

Perthes disease

Information for patients, parents and guardians

You have been given this factsheet because your child has been diagnosed as having Perthes disease. The type of treatment they will have depends on the severity of the condition and may include outpatient care or a stay in hospital. If you have any further questions your child's healthcare team will be happy to answer them.

What is Perthes disease?

Perthes disease is a condition affecting the hip joint in children. It involves a loss of blood supply to the femoral head (the ball part of the ball and socket joint situated at the top of the thigh bone). This causes the bone to become soft and collapse (known as avascular necrosis). The femoral head may become deformed as a result and cause hip problems. Eventually the blood supply returns and the femoral head heals. This usually takes an average of two years. Although Perthes disease is a well-recognised hip disorder in children there is little understanding about why it happens. It affects boys more than girls, usually aged between three to 12 years old with the majority being aged five to seven years old.

Symptoms

Your child may have experienced an acute (sudden) onset of pain and hip irritation, or may have pain in the knee which is referred from the hip. Referred pain is discomfort experienced away from the original site. The pain may have been present for a few weeks. Some children walk with a limp and may not have full movement of their hip joint.

Testing for Perthes disease

X-rays are taken to confirm the diagnosis and blood tests are done to check there is no infection.

Sometimes a bone scan or MRI (a scan that uses strong magnetic fields and radio waves to create more detailed images) may be considered to help with the diagnosis. This will be discussed with you.

Treatment

Perthes disease varies in its severity and this dictates the treatment your child will receive. The overall aim is to keep the head of the femur (thigh bone) well-positioned in the hip socket and to maintain the movement of the hip joint. This encourages the blood supply to return and promote growth at the hip joint. Possible treatment methods are outlined below.

- If the hip is in a good position and there is no spasm (muscle tightening) your child will be seen regularly in the outpatient clinic to check their symptoms and range of hip movement. An x-ray will be taken during each hospital visit to monitor the progress of the condition. Your child will continue to be followed-up in the outpatient clinic until the head of the femur has completely healed.

- Children with hip pain and reduced range of movement may be admitted to hospital for bed rest or simple traction. Traction helps to reduce pain by resting the hip joint. It is applied using bandages and light weights. Your child will be given regular pain relief when needed. Hydrotherapy (therapy in water) may also be used to encourage easy movement of the hip joint. Once the pain and muscle spasm has settled your child will be able to go home. They may need to use crutches when walking, for comfort. Regular follow-up care will continue in the outpatient clinic.
- Your child will be admitted to hospital for a period of rest and sometimes skin traction if:
 - The head of the femur is not well-positioned in the hip joint.
 - There is loss of function of the joint and there is pain or muscle spasm.

Surgery may be considered to improve the position or function of the hip joint.

Options include:

- **Soft tissue release:** an operation to improve movement in the affected hip by releasing certain tight muscles in the groin.
- **Shelf acetabuloplasty:** an operation to enlarge the socket of the hip, using a bone graft, so that the ball-shaped head of the femur fits, to improve the cover of the femoral head.
- **Pelvic osteotomy:** an operation to alter the position of the hip socket.

- **Femoral osteotomy:** an operation to alter the position of the femoral head within the socket.

Your child's consultant will discuss the best option with you. Additional information leaflets are available explaining all the surgical procedures.

Ongoing care

Your child will have regular appointments in the outpatient clinic until they are better. It's always a good idea to discuss your child's needs with their school.

If you have any questions or concerns please contact:

The nurse practitioners: 023 8120 4991 or mobile: 07584 402438

Switchboard: 023 8077 7222 bleep 2641

Ward G3: 023 8120 6486

You can also speak to your child's GP about any concerns you may have.

Useful links

NHS Choices
www.nhs.uk

The Perthes Association
www.perthes.org.uk

If you need a translation of this document, an interpreter or a version in large print, Braille or on audiotape, please telephone **023 8120 4688** for help.

www.uhs.nhs.uk/childrenshospital