Bronchiectasis is a lung disease that occurs when the walls of the breathing tubes or airways widen due to chronic inflammation and/or infection. This results in irreversible damage to the lungs, which allows mucus to pool in the damaged airways. Infection in these breathing tubes contributes to ongoing inflammation in the airways. It may affect many areas of the lung, or it may appear in only one or two areas. Bronchiectasis is characterised by recurrent chest infections (flare-ups).

This condition can affect people of all ages, and can sometimes begin in childhood. Although the incidence is not accurately known, it is more common in women and the elderly and in certain ethnic groups such as Aboriginal and Torres Strait Islander peoples.

The most common known cause of bronchiectasis is having previous infections that damage the airways such as pneumonia, whooping cough or tuberculosis, particularly in childhood. In many cases, however, the cause is unknown. Some conditions that have been linked to bronchiectasis include:

- Pre-existing lung conditions such as severe Chronic Obstructive Pulmonary Disease (COPD) and asthma associated with allergy to the fungus Aspergillus.
- Immune deficiencies.
- Chronic inflammatory diseases that affect connective tissues such as rheumatoid arthritis and inflammatory bowel disease.
- Disorders that affect mucus clearance from airways.

The symptoms and signs of bronchiectasis can present at any age. The most common symptoms include:

- Long-term cough (often described as ‘wet’)
- Increased mucus (sputum) production.

Other symptoms include:

- Feeling tired
- Shortness of breath (breathlessness) or wheezing
- Chest discomfort or pain
- Coughing up blood.

Bronchiectasis has many symptoms in common with other lung diseases. To get the correct treatment, it is important to have an accurate diagnosis. This may include:

- Blood tests
- Sputum tests: identifies germs present in the mucus
- Chest X-ray
- Lung function tests: breathing tests.
- High resolution CT scan (HRCT): looks in detail at the lung tissue and airways - this test is usually needed to confirm a diagnosis of bronchiectasis.

It’s important to know that each person may experience bronchiectasis differently. Having a regular airway clearance routine and responding early to flare-ups (exacerbations), generally helps to maintain a good outcome. Symptoms and quality of life are more likely to worsen if a person is not treated promptly, especially if they are experiencing a flare-up.
Treatment

Although there is no current cure for bronchiectasis, early treatment is important to help improve how you feel, keep the condition well managed, and maintain normal lung function. Many patients manage their symptoms with an airway clearance routine (a cornerstone of bronchiectasis management) along with exercise, without the need for specific medications, except during flare-ups.

Current treatment options include:

- **Medicines**
  - Antibiotics are the most common medicine used to treat infection during flare-ups – these can be taken by mouth, inhaled (nebulised) or given into a vein (intravenously).
  - Nebulised medicines, such as nebulised saline (salty water) may be prescribed to help clear mucus from the airways.
  - Occasionally, patients may be prescribed long-term antibiotics to help reduce the number of flare-ups they experience.

- **Oxygen**
  Although not common, if your oxygen levels are low, oxygen therapy may be prescribed. Some patients may need continuous oxygen and others may only require oxygen during physical activity (i.e. walking/exercising).

Self-management options include:

- **Airway clearance program**
  Clearing mucus/sputum from the chest every day is very important to decrease the risk of flare-ups. A physiotherapist trained in airway clearance techniques can help you develop a daily clearance routine. This may potentially include breathing exercises, using positive expiratory pressure devices, inhaling saline via a nebuliser, positioning to open the airways and a prescribed exercise program.

- **Pulmonary rehabilitation**
  Pulmonary rehabilitation is an exercise and education program provided by specially trained health professionals that teaches you the skills needed to manage your symptoms and to stay well and out of hospital.

- **Staying active and healthy**
  Quitting smoking, being physically active, eating well, getting plenty of rest, enjoying friends, family and hobbies, practicing relaxation techniques, joining a support group and keeping a positive attitude, are all things you can do to support your health and manage your bronchiectasis.

- **Ensuring your vaccinations are up-to-date**
  This may include discussing a seasonal flu vaccination and the pneumonia vaccine with your doctor, in order to help support your immune system.

- **Accessing emotional support**
  Anxiety and depression are not uncommon in bronchiectasis and it is important to access support, if needed. Talk to your doctor or contact Lung Foundation Australia for referral to an appropriate support service.

FURTHER INFORMATION AND SUPPORT

Contact Lung Foundation Australia for more information and to access our support services. You can also join our mailing list for regular updates and the latest news.

**Lung Foundation Australia Services**

- Information and support line
- Lung disease information resources
- Education seminars and webinars
- Lung cancer support nurse
- Support groups
- Peer-to-peer connections
- Referral to pulmonary rehabilitation and Lungs in Action exercise programs
- Newsletter

**External Links**

Australasian Bronchiectasis Registry
lungfoundation.com.au/BronchiectasisRegistry

Bronchiectasis Toolbox
bronchiectasis.com.au

Lungfoundation.com.au | Freecall 1800 654 301 | enquiries@lungfoundation.com.au

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