

Chronic Bronchitis Assessment

Chronic bronchitis is a type of chronic obstructive pulmonary disease (COPD) in which the bronchial tubes become inflamed. Chronic bronchitis leads to increased bronchial wall thickness and increased mucus production. An individual can be diagnosed with this condition if he/she has a chronic productive cough for three months or more per year, for two consecutive years, and has no other underlying conditions that can explain the chronic cough. For a more comprehensive review of obstructive airway diseases, please view the COPD Overview Picmonic.



PLAY PICMONIC

Clinical Findings

Chronic Productive Cough

[Crone Producing Coughing coffee-pot](#)

Increased mucus production in patients with chronic bronchitis causes a chronic productive cough; a productive cough is one that produces sputum.

> 3 Months for 2 Years

[> \(3\) Tree Month-moon to \(2\) Tutu Year-calendar](#)

A patient may be diagnosed with chronic bronchitis, if he/she has a chronic productive cough for three months or more per year, for two consecutive years. The diagnosis can only be made if the patient has no other underlying conditions that can explain the chronic cough.

Increased Mucus Production

[Up-arrow Mucus Produced](#)

In patients with chronic bronchitis, both inflammatory mediators and goblet cells produce mucus. The result is an increase in mucus production, which triggers a chronic productive cough.

Dyspnea

[Disc-P-lungs](#)

Dyspnea is characterized by shortness of breath. In patients with heart failure, dyspnea is caused by decreased cardiac output.

Cyanosis

[Cyan-crayon](#)

Inadequate oxygenation of the blood leads to cyanosis or blue discoloration of the skin and mucous membranes. For this reason, individuals with chronic bronchitis are called "blue bloaters."

Wheezes

[Weasel](#)

As the airway becomes narrower due to inflammation caused by chronic bronchitis, wheezing may occur. Patients should notify their provider if they experience new onset or worsening wheezing.

Complications

Right Side Heart Failure

Right dead heart

Pulmonary vasculature will undergo vasoconstriction due to chronic hypoxia, related to chronic bronchitis. This vasoconstriction can lead to pulmonary hypertension, and eventually, enlargement of the right ventricle of the heart (cor pulmonale). As the right ventricle enlarges, right-sided heart failure may also develop.

Jugular Venous Distention (JVD)

Jug Veins Bulging

When the right side of the heart fails, the ability to pump blood through the heart and into the lungs is reduced. As a result, blood begins to back up into the vasculature, and can cause neck vein distension or jugular venous distention (JVD).

Peripheral Edema

Peripheral Edamame

Right heart failure leads to decreased cardiac pumping power, which ultimately affects the forward flow of blood. Remember, if the right side of the heart is unable to pump blood to the lungs, the blood will back up into the vasculature, causing peripheral edema.