

Traumatic Anterior Dislocation Of Right Hip With Associated Posterior Acetabular Wall Fracture: A Rare Case Report

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Introduction

Traumatic hip dislocations mostly occur following a high velocity trauma¹. Anterior hip dislocations are the less common form of hip dislocations, forming less than 10% of all traumatic hip dislocations². The association of acetabular fracture with anterior dislocation of the hip were reported in a few case reports, which most of them involving anterior wall or column. Only one case report was found to describe anterior-superior hip dislocation associated with a posterior acetabular wall fracture³. This is a case report of a rare case of anterior-inferior hip dislocation associated with lip of posterior acetabular wall fracture.

Case report

We describe a 71 years old Chinese gentleman with no known co-morbids involved in a low velocity motorbike accident. He fell on the right side of his motorbike, with his hip extended and abducted. Post trauma he sustained pain over his right hip and unable to move his right lower limb. On examination, the right lower limb was fixed in hip abduction, slight extension and externally rotated. Minimal swelling and tenderness elicited from the right hip joint with prominent femoral head palpable. Otherwise he was hemodynamically stable with no neurovascular deficit. Plain radiography of the pelvis (anteroposterior view) revealed an inferior variety of anterior dislocation of right hip joint with associated undisplaced fracture of right posterior acetabular wall (figure 1). Closed manipulation reduction of the right hip was done and reduction was achieved after gradual traction with force parallel to the femur axis, gradual flexion, adduction and internal rotation of the right hip. 3 kg of skin traction was applied post reduction and the right hip pain and tenderness was markedly reduced. There was no neurovascular deficit post reduction. Plain radiography post reduction showed a successfully reduced right hip dislocation (figure 2). Computed tomography of the pelvis reveals a small undisplaced fracture fragment over the lip of right posterior acetabular wall (figure 3). He was treated conservatively with skin traction and was discharge well with full weight bearing ambulation.



Figure 1



Figure 2



Figure 3

Conclusion

Traumatic anterior hip dislocation may occur in mechanism of injury involving hip extension, abduction and external rotation despite low velocity accident. Posterior acetabular wall fracture must be ruled out even in anterior hip dislocation. Although the hip dislocation is associated with acetabular wall fracture, stable reduction of the hip can be achieved through closed manipulation reduction and subsequent skin traction.

References

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