Introduction

This fact sheet aims to provide you with information about a procedure called muscle biopsy and aims to provide you and your family with information to prepare for the procedure.

What is a muscle biopsy?

A muscle biopsy is the removal of a small sample of muscle, about 1 cm in diameter, for analysis. This is done under a general anaesthetic by a surgeon. A small cut of 2-3 cm is made to the skin. Very occasionally, a bigger cut is needed so that an adequate sample of muscle can be obtained.

The biopsy is usually taken from the outer part of the left thigh. Your child’s doctor will discuss with you the most appropriate place to take the biopsy from.

Why does my child need a muscle biopsy?

A muscle biopsy is usually undertaken to help in identifying conditions that affect muscles or nerves. The muscle sample is examined under the microscope and special chemical stains are used to identify certain proteins within the muscle tissue.

What are the risks?

The risks associated with muscle biopsies are very small. The muscle sample that is taken is only about a centimetre in size and with time the area sampled re-grows. A muscle biopsy does not increase any muscle weakness. There is a small risk of infection around the wound, which might need treatment with antibiotics.

With all neuromuscular conditions, care must be taken when using anaesthetics. Anaesthetic agents that may cause Malignant Hyperthermia (an adverse reaction) in neuromuscular patients are avoided. The risks are otherwise similar to that of other healthy children having an anaesthetic, which are very small. The anaesthetist looking after your child will be happy to discuss this with you when you arrive on the ward.

Will there be a scar?

Your child will have a few self-resolving stitches (these are stitches that do not need removing as they are absorbed by the body) underneath the skin at the site where the biopsy is taken. The actual wound will be covered with Steri-Strips (like small stripes of sticky plaster). The biopsy site may be a bit bruised and sore for a few days but a mild pain killer such as Paracetamol and/or Ibuprofen is usually sufficient to make your child comfortable. After the wound has healed, this will leave a scar.
Sometimes, children with a neuromuscular disorder may have poorer wound healing, and this may lead to a more prominent scar (sometimes wider and “papery”). The muscle where the biopsy is taken should repair itself quite quickly, and the biopsy itself should not worsen the strength and movement of that muscle.

**How long does the procedure take?**

The procedure usually takes about 20 minutes. Your child will spend some time in the recovery room of the operating theatre afterwards while the anaesthetic wears off, so it may seem a bit longer.

**When do we find out the results?**

Following the operation, the muscle sample is sent to the laboratory at the Royal Liverpool University Hospital for tests and examination under the microscope. Some samples may have to be sent to other laboratories outside Liverpool. The tests usually take about six weeks, sometimes longer, to complete. Your doctor will contact you as soon as the results are available.

**Can I stay with my child?**

Please come into the ward with your child, because a parent (with legal parental responsibility) or legal guardian is needed to sign the consent form for the operation. You will be able to stay with your child at all times, apart from during the actual operation. If you wish, you will be able to stay with your child in the anaesthetic room until he/she is “asleep” (under the anaesthetic).

**What do we have to do before we come to hospital?**

For your child’s safety, it is important that you follow the instructions about when your child can have their last food and drink before admission.

This will depend on whether your child is having their operation in the morning or the afternoon.

If your child’s operation is in the **morning:**

- Your child must not have any food after **midnight**.
- He/she can have a drink of juice, squash or water (**but not** milk or fizzy drinks) in the morning before **6.00am**.
- He/she must not have anything to eat or drink after that time.

If your child’s operation is in the **afternoon:**

- Then he/she can have a light breakfast (cereal or toast) before **8.00am**.
- They could have a drink of juice, squash or water (**but not** milk or fizzy drinks) up to **11.00am**.
- They must not have anything to eat or drink after that time.
Where do we go on the day?

Unless you are told otherwise your child will be admitted to Surgical Daycase Ward.

What time do we have to turn up?

You should receive a letter telling you the date of your child’s biopsy and whether it will be in the morning or the afternoon.

- If your child is listed for the **morning**, please arrive by **8.00am**.
- If your child is listed for the **afternoon**, please arrive by **11.30am**.

Please arrive early because:

- plenty of time is needed to make the necessary preparations
- the operation could even be moved forward if, for example, another operation is cancelled.

What should we bring on the day?

- If your child has pyjamas that are made of 100% cotton with no metal fastenings, please bring them.
- If possible, please bring a dressing gown and slippers for your child.
- Your child will need loose, comfortable clothes for their journey home.
- Bring any medicines or tablets your child is taking.
- You may wish to bring your child’s own toys/games and magazines/books for yourself.

What happens when we get to hospital?

On admission to the ward, your child will be seen by the nursing staff who will check your child’s temperature, weight, pulse and blood pressure.

You and your child will also be seen by the anaesthetist and the surgeon who is going to do the biopsy.

You will have the opportunity to ask any questions you may have.

How long will my child stay in hospital?

Your child usually will be able to go home on the same day. Occasionally, it may be necessary for a child to stay overnight if they feel unwell following the anaesthetic.

What about transport home?

You will need transport to take your child home. It is not advisable to travel by bus or train after a general anaesthetic in case your child is sick. If you cannot arrange private transport, please tell the ward staff on or before the day of admission.
We may be able to help with transport costs if you are on certain benefits.

Please ring the Surgical Day Case Ward on 0151 252 5557 for further advice.

**When can my child go back to nursery/school?**

Your child should be able to resume normal activities, including going back to nursery/school, within a day or so (as long as he/she feels well enough).

**Further information**

If you have any further questions or concerns, please do not hesitate to contact us.

Surgical Day Case Ward  Direct Line  0151 252 5557

Neurology Secretaries  Direct Line  0151 252 5451

This fact sheet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this fact sheet alone for information about your child’s treatment.

This information can be made available in other languages and formats if requested.