

Introduction

Hip dislocation is often associated with high impact trauma. Majority of hip dislocation are posterior subtype. Anterior and inferior dislocations account for only 10% and 5% cases, respectively. We reported a case of anterior-inferior hip dislocation in low energy trauma complicated with neurosensory impairment post reduction.(1)(2)

Case presentation

A 19-year-old Indonesian male presented with right hip pain and inability to ambulate after slipped at riverbank. His right leg was externally rotated, abducted and flexed with intact neurovascular status. There was no other associated injury.

Right hip X-ray revealed anteroinferior hip dislocation with no visible fracture. Closed manual reduction (CMR) utilizing traction-countertraction, lateral traction, Bigelow and Howard manoeuvres was unsuccessfully attempted by Emergency and Trauma Department (ETD) and orthopaedic teams under optimal procedural sedation analgesia (PSA) for almost 2 hours. The dislocation was successfully reduced under general anaesthesia within 8 hours post trauma.

X-ray post reduction was suggestive of acetabular inferior wall fracture and superior femoral head indentation. He was discharged with non-weight bearing advice. Clinic follow-up 2 weeks later disclosed bearable right hip pain with reduced sensation over sciatic nerve distribution.

Discussion

There is limited study on hip dislocation in low impact trauma. Type IVa Brumback classification for anteroinferior hip dislocation might contribute to the initial CMR failure despite maximal PSA.(3)(4)

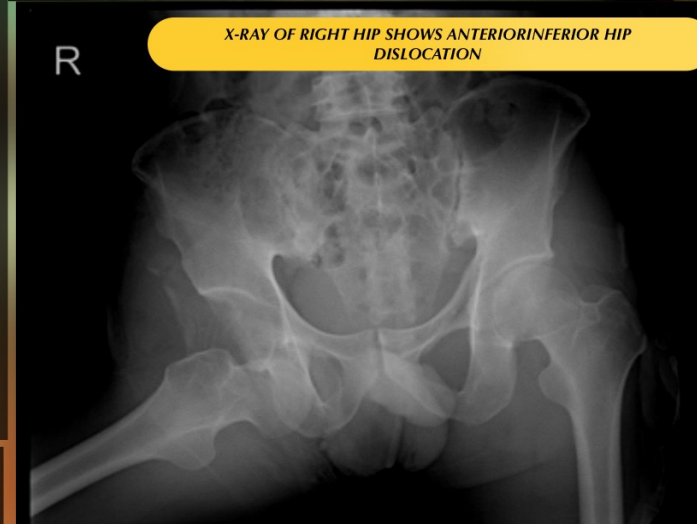
Computed tomography is highly recommended to exclude occult fracture hindering successful reduction. Open reduction as suggested in literature was not opted due to financial constraint. Prolonged reduction beyond 6 hours might have caused sciatic nerve injury seen in 10% cases. Failure to achieve good muscle relaxation might attribute to reduction failure at ETD.(5)

Conclusion

Anteroinferior hip dislocation should be managed case basis. Combination of reduction methods may help in reducing the dislocation. Addition of muscle relaxant such as diazepam might be helpful in difficult CMR cases. Shorter reduction time reduces functional morbidity.(6)(7)



IMAGE OF PATIENT'S RIGHT LEG POSITION-EXTERNALLY ROTATED ,FLEXED AND ABDUCTED



X-RAY OF RIGHT HIP SHOWS ANTERIORINFERIOR HIP DISLOCATION



POST CMR CHECK X-RAY OF RIGHT HIP REDUCED DISLOCATION