**Treatment Outcome of Posterior Dislocation of Hip Associated with Acetabular Fracture**

**(A Comparative Study between Surgical and Nonsurgical Treatment)**


**Abstract**

**Background:** Fracture dislocation of the hip is a result of high energy trauma and can lead to hip dysfunction and patient disability. Stable and perfect reduction of the femoral head and acetabular wall are the two most important prognostic factors. The aim of this study was to compare the results of surgical treatment with nonsurgical treatment in this injury.

**Methods:** In a period of 2 years, the cases of posterior hip dislocation with acetabular rim fracture were studied. Two groups were recognized after closed reduction of dislocation. First group (18 patients) received open reduction and plating of acetabular fracture followed by 3-5 weeks of skeletal traction. The second group (14 patients) was treated by skeletal traction of 5-6 weeks.

The patients were evaluated for hip motion, stability, complications or nerve injury and early osteoarthritis, and acetabular fracture index in average one year follow-up. The results were compared in the two groups.

**Results:** Restriction of hip motion was more common in nonsurgical patients. Sciatic nerve injury was noted in 3 patients of surgical group with recovery in 2 of them. Perfect reduction was seen in 17 (94.4%) of surgical and 9 (64.3%) of nonsurgical patients. Primary osteoarthritis was seen in 7 patients (38.9%) of surgical and 8 patients (57%) of nonsurgical group. AFI in surgical and nonsurgical groups were 55.2% and 32.5% respectively. Surgical patients had better functional results.

**Conclusion:** Articular damage by initial trauma, perfect reduction of the hip and stable anatomic fixation of the acetabular wall are the important prognostic factors. The patients with surgical treatment obtain better functional outcome.

**Keywords:** Hip dislocation; Acetabulum; Fractures, bone

* *Orthopaedic surgeon
Jondishapooy University of Medical Sciences, Ahvaz, IRAN

**Corresponding author:** Seyyed Abdolhossein Mehedinassab
Imam Khomeini Hospital, orthopaedic unit, Ahvaz, Iran
E-mail: hmehdinasab@yahoo.com

Received: 6.5 months before printing ; Accepted: 10 days before printing