



Perthes disease

Your questions answered

Q. What is Perthes disease?

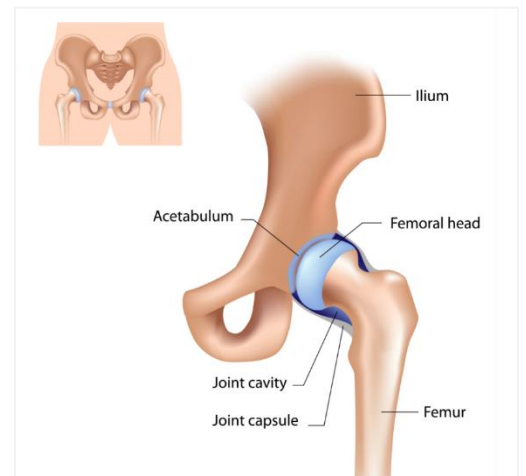
A. Perthes disease is a rare condition of the hip joint that tends to affect children between the ages of 4 and 10.

The top end of the thigh bone (femur) is shaped like a ball to fit snugly into the hip socket (acetabulum). In Perthes disease, this ball (femoral head) is softened and eventually damaged due to an inadequate blood supply to the bone cells.

Boys are more likely to develop Perthes disease than girls. In most cases, only one hip joint is affected.

For most children with Perthes disease, the long-term outcomes are good. Still, it can take two to five years for the femoral head to regrow and return to normal or close to normal.

Perthes disease is also called Legg-Calve-Perthes disease after the three doctors who independently discovered and treated the condition in the early 1900s.



Q. What causes Perthes disease?

A. Our bones need a regular supply of blood to stay healthy. Blood provides our bones with oxygen and other nutrients.

In children with Perthes disease, the blood supply to the femoral head is disrupted. We don't know why this happens. Without enough oxygen and nutrients, the bone cells of the femoral head die. This causes the bone to collapse and lose its rounded shape.

Q. What are the symptoms?

A. The symptoms of Perthes disease include:

- an occasional limp in the earlier stages
- stiffness and reduced range of movement in the hip joint
- pain in the knee, thigh or groin when putting weight on the affected leg or moving the hip joint
- worsening pain and limping as time goes by.

Q. How is it diagnosed?

A. To diagnose Perthes disease, your doctor will take a medical history and ask about your child's symptoms. They'll also conduct a physical exam to assess hip mobility and range of movement.

Your doctor will send your child for an x-ray so they can see the femoral head. This will confirm the diagnosis and show your doctor how much damage has occurred to the bone. If the x-ray is unclear, your child may also need an MRI (magnetic resonance imaging).

Q. How is Perthes disease treated?

A. In most cases, the blood supply to the hip joint returns, and the femoral head heals. This can take anywhere between two and five years. During this critical period, the bone is soft and vulnerable to damage.

Treatment of Perthes disease aims to relieve pain and stiffness and protect the rounded shape of the femoral head. Treatment may include:

- regular monitoring by your doctor, including physical exams and x-rays
- pain medicine
- physiotherapy to keep the hip joint moving and to maintain muscle strength
- swimming and exercising in water
- avoiding high-impact activities such as running and jumping
- a brace, splint or plaster may be used if your child's range of movement in the hip is affected or if x-rays show that the femoral head is losing its rounded shape
- your doctor may advise rest using crutches, a walker, or a wheelchair for a period.

Q. What about surgery?

A. Some children require surgery to treat the femoral head so that it fits snugly within the hip socket.

Q. What is the long-term outlook?

A. As mentioned, in most children, the blood supply to the hip joint returns and the femoral head regenerates. This can take anywhere between two and five years.

During this time, provide understanding and support to help your child find other activities they can enjoy that don't require weight bearing on the affected leg.

Generally speaking, the younger the child is when they develop Perthes disease, the better the outcome. The degree of damage to the femoral head also determines the long-term outlook.

Some children may develop [osteoarthritis](#) in the affected joint later in life. However, most children respond well to treatment and can return to their usual activities.

Q. Where can I get more help?

A. Many people and support organisations can help you manage your musculoskeletal condition. They include:

- your doctor
- your rheumatologist
- [physiotherapist](#)
- [exercise physiologist](#)
- [occupational therapist](#)
- Musculoskeletal Australia | msk.org.au | National Arthritis and Back Pain+ Help Line: 1800 263 265



Q. How can Musculoskeletal Australia help?

A. Our nurses are available for you to speak with about Perthes disease, pain or any other musculoskeletal issues you have. You can contact them on weekdays between 9am-5pm. Phone 1800 263 265 or email helpline@msk.org.au. We also have a range of services – including free webinars – you can access on our [website](#).

More to explore

- [Legg-Calve-Perthes disease](#)
Mayo Clinic
- [Perthes disease](#)
Healthdirect
- [Perthes Disease](#)
American Academy of Orthopaedic Surgeons
- [Perthes Kids Foundation](#)

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