

# Perthes' disease

**Disclaimer: This fact sheet is for education purposes only. Please consult with your doctor or other health professional to make sure this information is right for your child.**

What is Perthes' disease?

Perthes' disease is a disease of the hip joint in children. In the early stages of Perthes' disease, your child will have a limp that often comes and goes. The limp may get worse as the disease progresses. Eventually, your child may feel pain in the knee, thigh or groin when they put weight on the leg or move the hip joint. Also, there will be less movement in the hip joint. If your child has had the condition for a long time, the affected leg may be slightly thinner and occasionally shorter.

Despite pain and limping, these children are healthy. Perthes' disease usually affects children between the ages of three and eleven years. It is more common in boys than in girls. Only one hip is affected in over three-quarters of children.

What causes Perthes' disease?

In children with Perthes' disease, the ball-shaped end of the thighbone, (called the femoral head), softens because of the lack of blood supply. The cause of this is unknown. The decreased blood supply affects the bone cells in the femoral head.

This may cause the femoral head, which is normally round, to become flattened or deformed. It no longer fits perfectly in its socket. In fact, as it heals, it may even grow outside the socket. Children with Perthes' disease usually recover. However, it may take from two to five years to repair the damaged bone. Most children with Perthes' disease recover completely. If the femoral head is not seriously deformed, normal hip function will return. Major deformity may lead to persisting stiffness and premature arthritis of the hip.

Diagnosis

In the early stages, Perthes' disease cannot always be diagnosed by x-ray. Your doctor may request a bone scan or ultrasound so that the correct diagnosis can be made.

Treatment

Treatment aims to reduce hip pain and stiffness, and prevent deformity of the femoral head. The treatment your doctor prescribes will depend on the severity of your child's condition.

Mild condition or child under five

If your child is less than five years old, or if the hip joint is only mildly affected, your child may need no immediate treatment. If there is pain or stiffness, they will need bed rest to relieve the hip joint from weight-bearing movements. Your child should not take part in any high-impact activities, like jumping or running, until the joint is healed. However, swimming and gentle cycling are OK. They will also need regular checkups with their doctor to monitor their condition.

Child over five

Children aged over five need careful evaluation to decide if they require more active treatment. Non-surgical treatment aims to keep the ball of the joint deeply seated inside the socket. This is done with a brace or plaster cast that restricts some movement but allows weight bearing and walking. The brace or cast usually needs to be worn for one or two years. If the femoral head is severely deformed, or the child refuses to wear a brace, surgery may be needed. Your doctor will discuss the procedure with you.

## Emotional support

Children with Perthes' disease are otherwise healthy and usually want to lead the same active lifestyle as their peers. If you try to limit their activity, they may become frustrated and anxious. Be understanding and supportive. Help your child to find other activities, which they enjoy, but which do not need too much weight bearing on the affected leg. Recovery is a long, slow process. Reassure your child that they will recover and will eventually be able to resume normal activities, even contact sports.

## Remember

- **Recovery is a slow process. Be patient and explain this to your child.**
- **Most children recover completely.**
- **Avoid high impact activities, like running and jumping, until the hip joint heals.**



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