

## Short Communication

# Legg-Calve-Perthes treatments and relation between type of treatment and duration of the disease

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### Abstract

**Background and Objective:** Legg-Calve-Perthes disease is one of the most common disabling diseases of childhood and if not managed appropriately is truly disabling. Severity of disease and duration of disease onset are main determinants of choosing treatment strategy of either conservative management or surgical treatment. This study was designed to determine Legg-Calve-Perthes treatments and relation between type of treatment and duration of the disease.

**Materials and Methods:** This descriptive study was carried out on 50 patients with Legg-Calve-Perthes disease admitted in Ghaem Hospital in Mashhad, North East of Iran from 1995-2005.

**Results:** According to age of patients and severity of disease, the subjects allocated to conservative (11 patients) and surgical treatment (39 patients). Clinical improvement signs include pain reduction, range of joints motion, which were evaluated by physical examination and taking medical history of patients. In conservative group, only 4 patients assumed to be successfully treated with mean age of 7.25 years and the mean interval between disease onset and beginning of treatment was 2.25 months. Surgical group had mean age of 10.85 years and mean interval between onset of disease and initiation of treatment was 18 months. Conservative group showed less severe form of disease (lateral pillar group A and group B with age less than 8 years), but patients treated surgically were more severely involved (lateral pillar group B with age more than 8 years and group C).

**Conclusion:** This study showed that age and severity of disease (lateral pillar classification) are main elements in treatment strategy (choosing conservative VS surgical treatment). The interval between onset of disease and onset of treatment strongly affects treatment success.

**Keywords:** Legg-Calve-Perthes disease, Lateral pillar classification, Proximal femoral osteotomy, Innominate bone osteotomy

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