Legg-Calvé-Perthes disease (LCPD) is a necrosis of the femoral epiphysis that occurs during the growth stage and evolves in consecutive stages with varying degrees of intensity and extension. It is self-limited, caused by ischemia of unknown origin, and involves a complex course, from the time of diagnosis to the decision of providing treatment. The latter needs to be understood for it to be effective and delay or prevent the occurrence of the pain resulting from the arthrosis that may occur as a sequela.

Keywords
- hip necrosis
- avascular necrosis
- osteotomy
- ischemia

Abstract

Legg-Calvé-Perthes disease (LCPD) is a necrosis of the femoral epiphysis that occurs during the growth stage and evolves in consecutive stages with varying degrees of intensity and extension. It is self-limited, caused by ischemia of unknown origin, and involves a complex course, from the time of diagnosis to the decision of providing treatment. The latter needs to be understood for it to be effective and delay or prevent the occurrence of the pain resulting from the arthrosis that may occur as a sequela.

Suggestion on how to quote this paper:

Introduction.

Legg-Calve Perthes, described simultaneously in 1910 by Arthur Legg, Jacques Calvé Perthes and George. The etiology of this disorder is unclear, so it is unclear what causes the interruption of blood flow to the femoral epiphysis.

This disease is a dynamic entity, so the results of physical examination, imaging studies are heavily dependent on the stage of disease at presentation. The classifications described by many authors, looking for ways to establish a prognosis of the evolution of the disease and institute appropriate treatment.

Definition.

Pediatric pathology is characterized by acquired disorder of the proximal femoral epiphysis, characterized by hypertrophy of cartilage and bone necrosis. The cause is idiopathic impaired circulation. Usually this disease affects children from 4 to 10 years; low socioeconomic stratum predominates in children over girls with a ratio of 4 to 1, affecting one in every ten thousand children.

Aetiology.

In reviewing the world literature found that there have been many studies attempting to find the etiology of ELCP without success and to date remains unknown. Its direct cause is ischemia of the femoral epiphysis causes necrosis of the femoral head.

Evolution.

Initially presents an interruption of blood supply (ischemia), causing necrosis immature femoral head and sclerosis in the epiphyseal nucleus. Then, an fragmentation and subchondral femoral head fractures, bone resorption, and remodeling reossification femoral head, resulting in no doubt altered the length of the limb deformities, subluxation or both of the femoral head and the acetabulum.

Case Report.

This is a 7-year-old who is brought to consultation by their parents present in the hip pain and pain when walking. It is therefore performed a physical examination and radiographs (panoramic radiograph of the spine, pelvis bone AP, both coxofemoral), found alterations in the left femoral head, with remodeling of the same, and signal changes in femoral neck.
Treatment.

Once diagnosed, Legg-Calve-Perthes disease, is made a treatment plan with ozone in order to ensure the safety and efficacy of ozone applied rectally, intraarticular and extraarticular, based on one of the beneficial properties of gas "improves circulation and release of oxygen from the blood."

The protocol consisted of the application of 20 sessions of rectal ozone in doses of 120 cc with a concentration of 20 mcg and 4 sessions of ozone intra / extra-articular dose of 5 cc at a concentration of 10 mcg. The duration of treatment was 3 months so.

The therapeutic dosages are divided according to the effect of three (3) types: low (immunomodulation), average doses (stimulatory effect), high dose (immunosuppressive effects).

Materials used.

Ozone generator, oxygen, syringes, needles, catheters.

Results.

Once the treatment is for Rx, obtaining images that show a marked improvement in the femoral head, the consultations of clinical control, the patient is asymptomatic (without pain or limping) by moderate sports activities.

With the application of ozone rectally, intraarticular and extraarticular no adverse reactions, on the contrary, showed that the treatment is effective in these cases, due to improvement of symptoms and radiological imaging of the patient.