

BILATERAL ASYMMETRIC TRAUMATIC HIP DISLOCATION: A CASE REPORT

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ABSTRACT

Bilateral dislocation of the hip is a rare accident. We describe one case of post traumatic bilateral dislocation of the hip. An immediate closed reduction was successfully performed

KEYWORDS: Bilateral dislocation, asymmetric, hip.

INTRODUCTION

Hip dislocations are high velocity injuries, with increase morbidity and mortality.^[1,2] 90% of hip dislocations are associated with road traffic accident and remaining reported due to machinery and construction injuries and only 1% are bilateral hip dislocations and 0.01–0.02% of all joint dislocations. It is absolutely difficult to narrate the exact mechanism in these injuries.^[2] Most of these hip dislocations are associated with other injuries; those should be diagnosed and treated earlier to prevent further morbidity. Earlier the hip dislocation reduced better the functional outcome and decrease risk of avascular necrosis and arthritis.

MATERIELS ET METHODES

Study of the case of a patient with no relevant medical or surgical history admitted to the emergency department for bilateral post traumatic hip dislocation.

PATIENT INFORMATION

A 22-year-old patient active military, was admitted to the emergency department of university hospital center Ibn Sina Rabat. On 17/12/2023 at 6 a.m. for within one hour with history of a violent trauma to the pelvis, following a road traffic accident. He presented with pain and deformity of both legs. On examination, the right lower limbs abducted, flexed and externally rotated, while the left lower limb was adducted and internally rotated (fig 1), the vascular-nervous examination was without particularity, in particular without deficit in the territory of the greater sciatic nerve two sides.

Radiograph full pelvis antero-posterior view showed bilateral asymmetric dislocation; right side anterior hip dislocation and left side posterior hip dislocation (Fig 2).



Figure 1: Deformity of both lower limbs at Emergency patient position.

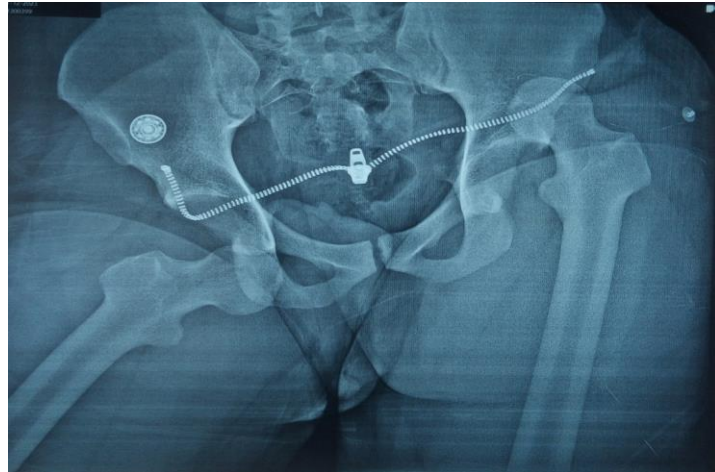


Figure 2: Radiograph full pelvis antero-posterior showing right side anterior hip dislocation and left side posterior hip dislocation.

The patient admitted to the shock room for conditioning and stabilization, then emergency closed reduction of the two dislocations was carried out under sedation by the maneuver of BOEHLER (flexing the hip to 90 degree and simultaneously one assistant applied lateral traction

and pushed back head to acetabulum) with radiological and CT scan control which confirmed the reduction (Fig 3, 4), A traction system has been put in place bilaterally for a period of three weeks with prescription analgesics and preventive anticoagulation for another six weeks.



Figure 3: Post-reduction radiograph showing both hip reduced.



Figure 4: Post-reduction CT scan both hip joint with 3-D reconstruction.

DISCUSSION

Hip joint dislocations are serious injuries, happen due to road and factory accidents. 2 to 5% are traumatic hip dislocation.^[1,2] & bilateral asymmetric hip dislocations are very rare.^[3] These are high velocity injuries usually associated with acetabulum fracture, femur head, neck & midshaft fracture.^[4,5,6] In very rare cases Abdominal, chest and head injuries are also reported to be associated with hip joint dislocations.^[7,8,9] That's why ATLS protocol should be followed to prevent any missed injuries. X-ray full pelvis antero-posterior view & pelvic CT scan with 3 D reconstruction provides fracture configuration and intraarticular bony pieces.^[10] Immediate reduction of dislocated hip should be the priority under anesthesia. Delay in reduction of dislocated hip increase chances of avascular necrosis and osteoarthritis. Avascular necrosis also increases from 8% to 15% close reduction to more than 40% with open relocation.^[11,12] 10% patients with posterior hip dislocation associated with sciatic nerve injury (Peroneal part) with chance of recovery in between 60 and 70%.^[13]

Maintaining the reduction by a traction system is recommended, but its duration is much debated, and according to teams, it varies from a few days to six weeks.^[14,15] In our case, we were able to reduce this bilateral dislocation under sedation by the maneuver of Boehler followed by traction on the bed of the sick for 3 weeks.

CONCLUSION

We conclude that asymmetrical bilateral hip dislocation are very rare and associated with other injuries, those should be excluded and dislocated hips should be reduced as earlier as possible to achieve the better functional results and prevent avascular necrosis and osteoarthritis.

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