What is bronchitis? Symptoms, signs, treatment, and its prevention

Bronchitis is the infection of bronchi, the airways or tubes which takes airs from throat to further parts of the lungs.

Cause of acute bronchitis:

The most common causes of acute bronchitis are viruses. These include influenza A and B, parainfluenza virus, RSV virus, adeno virus, SARS-COVID 2 virus and metapneumovirus. There are rare bacterial causes of acute bronchitis, *Bordetella pertussis* is one which causes whooping cough.

Symptoms and signs:

Patient with acute bronchitis presents with cough which is generally dry initially but can be productive of small amount of white, yellow or green color mucus. There is no blood in the mucus. There may be associated upper airway symptoms including sore throat, runny nose or change in voice. There may be some fever especially earlier in the course of the disease.

Generally, heart rate and breathing rates are normal and oxygen levels are normal.

Incidence:

Acute bronchitis is a very common problem. It can account for up to 10% of all medical presentations to doctors and hospitals.

Complications:

There is very small chance of developing any significant complication from acute bronchitis unless someone has got underlying immune deficiency. The most common problem is lingering low grade cough which may last up to three weeks and sometimes even six to eight weeks after acute bronchitis. Very rarely pneumonia can develop after bronchitis.

Transmission:

Most cases of bronchitis are caused by viruses which can be transmitted to other people through coughing, sneezing or and talking. It happens in the shape of a microdroplets.

Diagnosis:

Diagnosis of acute bronchitis is made on clinical grounds. Typical history with normal chest examination suggests it to be acute bronchitis. There is no need for blood tests or an X-ray. Throat swab can be done for PCR testing to determine which virus is the cause which is generally not need for majority of the patients.

Treatment:

There is a **NO** role of antibiotic in the management of acute bronchitis as viruses are most common causes of acute bronchitis and antibiotics do not kill viruses. We just need a symptomatic management. If there is a fever, paracetamol or any other anti-inflammatory medication can be used. It can also help ease the pain associated with coughing. Over the

counter cough medication can be used but best be avoided. Using some sort of a lozenges or lollies can be helpful. Drinking plenty of fluids, hot tea can be soothing.

When to go to hospital

Patients with persistent fever, breathlessness, increased heart rate or any significant health concerns, should visit nearest doctor or emergency department of the hospital.

Prevention:

It is recommended to have a flu vaccine especially in vulnerable population. It is important to cover your cough or sneezing. Maintaining good health is a good way of preventing or managing acute bronchitis too.

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