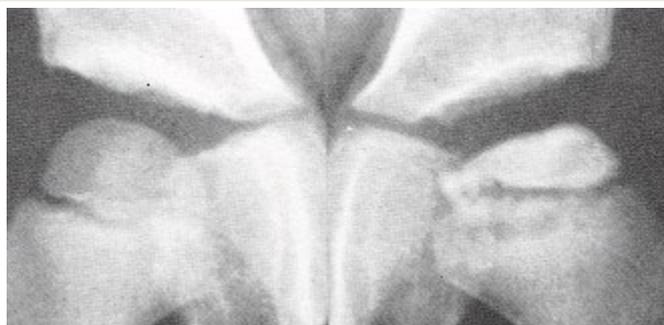


Perthes Disease

Patient information - Orthopaedic Outpatients & Paediatrics



Perthes Disease is the name applied to a condition which affects the upper end, or head, of the thigh bone (femur), where it enters in to form the hip joint. In this condition, the growing part of the head goes through a series of changes, in which it softens, may become flattened and then gradually reforms.

How is Perthes diagnosed?

Diagnosis at an early age is associated with a better hip recovery. Delayed treatment or diagnosis, after the age of eight, may affect the child's recovery. This condition must be suspected if a child limps for more than 48 hours. An X-ray must be taken. Perthes cannot be diagnosed by a blood test.

How long will it last?

The condition runs a slow course. As you have probably already noted in the case of your own child, the onset of symptoms – limp, pain in hip or knee – develops slowly and insidiously. There may be no pain at all. It must be remembered that every case is different. So, too, the recovery phase takes a long time – rarely less than 18 months; often two years or even longer. This may seem an unbearably long period of disability, but considered in relationship to your child's total life span, it is not long.

What causes Perthes Disease?

The changes of the disease are due to the growing end (epiphysis) of the thigh bone (femur), having its blood supply cut off. This results in the softening of part or all of the bony "nucleus" of the epiphysis. The smooth cartilage (gristle) covering this bone remains unchanged as it is fed by the joint fluid, so you don't have to worry about the shape of the bone in X-rays.

The cause of the interruption of blood supply is not known. The condition usually develops between the ages of about 4 and 10 years, when the stage of development of the epiphysis renders it especially liable to such interruption. It occurs much more commonly in boys than girls. When the process develops there is often, at first, pain in the hip or knee, and some muscle spasm associated with limping.

The affected part of the bone looks denser on the X-rays. Over a period of time (measured in months), this bone is gradually and irregularly absorbed in the body, giving rise to the fragmented or broken-up appearance on the X-ray.

Sometimes the round epiphysis of the femur becomes swollen beyond its normal size and if this occurs, it may become squashed out of its normal smoothly rounded shape. In these cases, the round epiphysis of the femur does not return to its normal shape but the new bone grows into a deformed shape which would remain for the rest of the child's life. This may be a source of disability in the hip but this is rarely the case.

What about the other hip?

The opposite hip may become affected, either at the same time or later, in about one in eight cases. If your child complains of an ache in the good leg, tell the doctor.

What is the treatment of Perthes Disease

Many patients with Perthes Disease merely require observation and X-ray from time to time. Often a period of bedrest with no physical activity is necessary to ease severe pain and limping. Further treatment may include using crutches or a wheelchair to avoid weightbearing. Rarely surgery may be used to protect the epiphysis (head) of the thigh bone or ball of the hip joint from deformation.

Your child can and should attend school as normal, but some restriction of physical activities may be necessary.

What of my child's future?

Perthes is a self-limiting disease. It will pass through stages described as above, and finally heal. This may take a long time, but in the great majority, the child will have a painless hip with a good range of movement. A few will be left with some stiffness and pain in the hip. Because the precise cause is unknown, results cannot always be predicted. The outlook is poorer where treatment is delayed or if the disease occurs after the age of eight. Early detection and adherence to treatment greatly improves the prognosis.

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