What is Bronchiectasis?

This leaflet will explain what the condition Bronchiectasis is. Bronchiectasis is not a disease as such, but a pathological process. Bronchiectasis is a condition in which there is abnormal chronic dilatation, or widening, of the lower airways. This results in the accumulation of mucus in the airways and a tendency to bacterial infection. Bacterial infection itself causes the production of more mucus and airway damage, which results in more dilation. Untreated, this results in a “vicious cycle” with worsening damage to the lungs. The aim of treatment is to break this vicious cycle and hopefully allow the lungs to heal.

What causes Bronchiectasis?

The cause of this condition is one or more of the following:

- Cystic Fibrosis
- Immune deficiency disease resulting in repeated episodes of bacterial infections.
- Following an episode of pneumonia, usually in younger children.
- In about a third of patient’s it is not possible to identify a precise cause for the problem. It is suspected that many of these patients may have developed Bronchiectasis as a result of a previous pneumonia.
- Accidental inhalation of an object, such a small piece of plastic, into the airway causing an obstruction and then inflammation.
- Congenital abnormality of the lungs.
- A number of other very rare causes.

What are the symptoms?

Symptoms experienced by each patient can vary but can include:

- Coughing
- Sputum production
- Fatigue
- Wheezing
- Occasional weight loss
- Occasional shortness of breath
How is it diagnosed?

Computed Tomography (CT) Scan (see CT Scan information sheet)

This will tell us if your child has Bronchiectasis, where it is in your lungs and how severe it is.

Airway Secretions for Bacterial Culture (Cough swab, Nasal Pharyngeal Aspiration or Alveolar Lavage)

Samples of your child’s airway secretions will tell us which bacteria are growing to ensure your child is given an appropriate antibiotic. The type of test performed will depend on your child’s age and if they are undergoing any other type of investigation such as a Bronchoscopy. The doctors will discuss with you which one of these is suitable for your child.

Blood Sample

Regular blood test will tell us about your child’s immune system, which helps the body fight infection and inflammation.

Cilia Tests

Mucus is usually produced constantly in the lungs and transported up to the throat where it is swallowed. The mucus is moved by the action of the billions of C microscopic hair-like projections, which line the airways. These “waft” mucus up towards the throat. In order to test for the condition it is necessary to take a small brushing of the nose and send the specimen to a specialised laboratory in Leicester for analysis.

Sweat Test

This is a test that collects an amount of sweat from your child’s skin and the amount of chloride and sodium is measured. It is a pain free test but takes about 30 minutes.

How does the condition develop over time?

The classical view of Bronchiectasis is that it is a condition, which inevitably gets worse over time. However, we are now diagnosing in many more children as a result of increased use of CT scanning. Many of our patients have relatively mild disease. We have found when patients have been scanned at a later date, that in many the condition has not deteriorated and in some the condition has even improved or disappeared.
What is the treatment?

If an underlying cause has been discovered that will be treated. Once this has happened, the treatment remains the same for all children with Bronchiectasis.

The treatment consists of:

- Physiotherapy as taught to you by our physiotherapist. The frequency with which this is needed is very variable and our physiotherapist will advise you about this.
- Antibiotics at times of infection and the possible use of low dose antibiotics throughout the winter months. This is given to try to stop infection occurring and the term you will hear used is prophylactic. Possibly, use of inhaled medication (the sort used by patients with asthma) to "open up" the airways and reduce the inflammation.
- The flu vaccine at the beginning of October at your GP’s. We will inform them of this.

The treatment will be regularly monitored at clinic to check the progression of the condition. The aim of treatment is to stop the condition getting worse and keeping the airways clear of secretions and infection.

What can we do to help our child?

As already discussed, the aim of treatment is to keep the airways clear of mucus and infection. So you can help, by making sure your child takes the medicine that has been prescribed by the doctor, correctly and fully.

You will need to be more vigilant in spotting the signs of a cold and infections so that you can contact the doctor for appropriate treatment sooner than for other children.

It is very important that you ensure that your child is not subjected to a smoke filled environment, as this will make the condition worse. If you smoke, then we would be happy to liaise with your GP to enable you to access support from your practice for you to try to stop.

As your child grows up, there will inevitably be peer pressure for them to smoke. They will need your support & it will help if you also do not smoke. Encouraging your child to take part in normal activities such as; sport at school and out of school activities. This will be good for their physical, emotional and social health.

Being honest with your child about their illness at a level they can understand will enable them to be in control of their illness but allow them to live their lives to the full.

Where can I go for more information or help?

It is important that we see you on a regular basis so you will receive appointment to attend clinic. At these clinics, you will have access to the doctor, the specialist nurse, and the physiotherapist. These people will help you with the care of your child and they will try to address any fears or worries you have at the time.

However, you can contact both the doctor and the specialist nurse at other times as well if you need to. The contact numbers are on the bottom of this sheet.

In addition to the team member mentioned above, we do have a team social worker that will be able to help with such issues as schooling and finance if you should need it.
Contact details

Nurse Specialists Children’s Respiratory:
0191 282 5558 (Mon –Fri, 9 am –5 PM)

Physiotherapist for the Children’s Respiratory Service:
0191 2821265 (Mon –Fri, 9 am –5 PM)

The Patient Advice and Liaison Service (PALS) can offer on-the-spot advice and information about the NHS. You can contact them on freephone 0800 032 02 02 or e-mail northoftynepals@nhct.nhs.uk

Useful websites

If you would like further information about health conditions and treatment options, you may wish to have a look at the NHS Choices website at www.nhs.uk. On this website there is an information prescription generator www.nhs.uk/ips which brings together a wealth of approved patient information from the NHS and charity partners which you may find helpful.