

Pre-operative testing for blood disorders

Information for patients, relatives and carers

What is sickle cell disease?

Sickle cell disease is a genetic condition which affects red blood cells. Red blood cells contain a substance called haemoglobin which carries oxygen around the body. People with sickle cell disease have an abnormal haemoglobin (known as sickle haemoglobin) which causes their red blood cells to bend out of shape. These sickle shaped cells can then become stuck in small blood vessels (capillaries) causing blockage. When this happens it is called a sickle cell crisis. This is painful and can cause damage to important organs like the brain and lungs.

How does the test work?

Sickle cell disease is detected by a blood test. The test identifies the presence of sickle haemoglobin in the blood sample. In some cases, the test may show that a person is a carrier for sickle cell. Carriers are healthy people who have a risk of passing on the disease to their own children in the future.

Why is it important to know about sickle cell disease before surgery?

Undergoing an anaesthetic and surgery places a stress on the body. This can cause a sickle crisis in people with sickle cell disease. If someone is known to have the disease, extra measures can be taken to ensure they are well supported and minimise this risk.

Having sickle cell disease can make a person anaemic. Anaemia, low levels of haemoglobin, makes it more difficult for oxygen to be carried around the body. This increases the risk of problems during an anaesthetic. Bleeding can occur during operations, and people with anaemia are less able to cope with this.

Who needs to be tested?

All children from the following ethnic backgrounds are at risk of having sickle cell disease.

- African
- Afro-Caribbean
- Middle-Eastern
- Mediterranean
- Mixed, including one of the above

In order to keep children and young people safe, our policy is to recommend testing unless we have written evidence of a previous negative test. This means testing all healthy people in order to pick up any unknown cases of sickle cell disease.

Please ask your doctor if you have any questions or concerns.

How do I make a comment about my treatment?

We aim to provide the best possible service and staff will be happy to answer any questions you may have. However, if your experience of our services does not meet your expectations and you would like to speak to someone other than staff caring for you, please contact the patient advice and liaison service (PALS) on 020 3133 0088 (Hammersmith Hospital and Charing Cross Hospitals), or 020 3312 7777 (St Mary's Hospital).

You can also email PALS at pals@imperial.nhs.uk. The PALS team is able to listen to your concerns, suggestions or queries and is often able to help sort out problems on behalf of patients. For more information visit www.imperial.nhs.uk/pals

Alternatively, you may wish to express your concerns in writing to:

The chief executive's office
Imperial College Healthcare NHS Trust Headquarters
The Bays, South Wharf Road
London W2 1NY

Contacting us

Please do not hesitate to contact us if you have any queries or concerns

St Mary's Hospital

Paediatric Outpatients Department
6th Floor, QEQM building,
Praed Street
London W2 1NY
02033125146

Hammersmith Hospital

Paediatric Ambulatory Care Unit
D Block, Ground Floor
Du Cane Road
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Alternative formats

This leaflet can be provided on request in large print, as a sound recording, in Braille, or in alternative languages. Please contact the communications team on **020 3312 5592**.