

## **Combined Pelvic And Acetabular Fractures; Suggested Order Of Fixation And Treatment Plan.**

**Mahmoud Abdel Karim**

Cairo University Hospitals, Cairo, Egypt

**Objective:** These combined injuries entail unique management and reconstructive procedures. Patients usually have high injury severity, require lengthy hospital stays and frequent ICU admission. The objective was to present our experience with this injury combination, describing a treatment plan, fixation methods and order .

**Methods:** 42 cases of combined acetabular fractures and pelvic ring injuries were managed in this prospective case series. There were 26 males (62%) and 16 females (38%).. All injuries were high energy injuries. The mean age was 37 years, range (17 - 65 years). The commonest acetabular fracture was transverse fracture pattern (33%) and the commonest pelvic fracture was AnteroPosterior Compression (APC II&III) type in 48% of cases. The most frequent injury combination was transverse acetabular fracture with disruption of the sacroiliac joint. Single, combined and occasionally extensile approached have been used to fix these injuries. Methods of fixation included ORIF (open reduction and internal fixation), percutaneous fixation and external fixation.

**Results:** For the acetabular component, anatomic reduction was achieved in 35% of cases, satisfactory reduction in 59 % and unsatisfactory reduction in 6 %. For the pelvic component, excellent reduction was achieved in 64%, good reduction in 28.5 % and fair reduction in 7.5 % of cases. The mean Merle D'Aubigne and Postel score (for the acetabular component) was 15/18 and the mean Majeed score (for the pelvic component) was 84/100 for patients who were working and 68/80 for patients who do not work. The functional outcome scores were lower in patients who presented late.

**Discussion & Conclusion:** This study showed that this combined injuries necessitates proper optimization of the patient general condition and haemodynamic status. It requires as well proper classification, preoperative planning and the use of well tailored approaches and fixation order and methods to manage both components of injury properly.