

**What is Legg-Calvé-Perthes Disease?**

Legg-Calvé-Perthes Disease (also known as Perthes Disease) is a rare childhood condition in which the blood supply to the top of the thigh bone (femur) is temporarily disrupted, causing the ball-shaped head of the thigh bone (femoral head) to collapse, which results in pain and inflammation in the hip joint. Eventually the blood supply returns and the bone heals. Recovery usually takes a few years as the bone around the femoral head reforms. The cause of Perthes is unknown, and currently, there is no cure. - *Perthes Kids Foundation* ©2020

**Signs and Symptoms:**

Perthes affects roughly 1 in 20,000 children. It is four times more common in boys than girls, and the majority of cases are diagnosed between 5-8 years of age, right or left hip, or both (10% cases, bi-lateral). Some of the signs include:

- Walking with a limp (can be a “painless” limp)
- Limited range of motion and stiffness in the hip, groin, thigh, or knee
- Pain aggravated by activity in the hip, groin, thigh, or knee



**How is Perthes diagnosed?**

A diagnosis of Perthes Disease should be confirmed by a pediatric orthopedic specialist. This diagnosis can be based on a child’s medical history, a physical examination that assesses range of motion, and imaging- including x-ray and MRI. A blood test may also be done to rule out other conditions.

**How is Perthes treated?**

Treatment is done to help reduce or minimize the damage to the hip joint. Many children with Perthes do well without any surgical intervention and the hip regrows into a good shape. The challenge in treating children with Perthes is that no two cases are the same. Pain relief and restricting high-impact activity are commonly used to relieve symptoms. Physical therapy and/or hydrotherapy are often prescribed in order to maintain strength and range of motion. Other possible treatments may include:

- Crutches and/or wheelchair (to keep pressure off of the hip, minimizing damage to the bone)
- Traction (used to improve the motion of the hips)
- Leg braces or casts (helps keep the ball of the femur in the hip socket and keeps the hip muscles stretched)
- Hip surgery (may be considered to improve the position and containment of the ball into the socket and protect it from losing its round shape)

**Long-term Outlook:**

In all children diagnosed with Perthes, the blood supply to the hip will improve, whether they have surgical intervention or not. The hip continues to grow and remodels over time. The long-term outcome, into adulthood, depends on the final shape of the hip joint once regrowth is complete.

