

Pure obturator anterior dislocation of the hip: a rare clinical situation in 2 cases.

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Abstract:

Hip dislocation in its obturator variety is rare requiring urgent reduction to reduce the risk of aseptic necrosis of the femoral head, We report two cases of obturator dislocations secondary to AVP. After 2 years, the hip is painless and the range of motion is normal. Bone scintigraphy did not show any signs of necrosis of the femoral head.

Keywords: Dislocation; Hip; Shutter; Orthopedic Reduction

Introduction:

Obturator anterior hip dislocation is the very type of orthopedic emergency, rarely pure and is observed in 6 to 10% of cases of hip dislocation[1].

It requires an emergency reduction, The functional prognosis is linked to the risks of necrosis of the femoral head and coxarthrosis.

We report 2 cases of pure obturator anterior dislocation of the hip followed at 2 years of hindsight.

Patient et observation :**1er Patient :**

A 19-year-old patient, with no particular history, victim of a public road accident (motorcyclist hit by a car) causing pain, deformity and total functional impotence of the left hip.

The clinical examination shows a lower limb in flexion-abduction-external rotation, without vasculo-nerve lesions.

The X-ray of the pelvis from the front revealed a pure obturator anterior dislocation of the left hip (Fig. 1A).

The reduction was done 2 hours after the accident under general anesthesia, by traction at the zenith adduction and internal rotation. The hip was stable after the reduction and the scopic control confirmed the reduction.

Article Information

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The control CT scan did not reveal any associated fractures of the acetabulum or the femoral head (fig.1B – 1C).

Joint relief was recommended for 6 weeks under the guise of preventive anti-coagulation. The resumption of walking was authorized at eight weeks.

The patient was seen with a 2-year follow-up, the hip is painless and the range of motion is normal. Bone scintigraphy did not show any signs of necrosis of the femoral head (fig.1D).

1^{er} patient :

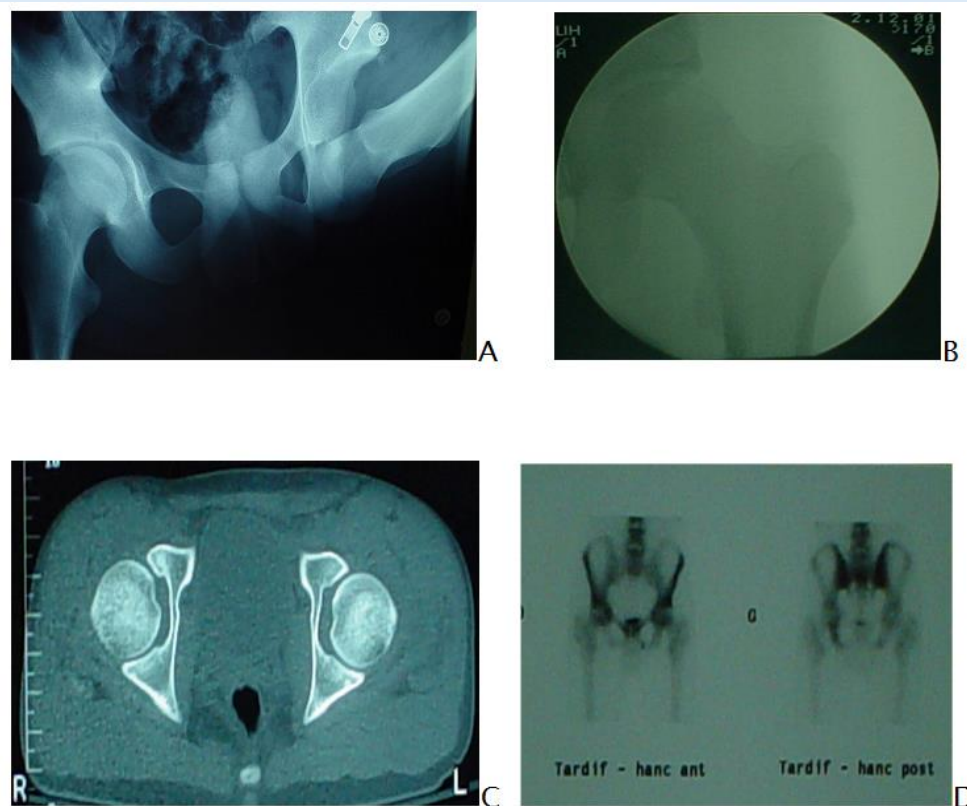


Figure 1 : **A :** Rx du bassin de face: luxation obturatrice pure gauche.
B : Contrôle scopique de la réduction. **C :** TDM de contrôle, Absence de Fracture.
D : scintigraphie du bassin à 2 ans, Absence de nécrose fémorale.

2nd patient:

33-year-old patient, with no particular history, victim of a public road accident (front passenger in a frontal collision between two cars) causing pain, deformity and total functional impotence of the right hip.

The lesion assessment showed liver contusion without surgical indication.

On the locomotor level, the right lower limb is shortened in abduction and external rotation without associated vasculonerve lesions.

The X-ray of the pelvis from the front shows an obturator anterior dislocation of the right hip without associated fracture (Fig. 2A)

The reduction was done under general anesthesia 5 hours after the trauma (Figure 2B-2C), joint relief was recommended for 6 weeks with rehabilitation.

At the last receding the hip is free and painless, the scintigraphy is unremarkable (Fig. 2D).

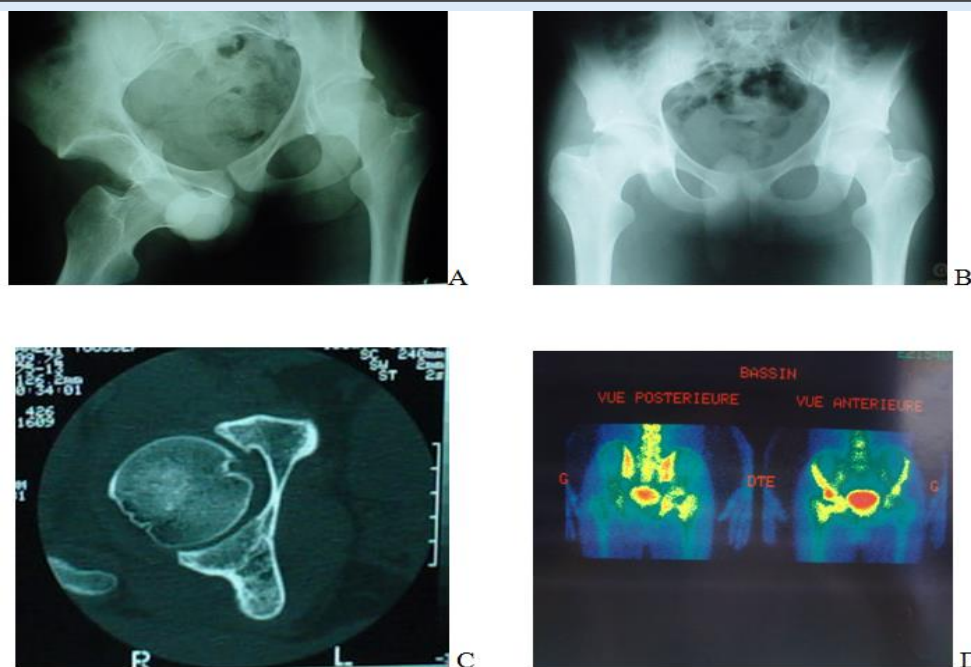


Figure 2 : A : Rx du bassin de face : luxation obturatrice pure droite. B : bassin de face après réduction. C : TDM de contrôle, Absence de Fractures. D : absence de nécrose de la tête fémorale sur la scintigraphie.

Discussion :

Anterior hip dislocations are divided into two types depending on the position of the femoral head: pubic or superior (type 1) and obturator or inferior (type 2) [2].

They are most often secondary to violent traumas, The anterior variety occurs in flexion abduction - external rotation during an impact on the inner side of the knee, with cam effect of the greater trochanter on the ilium in maximum abduction [3].

Depending on the degree of hip flexion, there will be a lower obturator or upper pubic dislocation. PRINGLE [4] in his cadaver study showed that obturator dislocation occurs when the hip is worn in abduction-flexion-forced external rotation. The femoral head then tears the anterior part of the joint capsule passes under the iliofemoral ligament and is lodged in front of the obturator hole (hence its name).

The clinical diagnosis is easy since it restores an attitude of the limb in flexion, abduction and external rotation [5]. Standard X-rays confirm the diagnosis and specify the variety and associated bone lesions.

Therapeutically, obturator dislocation is an orthopedic emergency. The reduction must be performed urgently under general anesthesia with complete muscle relaxation. There is no consensus on the modalities of reduction; Esptein [6] and Brav [7] propose traction in the axis of the femur followed by progressive flexion of the hip in internal rotation and abduction, while maintaining traction. Toms [3] has criticized these manoeuvres; He recommends the use of an orthopedic table with axial traction coupled with lateral traction and then a gradual release of the traction while imparting to the hip a movement of adduction and internal rotation. This evokes the difficulty of reducing this type of dislocation with a significant risk of complications that may prompt the orthopedist to perform an open reduction.

After reduction, some authors recommend a light glued traction for analgesic purposes for a few days. A 6-week discharge with gradual resumption of support is the rule. Rehabilitation is early and focused on active mobilization [5].

Anterior hip dislocation is rarely isolated, it is often associated with a fracture of the femoral head by impaction (12% to 87%) or a fracture of the anterior wall of the acetabulum.

The long-term risk is marked by necrosis of the femoral head (4%), this risk is increased when the reduction time exceeds 6 hours. The patient must be informed of the risk of necrosis of the head and of the need for follow-up for at least two years, or even five years for some authors,

followed by post-traumatic osteoarthritis in 17% of cases [8-9].

In our case, the reduction was done in less than 6 hours, due to early diagnosis and atraumatic reduction.

Conclusion :

Obturator anterior dislocation of the hip remains a rare entity.

If its diagnosis is easy, the reduction must be done urgently because it involves the functional prognosis of the hip by the risk of necrosis of the femoral head and subsequent coxarthrosis requiring long-term monitoring.

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