Respiratory Medicine

Bronchiectasis and Physiotherapy

Who is the leaflet for? What is its aim?
This leaflet is intended to provide information to people who have bronchiectasis, their families and carers. It explains what bronchiectasis is and how physiotherapy can play a part in its treatment.

What is bronchiectasis?
Your lungs are complex structures which contain many airways. Airways normally produce mucus to help keep them moist and clear. This is normally moved through your airways by little hairs called cilia. Small amounts of sputum can be swallowed without you realising, whilst larger amounts may be coughed up. In bronchiectasis, your airways become enlarged and damaged. They may lose their structure, including their cilia. This means that mucus cannot be moved effectively.

The main symptom of bronchiectasis is the daily production of mucus. The increased amounts of mucus and difficulty in clearing it make your lungs more vulnerable. This results in more infections, inflammation and further damage. This damage then becomes permanent and if not controlled, can cause severe breathing difficulties.

Chest infections
Chest infections play an important part in bronchiectasis. The more chest infections you have, the more likely it is that the damage to your lungs will get worse and your general health will deteriorate faster. Therefore, controlling the number of infections you get is one of the key parts of staying well.

You should learn to become aware of the symptoms related to a chest infection as early recognition and treatment is extremely important in preventing severe infections and further damage. Signs of an infection may include:

- Increased amounts of sputum
- Thicker sputum which is more difficult to clear
- Darker coloured sputum
- Temperature
- Chest pain
- Coughing up small amounts of blood

If you suspect that you may have an infection, it is useful to give a sputum sample to your GP or Practice Nurse to send to the labs. This will help identify which bacteria are causing your infection and which antibiotics will be most effective at treating it. The best time to do this is before you start any antibiotics.
An infection is often treated with a two week course of oral antibiotics but in severe infections, intravenous antibiotics may be needed and this may require you to be admitted to hospital. Some people who get a lot of infections may be advised to take continuous antibiotics either in tablet form or by inhalation (nebulisation).

**What other treatments are there?**

The damage to your airways cannot be reversed so treatment will be aimed at managing your mucus, reducing your symptoms and preventing further damage. Inhalers may be helpful in opening up your airways (bronchodilators) and reducing any inflammation (steroids).

Other treatments to help hydrate or thin the mucus may be used to make it easier to cough it up. These may include nebulisers such as saline or capsules such as carbocysteine. If your bronchiectasis is caused by a problem with your immune system, you may be offered immunoglobulin therapy. This is aimed at replacing some of the components of your body’s defence system to enable you to better fight off infections.

**Physiotherapy in bronchiectasis**

Physiotherapy can be very useful in helping to manage the mucus produced in bronchiectasis. A respiratory physiotherapist will assess you in order to devise a personalised management plan for you to perform at home.

Techniques used to help clear sputum may include:

- Breathing exercises, such as the Active Cycle of Breathing (ACBT)
- Use of positioning to target the most affected portions of your lungs which is known as postural drainage
- Use of devices such as an Acapella or Flutter

You should do these techniques daily, even if you are feeling well, to reduce the chances of mucus getting stuck, causing further infections and leading to more damage. During an infection, you may need to increase the amount of chest physiotherapy that you do in order to control the clear the larger quantities of sputum. A respiratory physiotherapist will be able to advise you on this based on your particular presentation.

If you are admitted to hospital for your chest infection, it is important that you continue to perform your usual airway clearance. If you develop a more severe infection then more intensive treatment may be required. If you are having difficulty clearing your mucus whilst you are in hospital please ask to be seen by a respiratory physiotherapist. They may be able to offer alternative treatments during your hospital stay.

If you feel you would like to be seen by a respiratory physiotherapist, either when you are well or unwell, then please speak to your doctor.
Other ways to stay well

There are some general factors that all adults should consider in regards to their health. These are even more important when you have bronchiectasis to prevent your condition from progressing faster.

**Stop smoking**
- Smoking has many negative effects on your health but in particular your lungs. Damage caused by smoking can make bronchiectasis worse and cause larger amounts of sputum, making it more difficult to clear your airways
- Talk to your local NHS Stop Smoking Service, Pharmacist or GP for advice on quitting smoking

**Stay active**
- It is recommended that all adults between the ages of 19-64 should take part in either 150 minutes of moderate activity (fast walking, cycling) or 75 minutes of vigorous activity (running, taking part in a sport) plus two or more sessions of strength exercise a week
- Staying active and keeping your body strong will allow your muscles to work more effectively during regular activities and also make it easier to cope when you have an infection.
- Ask to speak to a physiotherapist for advice regarding starting exercise

**Eat well**
- Eating a balanced diet will give your body the fuel and nutrients it needs to help fight off and recover from infections
- Ask to speak to a dietician about how to improve your diet

**Control your weight**
- Being overweight puts strain on many organs in your body, including your lungs. The heavier you are, the more your heart and lungs have to work to power your body
- Being underweight can also put excess strain on your body and reduce your ability to cope with infections
- Staying active and eating well will help to maintain a steady weight.

**Stay properly hydrated**
- Not drinking enough can lead to your sputum becoming thicker and more difficult to clear. Drinking non-alcoholic drinks such as water, squash, tea and coffee regularly throughout the day can help prevent this

**Have the flu jab**
- All adults with a chronic lung disease should have a flu jab each year. Flu can be a very serious infection, especially if you have a chronic lung disease so it is important to protect yourself. Speak to your GP about the flu jab
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk. Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.