Introduction
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Perthes' disease is an ischaemic lesion of the ossific nucleus of the femoral head (Somerville, 1971). It is a self-limiting disease (Paterson and Savage, 1986).

While it has long been known that the basic process in LCPD is one of ischaemic necrosis, the precise precipitating cause of the ischaemia has not yet been established (Sharrard, 1993).

The prognosis in the management of Perthes' disease depends entirely on appropriate treatment following an early and accurate diagnosis of the condition and on the state of revascularization at the time of diagnosis (Paterson and Savage, 1986).

The principle of treatment of patients who have LCPD is functional containment of the femoral head in the acetabulum. Containment may be improved operatively either by redirecting the neck of the femur or by reposioning the acetabulum (Sponseller et al., 1988).

This prospective clinical trial concerned with evaluation of the results of operative containment procedure for cases of LCPD using either femoral, innominate or both osteotomies.

HISTORICAL BACKGROUND

In 1910, **Legg, Calvé,** and **Perthes** in United States, Germany and France respectively independently described the disorder of the hip now known variously as Perthes' disease, Legg-Perthes, Legg-calvé- Perthes' disease (L.C.P.D), and coxa plana. During the ensuing fifty years this entity was the subject of a plethora of theoretical speculations but a paucity of scientific investigations. It was generally accepted, without any scientific evidence whatsoever, that in Legg-Perthes' disease avascular necrosis of the femoral head caused the bone to become soft and fragmented which, in turn, led to collapse and deformity. Because of this unproved and now obsolete concept, management was based on the principle of prolonged relief of weight-bearing on the involved femoral head and consequently involved the use of so-called weight-relieving braces, or even confinement to bed in an institution for varying number of years.

During these first five decades, apart from a few orthopaedic surgeons who recommended nihilistic neglect, the majority treated virtually all children with Legg-Perthes' disease by some means of prolonged relief of weight-bearing regardless of their age or the extent of involvement of the femoral head. Little thought was given to the general psychological or physical development of the

afflicted child. Fortunately, during the subsequent two decades scientific investigations shed considerable light on this disease (Salter, 1984).

Nowdays, the major goals of treatment in LCPD are femoral head containment and maintenance of hip motion. The principle of femoral head containment is based on the concept that the capital femoral epiphysis is vulnerable to deformity during the healing stages of LCPD and that a good outcome depends on maintaining femoral head sphericity by containment during the healing phase. This is most frequently accomplished by an ambulatory abduction orthosis or a Petrie-type cast; however, surgical containment methods may be used in cases where it is desirable to obtain a permanent correction and to minimize restriction of the child. Options for surgical containment include a varus or varus-derotational osteotomy of the proximal femur, an innominate osteotomy or combined Salter innominate and varus femoral osteotomy (Crutcher and Staheli, 1992).