

Children's Services

Nasal ciliary biopsy

A ciliary biopsy is when a small brush is brushed along the inside of the nose to obtain a sample of the small hairs. The sample is then sent to a laboratory to be analysed under an electron microscope.

Why perform a ciliary biopsy?

A ciliary biopsy is taken to help either diagnose or exclude a diagnosis of a condition called primary ciliary dyskinesia (PCD). PCD is a rare, genetically inherited condition in which the microscopic hair-like structures within the body (cilia) do not function normally.

What are cilia?

Cilia are microscopic, hair-like structures which vibrate within the airways and other organs such as the middle ear. In PCD the cilia either do not function at all or their movement is disordered and are therefore ineffective.

Who is the test performed on?

The test is commonly performed in children who present with one or a combination of the following:

- A history of chest and respiratory problems
- A constant runny nose
- Recurrent ear infections.

It is worth remembering that these are also common childhood complaints and are also the symptoms of many other conditions. PCD is a rare condition affecting one in 15,000 people (see PCD information leaflet).

How is the test performed?

A small brush attached to a narrow wire is placed inside the nose (see picture below). It is then brushed along the inside of the nose to obtain a sample of the small hairs.



It only takes a few seconds to do the ciliary biopsy. It is not a painful test but is uncomfortable. At Addenbrooke's Hospital a ciliary biopsy is performed either at a clinic visit and can be performed with or without sedation, or in conjunction with a series of other investigations under general anaesthetic, for example bronchoscopy and pH study, if your child requires these. Your consultant or Specialist Nurse will discuss this with you. Please ask them if you have any questions.

If your child is having the biopsy done whilst they are awake, they need to be still for long enough for the test to be done. In young children sedation may be required.

Once the sample has been taken, it is sent to a laboratory for analysis. The results usually take several weeks and will be discussed with you at your next clinic appointment.

Who will perform the test?

The test is performed by a member of the paediatric respiratory team who are qualified and trained to carry out the procedure.



Addenbrooke's is smoke-free. You cannot smoke on site. For advice on quitting, contact your GP or the NHS smoking helpline free, 0800 169 0 169

Please ask if you require this information in other languages, large print or audio format: 01223 216032 or patient.information@addenbrookes.nhs.uk

Informacje te można otrzymać w innych językach, w wersji dużym drukiem lub audio. Zamówienia prosimy składać pod numerem: 01223 216032 lub wysyłając e-mail: patient.information@addenbrookes.nhs.uk

Polish

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Cantonese

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Bengali

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