Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Orthopedic Surgery

Traumatic Obturator Dislocation of the Hip in Adults about a Case and Review of the Literature

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DOI: 10.36347/sjmcr.2023.v11i05.021 | **Received:** 27.03.2023 | **Accepted:** 02.05.2023 | **Published:** 06.05.2023

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Abstract **Case Report**

It was a 36-year-old patient. He was the victim of a road accident. The clinical examination revealed a deformity of the hip with loss of the anatomical guide. Neurovascular and skin examination were normal. Standard X-ray confirmed obturator dislocation of the right hip. The reduction of the dislocation was carried out under general anesthesia within the time limits, followed by a discharge for 6 weeks. The suites were simple.

Keywords: Hip obturator dislocation, osteonecrosis**.**

INTRODUCTION

- Traumatic coxo-femoral dislocations in adults are defined by a total and permanent displacement of the femoral head out of the acetabular cavity [1].
- The obturator variety is characterized by the position of the head in front of the obturator foramen following a movement in forced flexion, abduction and external rotation of the hip [2-4].
- We report the case of an obturator dislocation (antero-inferior) in a 36-year-old young victim of a road accident: motorcyclist hit by a car.

CASE REPORT

This is a 36-year-old patient, with no particular history, victim of a public road accident causing blunt trauma to the right hip with point of impact on the inner side of the right thigh.

On examination, the patient presented with pain and total functional impotence of his right lower limb with deformity in flexion-abduction-external rotation of the hip (figure 1).

Figure 1

The rest of the clinical examination was unremarkable with no skin lesions and no vascular-nervous deficit.

An X-ray of the pelvis from the front was performed in an emergency showing a pure obturator dislocation of the right hip (Figure 2).

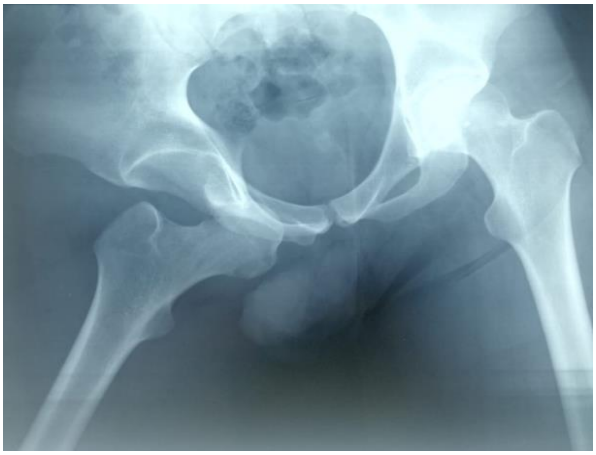

Figure 2

The reduction was performed at H5 of the accident under general anesthesia by traction maneuvers in the axis of the femur associated with flexion of the hip in internal rotation and abduction while maintaining traction.

A follow-up X-ray confirmed the reduction of the dislocation (figure 3).

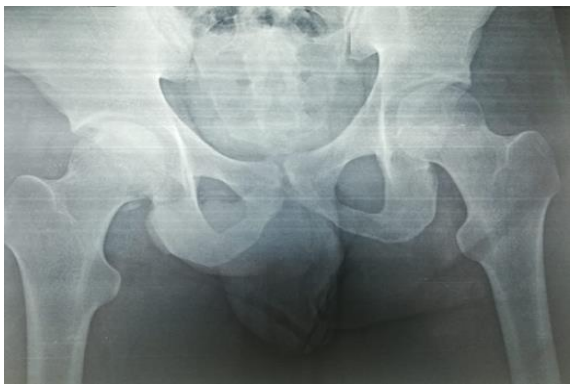

Figure 3

A complementary scan ruled out the presence of associated lesions/fractures (figure 4).

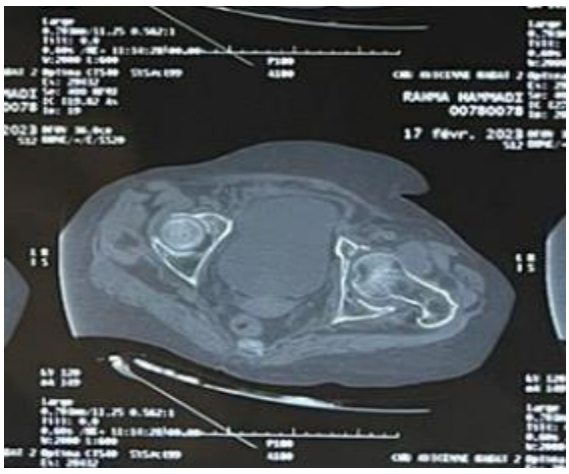

Figure 4

Discharge associated with preventive anticoagulation has been recommended for a period of 6 weeks with resumption of walking at 8 weeks.

At the last follow-up, the patient has resumed his normal activity and does not present any pain or stiffness in the hip and the control x-rays do not show signs in favor of osteonecrosis of the femoral head.

DISCUSSION

Traumatic hip dislocation is rarely isolated. In the majority of cases, it is accompanied by a fracture of the acetabulum or the femoral head [5].

Obturator dislocation accounts for 6 to 10% of dislocations reported in the literature [5].

They most often occur after violent trauma when the point of impact is located on the inside of the flexed knee and the hip is in a position of flexion-abduction and external rotation) [6].

Depending on the degree of hip flexion, there will be a lower obturator or upper pubic dislocation [6].

The diagnosis is obvious from the characteristic deformity of the limb. Anterior pelvic X-ray confirms the presence of the femoral head in the obturator foramen [7].

The reduction is done under general anesthesia and requires complete muscle relaxation.

Reduction maneuvers are controversial. Indeed Epstein [8] and Brav [9] recommend traction in the axis of the femur followed by progressive flexion of the hip in internal rotation and abduction, while maintaining traction.

While Toms et al., [10] have criticized the abduction in the reduction maneuver considering that the hip is already in forced abduction. They recommend using the orthopedic table and combining axial traction with lateral thigh traction and then gradually releasing the traction while impregnating an internal rotation adduction movement [11].

Post-reduction CT is mandatory in search of a chondral lesion or an infra-radiological fracture. An osteochondral fracture of the femoral head is frequently associated with this variety of dislocation [12, 13].

A discharge of 6 weeks with gradual recovery of weight bearing is the rule. Rehabilitation is early and is focused on active mobilization [14].

The long-term evolution exposes to the risk of necrosis of the femoral head (4%); which increases when the reduction time exceeds 3 hours [15], with a

necrosis rate of less than 15% in the event of reduction before 12 hours and greater than 50% thereafter [16].

The patient should be informed of the risk of head necrosis and the need for monitoring for at least two to five years [17].

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