

**Delayed Hospital Presentation of Acetabulum Fractures:  
Assessment of Functional Outcome at 1-Year Follow-up**

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**Purpose:** Delayed acetabulum fractures are common injuries among young adults presenting to health care centers in low-middle-income countries. Morbidity and mortality from these injuries are high and worse without proper surgical treatment to facilitate early hip function. Due to resource constraints, specialized health-care centers are not easily accessible to the communities and those patients resort to traditional community bone-setters for treatment. The objective of this study was to assess functional outcomes after surgical reduction and internal fixation of acetabulum fractures with reconstruction plate at 1-year follow-up.

**Methods:** This is a prospective case series, conducted at a tertiary referral hospital. Adult patients with acetabulum fracture were enrolled into the study. Intervention was open reduction of acetabulum fracture and fixation with reconstruction plate and screws. Primary outcome was hip function as measured by the modified Harris hip score (mHHS) at 1 year after surgery, Secondary outcomes were reoperation and infection rate at 1 year after surgery.

**Results:** 23 patients were included in the study, 19 (82.6%) male and 4 (17.4%) female with a mean age of  $34 \pm 11.5$  years. All cases were due to motor vehicle accident. Early presentation was in 10 (43.5%) and delayed presentation in 13 (56.5%) of the cases. Fractures were classified by AO/OTA classification of acetabulum fractures: OTA / AO 62A1 in 15 patients (65.3%), OTA / AO 62A2 in 3 (13%), OTA / AO 62B2) in 3 (13%), and OTA / AO 62B1.2b in 2 (8.7%). Kocher-Langenbeck approach was used in 19 cases (82.6%) and modified Gibson approach in 4 (17.4%). Mean mHHS at 1 year was  $64.30 \pm 16.6$  with 47.8% categorized as a good score. There was 1 case (4.4%) of reoperation and 3 cases (13%) of osteonecrosis advised for total hip replacement surgery.

**Conclusion:** Surgical reduction and internal fixation of acetabulum fracture with reconstruction plate achieved good hip function in the majority of patients with delayed hospital presentation among patients with acetabulum fractures.