Legg-Calve-Perthes Disease

What is Legg-Calve-Perthes disease?
Legg-Calve-Perthes (LCP) is a disease of the hip. The hip is a ball and socket joint. The ball of the femur bone (thigh) fits into the socket (acetabulum) of the pelvic bone. The normally round head of the femur becomes misshapen because of unexplained, temporary loss of blood supply. The result is pain and disability. Ten percent of children with LCP in one hip will get it in the other hip 1 to 2 years later.

What is the cause?
Although there can be many reasons why the blood supply to the femoral head gets blocked, the exact cause of LCP is not known.

Who gets Legg-Calve-Perthes?
LCP is more common in boys than girls. The age range is from 2 to 12 years, but it most often occurs in children between 4 and 8 years old.

What are the symptoms?
The symptoms are pain, walking with a limp, and stiffness of the hip joint.

There are four stages to the disease process, which can take 1 to 2 years to complete:

Stage 1: Inflammation/Collapse
The lining of the hip joint becomes inflamed with increased fluid in the joint. During this early phase, your child may complain of mild discomfort and may limp. Most cases of the disease are not diagnosed during this stage because the X-rays look normal and the symptoms are mild or absent.

Without proper blood supply, the bone weakens and dies and a fracture of the ball often occurs. Your child will usually have some pain and limp at this time.

To Learn More
- Orthopedics
  206-987-2109
- Ask your child’s healthcare provider
- seattlechildrens.org

Free Interpreter Services
- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.
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#### Stage 2: Fragmentation
This is the start of the healing process, during which the dead bone is reabsorbed by the body. In X-rays taken at this time, the bone looks “moth-eaten.”

#### Stage 3: Reossification
During this stage, new living bone is deposited to re-establish and gradually strengthen the ball (head of the femur). The new ball may be enlarged or flattened. Proper treatment can help to minimize the deformity. Pain and limp will decrease.

#### Stage 4: Remodeling
Healed bone reshapes itself as your child grows. How the ball and socket reshape together determines how well the hip will function for the rest of your child's life.

### What is the treatment?
Treatment depends on your child's age and how bad the symptoms are. The goals of treatment are to decrease symptoms as the hip goes through the four stages, and to prevent the hip from slowly dislocating. Early in the process, it may be best to watch your child and keep them from active or rough sports. If symptoms during activity continue or get worse, have your child rest for short periods. You may give anti-inflammatory medicines such as ibuprofen if recommended by your healthcare provider. Check with your doctor first before giving any type of medicine to your child. Crutches can be used if the symptoms are severe.

### When is surgery needed?
Surgery may be needed in an older child or in more severe cases. Surgery is directed at preventing slow dislocation of the hip; that is, keeping the ball inside the socket. Surgical options include casting and cutting the thigh bone and/or the pelvic bone.

### What follow-up is needed?
During the active stage of the disease your child is seen every four months. Visits are required less often as your child progresses through the healing stages. Follow-up X-rays are needed until your child has finished growing.

### Summary
There is no known cause of Legg-Calve-Perthes disease. The outcome is usually good, but patience is required because the disease can last several years.