

Bronchiectasis

Bronchiectasis occurs in CF as a result of chronic infection, inflammation and mucus obstruction in the lung.

The thick sticky mucus in the CF lung flattens the hair-like cilia so they are unable to sweep back and forth to help move the mucus up the airways towards the mouth.

This mucus sits in the airways and creates a breeding ground for infection, eventually leading to bronchiectasis.

What is Bronchiectasis?

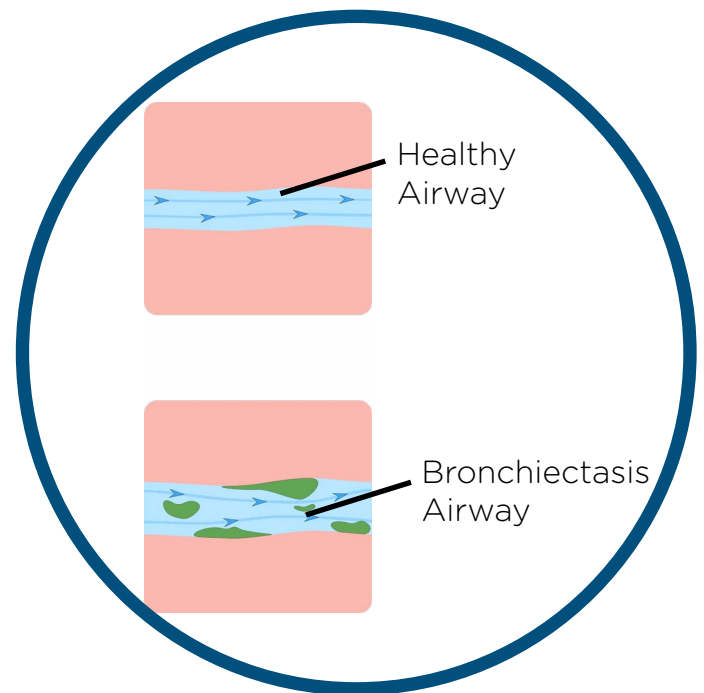
Bronchiectasis is defined as abnormal widening of the airways (bronchi). The damaged airways are not able to clear mucus effectively, leading to more infection.

This infected mucus blocks the airways and leads to airway damage and airway obstruction. The muscular and elastic components of the airways are also destroyed in bronchiectasis, and the surrounding tissues may be scarred.

In CF, damage to the airways occurs early and babies often have no symptoms. Diagnosis of bronchiectasis can only be made with high resolution CT scan.

Management

Treatment aims at optimising well-being, lung function and reducing infective exacerbations to prevent lung function decline.



It is important to:

- Recognise symptoms of exacerbation (increased cough, fever, change in amount and colour of mucus, fatigue) and seek advice from your clinic.
- Avoid irritants e.g. cigarette smoke (including passive smoke inhalation), noxious fumes/gases and airborne pollutants.
- Avoid contact with those who have respiratory infections.
- Immunise according to immunisation schedule, including annual influenza vaccine.

Airway Clearance

Airway clearance is an essential part of managing bronchiectasis. It will improve oxygenation and reduce excess mucus that provides a good environment for infection, thus reducing the inflammation.

Medications

Take your medications as prescribed. Follow the correct order and technique when using inhalers and nebulisers.

Exercise

Daily aerobic exercise in addition to airway clearance will help clear mucus and reduce the risk of infective exacerbations.

Nutrition and Hydration

It is important to eat well and use enzyme replacement as prescribed. Good nutrition helps the immune system fight infections. Ensure adequate fluid intake to maintain hydration and keep mucus thinner.

Useful Resources

- [Bronchiectasis Toolbox](#)
- [CFWA Factsheets](#)

Last reviewed May 2023.