Legg-Calve-Perthes Disease

This disease is a condition often occurring in children that affects the hip. The pelvis and the thighbone meet in a ball-and-socket joint. Legg-Calve-Perthes happens when the blood supply is temporarily interrupted to the ball portion of the joint. This is the part of the bone that tends to be affected. Even with considerable research, the cause of the condition is unknown. The condition is commonly shortened simply to Perthes.

Even though the disease can affect children of any age, it commonly occurs in boys between the ages of four and eight. Treatment is focused on being able to keep the ball portion of the joint as round as possible in the healing process, which can range from two years on up.

The hip goes through a number of stages. Firstly there is a lack of blood flow to the ball of the hip, known as the femoral head. This causes cell death (known as osteonecrosis, or avascular necrosis), and that leads to softening of the bone and deformation of the ball. The bone tends to re-mold or re-form to some degree over a 2 year period. During this time, children often adapt different gaits, or find other ways to get around like scooting along on their bottom using their hands to propel them.

Long term, the shape of the hip joint can be changed and this can lead to early arthritis many years later.

Perthes Disease Anatomy

The hip is a ball and socket joint connecting the thigh bone (femur) to the pelvis socket. It allows the leg to move. The hip joint is composed of multiple parts, including that of the lesser and greater trochanters. The greater trochanter is the place where countless muscles from the buttocks allow and meet to promote hip abduction and movement from one side to the other. When it comes to the lesser trochanter, this is the point where the iliopsoas muscle is attached to the hip joint to provide for forward movement within the leg, which is otherwise referred to as hip flexion.

How to Treat/Manage Perthes' Disease:

1. **Exercises**
   As the hip becomes stiff, the ligaments and muscles surrounding it may become shorter. Strengthening and stretching exercises work to keep the hip flexible.

2. **Crutches**
   In certain instances, the child might need to avoid bearing any weight on the affected hip. Using crutches will help in protecting the joint and keeping it from undue pressure.

3. **Traction**
   If you find that your child is in a tremendous amount of pain, a short period of bed rest and traction might do wonders. Traction is a steady, gentle pulling force on your child's leg.

4. **Casts**
   To maintain the femoral head deep within the socket, the doctor might recommend a specialized type of cast that works to keep both of the legs spready spart widely for a period of four to six weeks.

5. **Surgery**
   Non-surgical treatments don't tend to work as well in children who are older than seven years of age. It might be because their bones arent as moldable as children who are younger. Surgery is also a better choice for those who have more severe deformities.

Tips:

- Always seek expert help. Your doctor should refer you to a pediatric specialist. Seek help from a therapist with experience in this field too, or a therapist who has rehabilitated a Perthes' hip.
- Even though the disease can affect children of any age, it tends to occur often between the ages of four and eight.
- Perthes' is up to five times as common in boys as it is in girls.
- White children are a lot more likely to develop the diesease than black children.
- In a small amount of instances, the disease tends to run in families.
- Avoid participating in high-impact activities, such as jumping or running, because they can increase the damage incurred to the already weak bone.