

Atypical Combination Of Traumatic Hip Dislocation Associated Femoral Head Fracture With Ipsilateral Shaft Fracture And Acetabulum Fracture

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INTRODUCTION:

Femoral head fracture is rare fracture that occurs due to high energy trauma and is usually associated with acetabulum fracture. Not many cases of hip dislocation associated with femur head, ipsilateral femur shaft and acetabular fracture has been reported till date. This combination of fractures is challenging to manage as the fractures are not stable and involves the articular surfaces of the hip joint.

MATERIALS & METHODS:

An 18 years-old gentleman involved a high velocity motor vehicle accident, presented to emergency department with pain over right hip and thigh. On examination, right hip and thigh was tender, deformed and unable to move. Right lower limb pulse was good and patient was able to dorsiflex right foot. Radiographic imaging showed right femur head and shaft fracture with right posterior hip dislocation and right acetabular posterior wall fracture. Attempts to reduce the right hip by close reduction failed. We proceeded with open reduction of the right hip immediately using Kocher-Langenbeck approach. Screw fixation of the right femoral head and right femoral interlocking nail was performed in the same setting.

RESULTS:

Immediately post fixation, right hip telescopic test was stable. At 4 months postoperative, right hip range of motion is similar to the opposite site and able to partial weight bear. There were no signs of right hip avascular necrosis on x-ray.



Figure 1: CT scan right hip

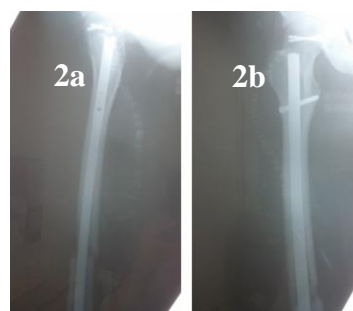


Figure 2: Postoperative X-ray

DISCUSSIONS:

Commonly, femoral head fractures are classified using the Pipkin's classification. However, this complex fracture does not fit into any current classification system. Traumatic hip dislocation is an orthopedic emergency which needs early reduction either by close or open reduction to prevent avascular necrosis of the femoral head. In this case, patient was position in lateral and Kocher-Langenbeck approach was used for the ease of hip reduction. Thru this approach; hip reduction, screw fixation of the femoral head and inspection of the posterior acetabulum wall was able to carry out using a single incision. With the patient in lateral position, interlocking femoral nail was done via K-nail method. Femoral head was fixed and salvage instead of hip arthroplasty because patient is young. Acetabulum fracture was treated conservatively because the fracture fragment was small and hip was stable intraoperative after screw fix femoral head.

CONCLUSION:

Early surgical intervention is warrant for good outcome in this complex injury. Kocher-Langenbeck surgical approach can be used for hip reduction, femoral head fixation, acetabulum posterior wall fixation and intramedullary femur nailing.

REFERENCES:

1. Michael et al, Hip Dislocations and Fractures of the Femoral Head, Rockwood & Green's Fractures in adults, vol 2, 7th ed. Pg 1598-1637