

SINGLE MODIFIED STOPPA APPROACH FOR THE TREATMENT OF T-TYPE ACETABULAR FRACTURE WITH ACETABULAR PROTRUSIO : A CASE REPORT

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Introduction: Acetabular fractures are among the most complex injuries treated by orthopaedic surgeons. The first known descriptions of surgical fixation of acetabular fractures were case reports in 1943. In 1980, Letournel demonstrated 80% good-to-excellent results in 492 hips. The quality of the articular reduction has been shown to be of utmost importance in determining clinical outcome.

Discussion: We have reported a case of right T-type acetabular fracture with acetabular protrusio secondary to a high velocity motorvehicle accident in a 18-year-old healthy gentleman. Patient was a motorbike rider and landed in a sitting position with pain and swelling over right hip region. Clinical examination revealed positive pelvic spring with echymoses formation over right hip region with limb length discrepancy. CT pelvis showed right T-type acetabular fracture with acetabular protrusio. Fractures were temporary immobilized with lateral traction and supracondylar pin skeletal traction. Risk of avascular necrosis of right femoral head explained in case Kocher Langenbeck approach was required for reduction of posterior column. Definitive fixation with non-locking pelvic reconstruction plating and buttress plating of right posterior column via single Modified Stoppa approach was done 7 days post trauma. After 1 year of physiotherapy, he is ambulating without aid with a united fracture without limb length discrepancy and no evidence of avascular necrosis of right femoral head.

Conclusion: In a large study of operatively treated acetabular fractures, Matta noted an anatomic reduction for 96% of elementary fracture patterns and 64% of associated fracture patterns and identified T-shaped fracture with an associated posterior wall fracture as the "worst case scenario" as this fracture is both difficult to reduce and has a high rate of articular cartilage damage. This finding was echoed in a report of 161 operatively treated acetabular fractures followed for 10 years. Complications of acetabular fracture surgery include infection, nerve injury, heterotopic ossification, avascular necrosis, thromboembolic, malunion and nonunion. Anatomic reduction is the most influential factor predictive of clinical outcome.