

Legg-Calvé-Perthes Disease

Legg-Calvé-Perthes disease is a hip disease that occurs in growing children. Your child may start limping but feel little or no pain. Especially in young children, Legg-Calvé-Perthes disease may heal on its own with no treatment needed. However, some children need treatment to prevent or correct hip deformities.

What is Legg-Calvé-Perthes disease?

Legg-Calvé-Perthes disease affects the “ball” of the hip joint at the top of the thigh bone (femur) in growing children. For some reason, the blood supply to this part of the bone (the ball) becomes interrupted. Part of the bone dies, resulting in pain and limping. Treatment depends on your child’s age and the severity of his or her symptoms.

What does it look like?

- Your child starts limping. Limping usually develops gradually over time. It tends to get worse when your child is active.
- Most children do not have much pain. When present, pain is in the front of the thigh, anywhere between the hip and the knee.
- Hip motion may be limited.
- Sometimes, both hips are involved.

What causes Legg-Calvé-Perthes disease?

The blood supply to the ball of the hip joint becomes reduced. The cause is unknown.

Whatever the cause, the reduced blood supply causes some of the bone to die. It may be only a small area, or the entire ball may be affected. The bone stops growing until new blood vessels can develop. Treatment may be needed to keep the ball in its proper position in the hip socket, so that the new bone grows in the proper shape.

What are some possible complications of Legg-Calvé-Perthes disease?

If the bone does not regrow in the proper way, various types of hip deformities may develop.

Children with Legg-Calvé-Perthes disease have a higher risk of arthritis of the hip in adulthood. This risk is greater if your child is older when Legg-Calvé-Perthes disease

develops, or if the hip joint is not normal after the bone heals.

What puts your child at risk of Legg-Calvé-Perthes disease?

Although the cause is unknown, certain risk factors for this hip disease have been noticed:

- Legg-Calvé-Perthes disease most commonly occurs around 6 to 7 years but can occur at any age between 2 and 12 years.
- Legg-Calvé-Perthes disease is more likely to be found in boys than in girls. However, the problem may appear at an earlier age and tends to be more severe in girls.

Can Legg-Calvé-Perthes disease be prevented?

- Since the cause is unknown, there is no known way to prevent Legg-Calvé-Perthes disease.
- Once the condition is present, early treatment is important to reduce the risk of hip deformity.

How is Legg-Calvé-Perthes disease treated?

Depending on your child’s age and the severity of Legg-Calvé-Perthes disease, options range from close observation with no or occasional treatment to bracing or to surgery. Your child will probably be sent to a bone and joint specialist (an orthopedic surgeon) for further evaluation.

- *No treatment.* Especially if your child is under 6 years old, he or she may receive no specific treatment at first. Frequent medical follow-up, including doctor visits and x-rays, may be recommended.
- *Temporary treatment.* Depending on his or her symptoms, bed rest or stretching exercises may be recommended as your child’s hip heals. During the healing process, your child may have episodes of pain and reduced motion.

More definitive treatments may be needed to make sure the damaged bone heals properly and to prevent arthritis from developing. These treatments are more likely to be needed if your child is older, overweight, or has loss of hip motion.

- *Bracing.* A brace, or sometimes a cast, may be recommended. The goal is to keep the ball of the joint inside the hip socket. This ensures that the healing bone will take on the proper shape to fit inside the hip joint. Your child may have to wear the cast or brace for a year or longer, until the hip bone begins to heal.

352 ■ Legg-Calvé-Perthes Disease

- *Surgery.* Sometimes surgery rather than bracing is recommended. If your child's Legg-Calvé-Perthes disease does not heal properly, surgery may be needed to correct the hip deformity.



When should I call your office?

Call your orthopedic surgeon's office or our office if your child develops new or severe pain, limping, or loss of hip motion during treatment for Legg-Calvé-Perthes disease.