Children’s Services

Children’s sleep study

What is a sleep study?
A sleep study is a test to measure your child’s breathing and oxygen levels when asleep.

Why does my child need a sleep study?
Usually the test has been requested because their breathing is causing concern. This may be because they snore a lot, or because they have a condition that might give rise to problems during sleep.

What happens?
Your child may be offered a consultation with a doctor with a special interest in sleep problems in children before deciding which investigation is required. You will be contacted either by phone or letter. This is usually to decide which type of sleep study is needed (see below), or whether no study is needed at all.

Types of sleep studies:

1. Simple outpatient sleep study for you to undertake at home.
2. Sleep study undertaken by a community nurse. This study is usually for premature babies who require home oxygen.
3. An inpatient sleep study which requires an overnight stay in hospital.

1. Simple outpatient sleep study
   - We will contact you by either phone or letter to arrange an appointment for you to collect or for us to post you out the sleep study kit.
   - If you opt to have the sleep kit sent to you by post, you will be sent the equipment with instructions about how to use it. We will send this as soon as a spare machine is available.
   - Alternatively we may discuss a simple study with you in clinic and be able to give you the equipment to take home that day.
   - The equipment (pulse oximeter) is a small wrist watch sized machine with a finger probe attached. It is attached to the wrist or ankle with a Velcro strap. The finger/toe probe is put on the finger/toe at the start of the overnight study as per instruction leaflet sent with the machine. It is a simple, non invasive piece of equipment.
   - We will discuss with you a suitable collection date, so that a courier can collect the sleep study kit, and return it to the hospital. We always have a waiting list for these studies, and it is vital you return the equipment as soon as possible.
• The sleep study will be analysed by the sleep team.
• The results will be sent to the referring consultant or GP who is responsible for discussing the results with you. You will also receive a copy of the results letter.

2. Simple sleep study undertaken by paediatric community nurse
• A paediatric community nurse will contact you and arrange a time to undertake a sleep study in your home. She will show you how to use the equipment and inform you when she will return to pick the equipment up.
• When the sleep study has been undertaken it will be sent to the sleep team for analysis.
• The results will be sent to the referring consultant who is responsible for giving you the results and changing the oxygen treatment your child requires.

3. Hospital sleep study
• Your child will be admitted to hospital for this study. You should arrive at around 17:00 and should be able to go home the next morning. You will be able to stay with your child and should bring an overnight bag.
• Your child will be settled into bed at night and one or more of the following will occur:
  ° A soft probe is wrapped around your child’s toe to monitor his or her oxygen levels while asleep.
  ° Three sticky ECG pads are attached to your child’s chest to measure their heart rate.
  ° One or two stretchy bands are put around your child’s chest along with a position sensor.
  ° A small tube may be placed just inside his or her nose to monitor breathing rates.
  ° A sticky pad may be put on your child’s neck to monitor snoring
  ° We may video your child asleep to look at their pattern of breathing
• The sleep laboratory will analyse the various recordings made during the sleep study. The sleep team will discuss the results with the referring doctor and appropriate treatment offered.

Further information
• Please phone the Paediatric Respiratory Nurse on 01223 216585 for any further information you may need about the process of sleep studies being undertaken.
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.

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