## MANAGING BRONCHIECTASIS IN ADULTS <br> understanding the professional guideline

This guideline includes information on what the European Respiratory Society has said about managing bronchiectasis in adults. It is based on a longer version, produced by a group of experts on the topic, which included healthcare professionals and people with personal experience of bronchiectasis.

The original guideline, written for professionals, considered the best available evidence - randomised control trials, systematic reviews and observational studies - and answers a series of questions about managing bronchiectasis. It represents the gold standard in terms of quality of care for people with adult bronchiectasis in Europe, and can be used as an educational resource for healthcare professionals.

This version is written for patients and the public to help you understand what was recommended in the original guideline.

## ABOUT BRONCHIECTASIS

Bronchiectasis is a long-term lung condition where a person's airways are wider than normal. This leads to a build-up of mucus (sputum) in the lungs that can make a person more at risk of getting infections.

The most common symptoms include cough, coughing up mucus and being short of breath. People with bronchiectasis can also experience sinusitis (swelling of the sinuses), coughing up blood, chest pain and feeling very tired out (fatigue).

Treatment for people with bronchiectasis has several aims:

- Preventing chest infections (exacerbations), during which symptoms get worse
- Treating symptoms
- Improving quality of life
- Stopping the condition from getting worse

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## THE RECOMMENDATIONS

## What tests should a person have after they have been diagnosed with bronchiectasis?

The guideline recommends that everyone with a diagnosis of bronchiectasis be given blood tests to see if their bronchiectasis could be linked to an issue with their immune system.

Everyone with bronchiectasis should also be tested for a condition called allergic bronchopulmonary aspergillosis (ABPA), a condition where a person becomes allergic to Aspergillus, a common type of mould. This usually involves a blood or skin prick test.

These tests can help healthcare professionals to tailor treatment to each individual.

People with bronchiectasis who were involved in the guideline emphasised the importance of understanding the cause of their condition.

In some cases, e.g. if a person has other symptoms or signs, they may also need to be tested for other conditions, including:

- Non-tuberculous mycobacteria (NTM)
- Cystic fibrosis (CF)
- Primary ciliary dyskinesia (PCD)


## LONG-TERM TREATMENTS

The guideline considered which, if any, treatments people with bronchiectasis should be offered to manage their condition on a long-term basis ( 3 months or more) based on the best available evidence.

## Anti-inflammatory drugs

Anti-inflammatory drugs, such as steroids, are medications used to treat pain, swelling and high temperatures. When given to people with lung conditions, they also aim to reduce symptoms.
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The guideline does not recommend that people with bronchiectasis routinely take inhaled steroids, unless they also have asthma or chronic obstructive pulmonary disease (COPD).

The guideline also does not recommend that people take statins for bronchiectasis, a type of medication that lowers a person's cholesterol and has some anti-inflammatory effects, unless their doctor has said they should take them to treat a heart condition.

## Antibiotics

Antibiotics are a group of drugs that fight bacterial infection. Some antibiotics work against specific types of bacteria, but many work against multiple bacteria. Antibiotics are always recommended for when a person with bronchiectasis has a chest infection. Sometimes, people with bronchiectasis need to take regular antibiotics every day or every few days to control infection.

The guideline recommends long-term antibiotic treatment (for 3 months or more) for people that have three or more chest infections per year that cannot be prevented by doing regular chest clearance exercises.

## Mucoactive treatment

Mucoactive drugs are drugs that help people to clear mucus from their lungs.
The guideline recommends mucoactive treatment for people with bronchiectasis who find it difficult to cough up mucus and who have poor quality of life.

The guideline does not recommend a treatment called recombinant human DNase (a medication used to make mucus in the lungs thinner, commonly used for people with cystic fibrosis) for people with bronchiectasis because trials showed that it did not work. However, some people do take these therapies; if you have concerns, you should discuss these with your doctor.

## Bronchodilators

Bronchodilators are drugs that help with breathing by relaxing the muscles in the lungs and opening up the airways.

The guideline does not recommend routinely offering long-acting bronchodilators for people with bronchiectasis.

However, the guideline recommends bronchodilators in the following cases:

- For people who are often short of breath
- Before physiotherapy sessions
- For people who also have asthma or COPD and take bronchodilators for these conditions


## Surgery

Surgery for bronchiectasis normally involves taking away the parts of the lungs that are no longer working to stop the illness from spreading to the rest of the lungs.

The guideline does not generally recommend surgery for people with bronchiectasis.

It advises that the only time a person with bronchiectasis should undergo surgery for their condition is if they still have a lot of chest infections despite trying all other treatment options.

People with bronchiectasis who were involved in the guideline felt as though surgery was only an option for people for whom there is no other effective treatment.

## PHYSIOTHERAPY

## Airway clearance

Airway clearance techniques are manual ways of loosening thick, sticky mucus in the lungs so that it can be coughed up. These include different
breathing exercises and moving into different positions to make it easier to release the mucus.

The guideline recommends that people with bronchiectasis that regularly cough do airway clearance techniques once or twice a day. They should be shown how to correctly do this by a trained healthcare professional.

## Pulmonary rehabilitation

Pulmonary rehabilitation is a programme that aims to reduce the physical and emotional impacts a long-term lung condition can have on a person's life. It combines exercise training with education about ways to keep as healthy as possible. This could also include other treatments from occupational therapists, dieticians, nurses, social workers and psychologists, where this type of support is available.

The guideline recommends tailored pulmonary rehabilitation programmes for people with bronchiectasis who find physical activity difficult. On average, research shows that after doing pulmonary rehabilitation for 6-8 weeks, people with bronchiectasis are more able to be physically active, cough less and tend to feel better in general. They may also be less likely to have chest infections. These benefits tend to last for between 3-6 months, with the positive effects lasting longer among those who follow the advice and exercises given during the programme after it finishes.

## TREATMENT FOR CHEST INFECTIONS

## How long should the course of antibiotics used to treat chest infections be?

Based on current research and practice, the guideline recommends that most people with bronchiectasis should be given a 14 -day course of antibiotics to treat a chest infection. However some healthcare professionals think that a shorter or longer course could be used in certain circumstances.

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Should people who have bronchiectasis found to have a potentially infection-causing bacterium (or "bug") in their lungs be given antibiotics until it goes away?
Having frequent airway infections can affect a person's quality of life, and can cause them to feel very unwell.

The guideline states that people with bronchiectasis who also have a specific type of infection-causing bacterium (or "bug") in their lungs called P. aeruginosa (also called Pseudomonas) should be offered eradication treatment - a targeted type of antibiotic treatment that aims to get rid of the bug completely, lasting up to 3 months.

## FINAL POINTS

Treatment for bronchiectasis aims to reduce chest infections and symptoms, improve quality of life and lower a person's likelihood of complications, like reduced lung function.

The healthcare professionals and patients that produced this guideline agreed that the potential benefits and side effects of every treatment option should be considered for each individual with bronchiectasis. A patient's individual situation and their preference should also be key factors.

It is important to note that most of the recommendations in this guideline are conditional, meaning that they apply in most but not all cases. If your healthcare professional says that any of these recommendations do not apply to you, you can ask for their reasons.

While the recommendations are based on the best available data, the experts accept that most of this evidence is of fairly low quality.

Lots of research is being done into bronchiectasis at the moment and the guideline should be updated as new research is published.

## FURTHER READING

## The original ERS version of this guideline www.ers-education.org/guidelines

## Bronchiectasis patient priorities <br> Information and support for people diagnosed with bronchiectasis and their caregivers, developed with the help of patients and healthcare professionals across Europe. <br> www.europeanlunginfo.org/bronchiectasis

## EMBARC

EMBARC is a pan-European network committed to promoting clinical research and education in bronchiectasis, through sharing of protocols, research ideas and expertise. www.bronchiectasis.eu

## About ERS

The European Respiratory Society (ERS) is an international organisation that brings together physicians, healthcare professionals, scientists and other experts working in respiratory medicine. It is one of the leading medical organisations in the respiratory field, with a growing membership representing over 140 countries.

The ERS mission is to promote lung health in order to alleviate suffering from disease and drive standards for respiratory medicine globally. Science, education and advocacy are at the core of everything it does.

ERS is involved in promoting scientific research and providing access to high-quality educational resources. It also plays a key role in advocacy - raising awareness of lung disease amongst the public and politicians.

## About ELF

The European Lung Foundation (ELF) was founded by ERS to bring together patients and the public with professionals.

ELF produces public versions of ERS guidelines to summarise the recommendations made to healthcare professionals in Europe, in a simple format for all to understand.

These documents do not contain detailed information on each condition and should be used in conjunction with other patient information and discussions with your doctor.

More information on lung conditions can be found on the ELF website: www.europeanlung.org

