

DODGING THE BULLET WITH THE GANZ TROCHANTERIC OSTEOTOMY : A CASE REPORT

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Introduction: Posterior hip fracture-dislocation comprising of femoral head (Pipkin type IV) and neck fracture with posterior acetabular wall fracture is very rare. We present a case in which open reduction and internal fixation(ORIF) via Ganz Trochanteric Osteotomy (GTO) and reverse triangle femoral neck screw fixation was performed.

Discussion: A 40 years-old male was involved in a motor vehicle accident and presented with right hip pain. CT scan revealed a severely comminuted fracture of right neck of femur with intra-articular involvement and right hip dislocation. Patient was planned for ORIF of the femur and acetabulum due to its complexity. The Kocher-Langenbeck approach was used with the GTO technique. Upon delivery of the femoral head, anatomical reduction of fracture fragments and fixation with three headless compression screws. Intraoperatively, the right hip was unstable on telescoping test and hence two cortical screws were inserted to fix the posterior acetabular wall fracture. Finally the neck of femur fracture was addressed with the reverse triangle configuration with 3 cannulated screws. With the loss of the posteromedial calcar support, part of the greater trochanter was used as structural bone graft to restore the medial buttress to aid in stability. Hip Fractures-dislocations require prompt reduction to decrease risk for avascular necrosis. Free capital fragments should be fixed and stabilized via open reduction in order to decrease the progression of early degeneration of the hip joint. Intraoperatively, vascularization and structure of femoral head and acetabulum should be examined. The GTO technique offers protection to the femoral head blood supply, reducing the operation time and blood loss, which aids to anatomically fix the femoral head and effectively reduce postoperative complication.

Conclusion: Ganz Trochanteric Osteotomy helps in reducing incidence of serious sequelae and the fraught of complications such a AVN of the femoral head in a young patient.