlessness
- Blocked nose and sinuses.



Is the bronchitis curable? What is the probable outcome after treatment?

Bronchitis is a curable disease.

Outcome after treatment :

- A dry, hacking cough may however be present for several months .
- Acute bronchitis usually heals completely, therefore leading to an excellent prognosis.

What lifestyle changes would be recommended?

- Stop Smoking
- Avoid Airborne Irritants
- Wear a Mask
- Stay Active
- Manage Your Weight
- Rest as Needed
- Learn to Relax



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Thank's for your attention