

Bilateral traumatic anterior hip dislocation - A case report

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Summary

We report a 33-year-old trader with bilateral traumatic anterior hip dislocation following a road traffic accident. Both hip dislocations were reduced under general anesthesia followed by immobilization of the hips with skin traction. He discharged himself against medical advice one week after injury.

Key-words: *Hip dislocation, Anterior, Bilateral*

Résumé

Nous rapportons le cas d'un commerçant âgé de 33 ans avec un déboitement de la hanche antérieure traumatism bilatéral à la suite d'un accident de la circulation routière. On avait réduit les deux déboitements des hanches sous l'anesthésie générale suivie par l'immobilisation des deux hanches avec la traction de la peau. Il s'est envoyé contre le conseil d'un médecine une semaine après la blessure.

Introduction

Traumatic dislocations of the hip are now becoming more common with the rising incidence of road traffic accidents^{1,2,3}. They constitute about 2-5% of all joint dislocations⁴. Anterior dislocation is rare compared with posterior dislocation^{2,4}. Bilateral hip dislocations are even rarer, constituting 1.25% of hip dislocations in some series⁵. Bilateral simultaneous anterior hip dislocation is extremely rare. Most of the previously reported cases were either a combination of anterior and posterior dislocations^{4,6,7,8,9,10} or a dislocation in association with pelvic, femoral head or acetabular fractures^{11,12}. We therefore report a case of bilateral simultaneous traumatic

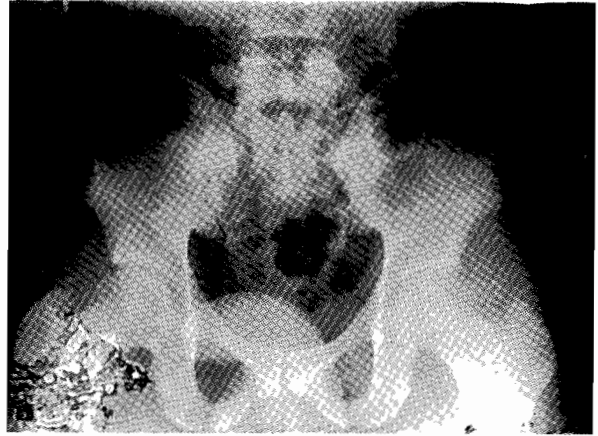


Fig. 2 *X-ray of the pelvis (AP) showing reduced anterior hip dislocation*

Case report

A 33-year-old trader presented to the Accident and Emergency Unit of Obafemi Awolowo University Teaching Hospitals Complex Ile-Ife with a 2-hour history of severe pain in both hips and inability to stand or walk. He was a front seat passenger in a car that was hit from behind by a trailer lorry and which collided with another vehicle in front. Examination showed a fully conscious man in distress. His vital signs were within normal limits. Sitting or lying was very difficult and painful. Both hips were held flexed and abducted. The lower limbs were externally rotated. There was marked tenderness in both hips. Pelvic compression and distraction did not elicit any tenderness. The neurovascular status of both lower limbs was preserved. There was no clinical evidence of fracture of the femoral shafts or the patella. X-ray of the pelvis showed bilateral anterior hip dislocation with both femoral heads lying over the ischium and pointing towards the obturator foramen (type IIA) – fig 1.

Both hip dislocations were reduced under general anaesthesia. Post reduction X-ray showed satisfactory reduction of both hips (fig 2) After one week in skin traction patient discharged himself against medical advice.

Discussion

The incidence of traumatic dislocations of the hip is rising with the increase in the frequency of automobile accidents¹. However bilateral traumatic hip dislocations are very rare⁴. Anterior hip dislocation is rare compared with posterior since the anterior capsule of the hip is stronger and is further reinforced by iliofemoral ligament. Hip dislocations are caused by high velocity forces as in road traffic accidents. In anterior hip dislocation usually the knee strikes the dash board with the thighs abducted or the patient is thrown out of the vehicle.



Fig. 1 *X-ray of the pelvis (AP) showing bilateral anterior hip dislocation*

anterior hip dislocation.

* Correspondence

Anterior dislocations may also result from falls or crushing injuries received on the back of the pelvis with the hip in a position of abduction³. This appears to be the mechanism of the hip dislocation in our patient. The abducted and externally rotated hip then causes the neck to impinge on the acetabular rim and lever the femoral head out anteriorly. If the hip is in a position of flexion an obturator dislocation occurs with the femoral head lying inferiorly (type II). If the hip is extended the head tends to dislocate superiorly (type I). Our patient had a type II anterior dislocation (figure 1). Clinically the leg is usually in external rotation with the hip abducted and flexed. Unlike in posterior hip dislocation the lower limb is rarely shorter than the opposite.

Traumatic dislocations of the hip are orthopaedic emergencies and must be reduced as soon as possible under general anaesthesia with good muscle relaxation². This is to avoid avascular necrosis which is a well known complication of traumatic hip dislocations^{2,3}. The incidence of this complication rises when dislocations are reduced after six hours from about 10% to 40%². Following reduction the hip is immobilized with a skin or skeletal traction for 4 to 6 weeks. If there is associated fracture the traction may be necessary for longer periods. Most cases of anterior (especially the obturator or type II) dislocations without associated fractures have a good prognosis if recognized and reduced promptly within 6 hours of injury. Unfortunately most of the patients in our environment either present late or are diagnosed late or their dislocations reduced late. Akiode et al¹³ observed that only 25% of their patients had their dislocations reduced less than 12 hours after presentation. This should be avoided to prevent complications like avascular necrosis and early onset osteoarthritis.

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