

Rare Pipkin Fracture: Vertical Split Fracture Of Femoral Head With Ipsilateral Neck Of Femur Fracture

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INTRODUCTION:

Femoral head fracture is a relatively uncommon injury. 6% - 16 % of posterior hip dislocations associated with a femoral head fracture.¹ Femoral head fracture is associated with poor functional outcome.¹ We present a case of such injury and the principle of management.

CASE REPORT:

A 40-year-old lady had a motor-vehicle accident and sustained closed fracture dislocation of left hip. Pelvic radiograph reviewed dislocated left hip with displaced neck of femur fracture and split femoral head fracture. Computed tomography showed no acetabulum fracture. Pipkin type III head of femur fracture was diagnosed. We performed open reduction, screw fix femoral head and neck of femur. The femoral head fragments were reduced and fixed with 2 partially-threaded cancellous screws. Neck of femur was able to be fixed with only 1 cannulated screw and K wires. Hip joint was reduced and stable. Post-operative 3 months, hip radiograph showed callus formation. However the flattening of femoral head seen may still indicate avascular necrosis. Partial weight bearing ambulation was allowed and she is still under observation and follow up.

DISCUSSIONS:

Pipkin type III hip fracture almost always occurs in young patients and it is the rarest Pipkin fractures². Treatment mostly operative and the principle is to restore anatomy and achieve joint stability. Limited literature discussed treatment of Pipkin III fracture, most recommended primary osteosynthesis in young patient and primary arthroplasty in elderly².



Figure 1: Femoral head and neck fracture dislocation



Figure 2: Split femoral head and neck fracture



Figure 3: Post-op 3 months, flattening of femoral head

CONCLUSION:

In management of femur head fracture, surgeon should make wise decision based on severity, patient's expectation and available resources.

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