Bone marrow biopsy

Information for patients and parents

This information sheet answers some of the questions you may have about having a bone marrow biopsy. It explains the risks and the benefits of the procedure and what you can expect when you come to hospital. If you have any other questions or concerns, please do not hesitate to speak to the doctors or nurses caring for you.

Confirming your child’s identity

Before your child has a treatment or procedure, our staff will ask you to confirm their name and date of birth and check their ID band, we will also ask you to confirm your address.

If we don’t ask these questions, then please ask us to check. Ensuring your safety is our primary concern.
What is bone marrow?
Bone marrow is the spongy tissue inside our bones. It is where blood is made, including red cells, white cells and platelets. These cells are then released into the blood.

What is a bone marrow biopsy?
A bone marrow biopsy involves taking a sample of bone marrow which can then be looked at under a microscope.

The bone marrow is usually taken in two different ways:
- bone marrow aspirate, which takes a little of the liquid found in the bone marrow space
- bone marrow trephine, which takes a small sample of solid bone marrow

Bone marrow tests are usually carried out under sedation or general anaesthetic. Once your child is asleep the doctor will use a needle to take the sample from the bone. The sample is usually taken from the hip at the back. It usually takes about ten minutes, although the time taken to return to the ward from surgery might be longer, as your child will need some time to recover from the anaesthetic.

Why does my child need a bone marrow biopsy?
A bone marrow biopsy is usually needed when the bone marrow does not seem to be working properly. This might show up as low blood counts, with symptoms of anaemia, bruising, bleeding or frequent infections. Sometimes a bone marrow biopsy might also be needed if abnormal cells are seen in the blood.

Your child’s doctor will explain in detail the importance of this test for your child.
What are the risks of a bone marrow biopsy?
Every anaesthetic carries a small risk, however your child will be given the anaesthetic by a specially trained anaesthetist who is able to deal with any complications. Some of the symptoms your child may experience after an anaesthetic include feeling sick, vomiting, headache, sore throat or dizziness. These side effects are usually short-lived.

After the biopsy the site may be a bit sore and bruised. This can be treated with simple pain killers, like paracetamol. There is also a very small risk that the biopsy site could become infected, but this is extremely unusual and can be treated with antibiotics. Very occasionally, there may be significant bleeding from the bone marrow biopsy. This may mean that your child has to stay in hospital longer or need a blood transfusion.

Consent
We must by law obtain your written consent to any operation and some other procedures beforehand. Staff will explain the risks, benefits and alternatives before they ask you to sign the consent form. If you are unsure about any aspect of the procedure or treatment proposed, please do not hesitate to speak with a senior member of staff again.

What happens before the test?
You will receive an appointment letter from the ward with the date and time you need to arrive. On the letter it will include the time that your child must stop eating and drinking before the procedure. If your child eats or drinks after these times the test will not be able to go ahead.

How can I prepare my child?
You can help to prepare your child for a bone marrow biopsy by explaining the procedure in language that they understand and
encourage them to ask any questions they may have to relieve anxiety. You can reassure them that they will be asleep and it will not be painful.

**What happens on the day of the procedure?**
The doctor will explain the procedure in more detail, answer any questions you may have and discuss any concerns. They will ask you to sign a consent form, to confirm that you understand what will happen and agree to your child having the bone marrow test.

The nurse will come and ask your child to put on a hospital gown and an ID band and remove any jewellery. They will also go through a list of questions including when your child last ate and drank, and what allergies your child may have.

Your child may require a cannula (thin plastic tube inserted into a vein) and a blood test before the procedure. This is not always necessary but numbing cream can be applied if required.

**What happens after the bone marrow biopsy?**
After the operation, your child will initially be monitored for a short time in theatre until it is safe for them to return to the ward. Normally your child will be observed for four to six hours to ensure they are fully recovered (eating, drinking, walking and comfortable). The nurse will advise you when you can start encouraging fluids and food. Your child should be able to go home on the same day as the procedure.

The biopsy site will be covered with a plaster which needs to be kept on and dry for 24 hours. After 24 hours it can be removed and your child can bathe and shower as normal.
If your child has any pain please give paracetamol as instructed on the bottle, unless advised otherwise.

**Is there anything to avoid or look out for once home?**
You should seek medical advice from the GP or hospital if the following happens:

- the biopsy site bleeds
- the biopsy site oozes a lot of fluid or the skin changes colour or feels hot
- your child is not drinking fluids
- your child has any fevers

**When will we get the results?**
Your doctor will be in touch as soon as possible with the biopsy results.

**Contacts**
If you have further questions please contact the general haematology clinical nurse specialist from Monday to Friday between the hours of 9am and 5pm on 020 3299 4579.

**Sharing your information**
We have teamed up with Guy’s and St Thomas’ Hospitals in a partnership known as King’s Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy’s or St Thomas’. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.
Care provided by students
We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS
The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is located on the ground floor of the Hambleden Wing, near the main entrance on Bessemer Road - staff will be happy to direct you.

PALS at King’s College Hospital, Denmark Hill, London SE5 9RS
Tel: 020 3299 3601
Email: kch-tr.PALS@nhs.net

You can also contact us by using our online form at www.kch.nhs.uk/contact/pals

If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.