

Isolated Traumatic Obturator Hip Dislocation in an Elderly: An Uncommon Injury

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Case Report

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Abstract: Isolated traumatic anterior obturator hip dislocation is less frequent compared to other types of hip dislocations or proximal femoral fractures in elderly patients. We present an obturator type anterior hip dislocation in an elderly patient which was successfully reduced by closed maneuver.

Keywords: Hip dislocation, closed reduction, trauma.

INTRODUCTION

Isolated traumatic anterior hip dislocations with an incidence of 15% are less common than posterior hip dislocation [1]. Traumatic obturator or inferior type of anterior hip dislocation is least common among all hip dislocation and is usually due to high velocity injury in adults [1]. We report functional and radiological outcomes of obturator hip dislocation in an elderly patient.

CASE REPORT

A sixty year male presented with severe right hip pain, deformity around hip following fall from height without any associated injury. Physical examination of injured lower extremity showed flexion, abduction and external rotation at hip joint with lengthening of the extremity. Active as well as passive movements of hip were extremely painful. There was no neurovascular deficit. Radiographic examination including X-ray pelvis with both hips AP view and lateral view of injured hip confirmed anterior hip dislocation (Obturator type) and ruled any other obvious bony injury.[Figure 1a and 1b].

A stable closed reduction of dislocation was achieved under general anesthesia using Allis maneuver. Following reduction all the deformities disappeared with full ROM at hip joint and there was no limb length discrepancy. Post reduction radiograph confirmed a congruent reduction of the hip joint[Figure 2]. A CT scan was done to rule out any osteochondral fracture. Initially patient was kept immobilized for three

weeks and allowed only static quads and on traction gentle ROM exercises. After three weeks partial weight bearing was allowed followed by full weight bearing after six weeks. At three years follow up patient had a painless stable and functionally mobile hip without any radiological evidence of femoral head avascular necrosis.



Fig-1a: AP radiograph of pelvis including both hips showing femur head out of acetabulum, lesser trochanter is visible in full profile



Fig-1b: Lateral radiograph of injured hip showing obturator type anterior hip dislocation



Fig-2: post reduction AP radiograph of same patient showing congruent reduction of hip Joint.

DISCUSSION

Majority of traumatic hip dislocation are due to high velocity injury following motor vehicle accident. The degree of hip flexion determines the type of anterior hip dislocation. An obturator type anterior hip dislocation results when there is simultaneous flexion, abduction and external rotation at hip joint. The greater trochanter impinges on the acetabular rim and femoral head is levered out of acetabulum [2]. An urgent reduction should follow to minimize the risk of avascular necrosis of femoral head, hip joint arthritis and myositis ossificans. There is a sharp decline in the

rate of avascular necrosis from 50% to 5% when reduction is achieved within six hours of dislocation [3]. Longterm follow up is required to look for post traumatic hip osteoarthritis following hip dislocation [3, 4]. There was no associated fracture in our case. A similar isolated traumatic anterior hip dislocation in elderly female following a trivial fall has been described by Gynne *et al.* [5]. Few authors have reported different patterns of proximal femoral fractures in association with anterior hip dislocation [6,7].

Our case is interesting in that obturator type hip dislocation, the least common among all types of hip dislocation is mainly seen in adults while the patient presented here is an elderly patient. Thibault Gérosa et al suggest that outcomes of traumatic hip dislocation in elderly may be different than those in young subjects [8].

CONCLUSION

Obturator type of anterior hip dislocation is rare in elderly individuals however; one must be vigilant for this injury. Early detection and prompt reduction can minimize the risk of avascular necrosis of femoral head.

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