International Journal of Orthopaedics Sciences

E-ISSN: 2395-1958

P-ISSN: 2706-6630

IJOS 2021; 7(3): 447-449

© 2021 IJOS

www.orthopaper.com

Received: 10-05-2021

Accepted: 12-06-2021

Dr. Avinash GC

Junior Resident, Department of
Orthopaedics, Mandya Institute
of Medical Sciences, Mandya,
Karnataka, India

Dr. Manjappa CN

Professor and HOD,
Department Of Orthopaedics,
Mandya Institute of Medical
Sciences, Mandya, Karnataka,
India

Dr. Mahendra Kumar KL

Associate Professor,
Department of Orthopaedics,
Mandya Institute of Medical
Sciences, Mandya, Karnataka,
India

Dr. Shivaprakash SS

Associate Professor,
Department Of Orthopaedics,
Mandya Institute of Medical
Sciences, Mandya, Karnataka,
India

Traumatic bilateral asymmetrical hip dislocation

**Dr. Avinash GC, Dr. Manjappa CN, Dr. Mahendra Kumar KL and
Dr. Shivaprakash SS**

DOI: <https://doi.org/10.22271/ortho.2021.v7.i3g.2785>

Abstract

Reporting a case of traumatic, simultaneous right anterior and left posterior hip dislocation with associated fractures, due to an impact of high velocity traffic accident in a 68 year old male. Closed reductions of both hips were successfully performed. The mechanism of this injury is discussed.

Keywords: trauma, bilateral, hip

Introduction

Bilateral hip dislocation is relatively rare and accounts for approximately 1-2% of all hip dislocations. Bilateral asymmetric dislocations of the hips are extremely rare injuries and those associated with fractures are even rarer with only 17 cases reported in English literature to our knowledge. Only four cases of asymmetric hip dislocations with unilateral acetabular fracture have been reported.

Case History

A 68 year-old male patient presented to emergency department after a motor vehicle accident. The patient was driving a two wheeler and hit a standing truck from behind and fell down. Then patient felt severe pain in both hips and could not move his both lower limbs. On physical examination patient was hemodynamically stable with a Glasgow coma scale of 15 during initial evaluation. His right leg was externally rotated, abducted and slightly flexed, while the left was held in fixed flexion, internal rotation and adduction, the right inguinal region was full, the dislocated femur head was palpable in the left gluteal region. Distal neurovascular status of both the legs was normal. Pelvic radiograph revealed bilateral hip dislocation with the femoral head displaced anteroinferiorly on the right side and posteriorly on the left side. There was associated fracture of the acetabulum on the left side for which CT scan was performed which shows displaced posterior wall fracture.

Fig 1: Prereduction clinical and radiographic pictures

Corresponding Author:

Dr. Avinash GC

Junior Resident, Department of
Orthopaedics, Mandya Institute
of Medical Sciences, Mandya,
Karnataka, India

Fig 2: Prereduction CT scan showing acetabular wall fracture

Both hips were reduced within one hour of presentation by closed manipulation under general anaesthesia. A radiograph

after reduction confirmed concentric reduction of both the hips.

Fig 3: Postreduction clinical and xray showing concentric reduction

Post-reduction CT scan was performed which ruled out the intraarticular fragments and the displaced posterior wall

fragment was reduced in normal anatomical position.

Fig 4: Postreduction CT scan

Bilateral skeletal upper tibial pin traction was applied for 4 weeks. The patient was allowed to full weight bearing on right side and partial weight bearing on left side after 4 weeks. Full weight bearing on left side was delayed till 6 weeks. At

the recent follow up of 24 months after injury, the patient is having painless full range of motion of both hips without radiographic changes of avascular necrosis in either femoral head.

Fig 5: 24 months followup xray

Discussion

For asymmetric bilateral dislocations to occur, i.e. one anterior and other posterior a simultaneous force needs to act in a different way on the two hips with different positions of

the two limbs at the time of impact. The mechanism of injury is usually a high-impact deceleration force, which acts on the lower limbs. Hip dislocation is an surgical emergency requiring early reduction. Associated injuries must be carefully looked for, which includes acetabular fracture, femur fracture, ligamentous knee injury or fracture of the patella or proximal tibia, femoral artery injury, venous thrombosis and sciatic nerve injury (seen in approximately 10% of cases). Early and accurate reduction may reduce complications associated with hip dislocation. In our case there was no evidence of avascular necrosis of the femoral head on follow-up. This may be related to early (< 6 hrs) prompt reduction.

Conclusion

Traumatic hip dislocation is an orthopaedic emergency, prompt recognition of the injuries and early reduction is the key determinants of an excellent result.

Fig 6: Final followup CT scan

References

1. Bansal VP, Mehta S. Case report. Bilateral hip dislocation: one anteriorly, one posteriorly. *J Orthop Trauma* 1991;5:86-88.
2. Brav EA. Traumatic dislocation of the hip: army experience and results over a twelve-year period. *J Bone Joint Surg [Am]* 1962;44:1115-1131.
3. Gittings ME, Serif LW. Bilateral traumatic anterior/posterior dislocations of the hip joints: case report. *J Trauma* 1991;31:1689-1692.
4. Masqsood M, Walker AP. Asymmetric bilateral traumatic hip dislocation with ipsilateral fracture of the femoral shaft. *Injury* 1996;27:521-522.
5. Shukla PC, Cooke SE, Pollack CV Jr, Kolb JC. Simultaneous asymmetric bilateral traumatic hip dislocation. *Ann Emerg Med* 1993;22(11):1768-1771.
6. Loupas G, Morris EW. Asymmetric bilateral traumatic hip dislocation. *Arch Orthop Trauma Surg* 1998;118(3):179-180.
7. Hougaard K, Thomsen PB. Coxarthrosis following traumatic posterior dislocation of the hip. *J Bone Joint Surg Am* 1987;69:679
8. Steward MJ, Milford LW. Fracture-dislocation of the hip: an end-result study. *J Bone Joint Surg Am* 1954;36:315
9. Epstein HC. Traumatic dislocations of the hip. *Clin Orthop* 1973;92:116.