Legg-Calvé-Perthes Disease

What Is Legg-Calvé-Perthes Disease?

Legg-Calvé-Perthes disease (also known as Perthes disease) is a condition in which the supply of blood to the hip bone is temporarily interrupted, causing the bone to deteriorate. Gradually, the old bone dissolves and new bone grows in its place. This process typically occurs over a period of two years or more.

Perthes disease affects the hip joints; it does not develop in other joints.

What Causes Perthes Disease?

The cause of Legg-Calvé-Perthes disease is unknown. The condition usually occurs in children from 4 to 8, but can occur between ages 2 to 14.

The disease often develops in children who are very physically active and small in size for their age. In 10 to 15 percent of cases, both hips are affected, typically at different times. In most cases, however, the condition only occurs in one hip.

Legg-Calvé-Perthes disease is rare, affecting roughly 5.5 of 100,000 children per year. The condition affects boys three to five times more than girls.

Legg-Calvé-Perthes Disease Symptoms and Effects

If your child has Legg-Calvé-Perthes disease, symptoms can include:

- Limping.
- Pain in the groin area, hip, inner thigh or knee.
- Some limitation of hip motion.
- Weakness in the thigh muscle.

Perthes Disease Treatment and Diagnosis
To diagnose Legg-Calvé-Perthes disease, we use common radiology services like X-ray or MRI.

As leaders in pediatric orthopedics, skilled surgeons and nurse practitioners at Gillette Children’s Specialty Healthcare are experts in diagnosing and treating Legg-Calvé-Perthes disease.

Depending on your child’s age and condition, orthopedic experts might recommend a combination of tests and treatments for Legg-Calvé-Perthes disease, including:

- **Physical therapy**, which includes exercises to stretch joints and strengthen muscles, which helps improve mobility and range of motion.

- **Pain medication** and non-steroidal anti-inflammatory drugs.

- **Modifying your child’s activities** (for example, avoid high-impact activities like jumping) to prevent further injury to an already weakened bone.

- **Surgery** can help to release tight muscles or to reposition the bones of the hip joint.

- **Wearing a brace** for a short time following surgery can help maintain range of motion and promote healing.

If your child is younger than 4 or if the disease only affects a small portion of the hip bone, treatment might not be necessary—only observation.

Once your child’s hip has healed completely, the disease is unlikely to return. Gillette specialists monitor for signs of the disease in both hip joints throughout treatment, and usually for the first two years following diagnosis.

During the observation period, your child might have regular physical exams or a special X-ray, called an arthrography, to evaluate the surface of the hip bone. An arthrography differs from a standard X-ray because a special dye is injected into the hip joint to produce a more detailed image.

The main goals of Perthes disease treatment are:

- Keeping your child as comfortable as possible.
- Maintaining adequate range of motion of the hip.
- Keeping the ball of the hip within the hip socket during the healing process.

**Integrated Care**

At Gillette, you’ll benefit from the in-depth knowledge of one of the country’s largest groups of pediatric orthopedic specialists. The family-centered environment at Gillette will help your child successfully heal and prevent damage to the hip bone.

An integrated team will help you navigate the services you need and often, your family will see a team of specialists during a single visit to one location. For Legg-Calvé-Perthes disease, treatment might include working with experts in:
• Orthopedics.
• Orthotics.
• Physical therapy.
• Radiology and imaging.
• Rehabilitation medicine.
• Rehabilitation therapies.