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Traumatic Posterior Hip Dislocation in 5 Year Old Child: A Case Report

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Abstract: ***A review in literature confirms that traumatic dislocation of the hip in children is rare. The aim was to report a similar case of posterior hip dislocation in 5 year old child which was reduced under anaesthesia and traction was placed. Immediate reduction is required to prevent the serious complications which may occur i.e. Avascular necrosis of femur head.***

Keywords: Hip dislocation, paediatric trauma, reduction maneuver, rehabilitation

1. Introduction

A review of literature confirms that traumatic dislocation of the hip in children is rare. The aim of this study is to report the case of a posterior hip dislocation in a 5 year old child due to fall while playing. The diagnosis of dislocation of in children is difficult and such trauma can lead to serious complications.

2. Case Report

A case of 5 year old was admitted to Emergency Department of Gauhati medical College & Hospital, Guwahati with chief complaint of pain, swelling and deformity in left hip region for 1 day. The trauma was caused while playing when another child pushed her from behind.

On clinical examination, there was pain, restricted range of motion and the attitude of left hip was in slight flexion, adduction and internal rotation. Maximal discomfort was localized to the left buttock, which was tensely swollen, tender and warm to the touch. The examinations done on other joints did not reveal any abnormality regarding the range of motion or ligament laxity. A plain x - ray was done revealing posterior and superior displacement of the head of the femur out of the acetabulum without any accompanied fracture. There was no evidence of infective pathology on routine investigations.

Under general anaesthesia the hip was reduced, using closed method the hip joint was stable in full range of motion the hip was left in below knee fixed traction on Thomas splint.
Post reduced radiography showed a concentrically reduced hip without any associated fracture or asymmetry of joint space.

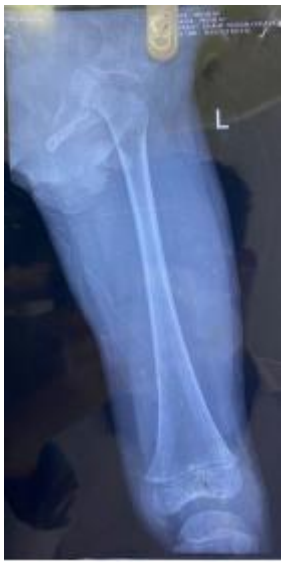
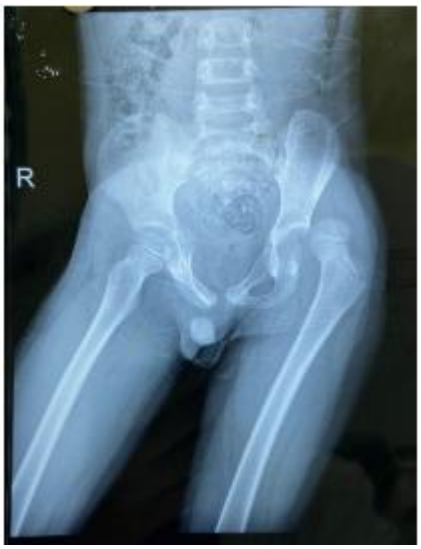
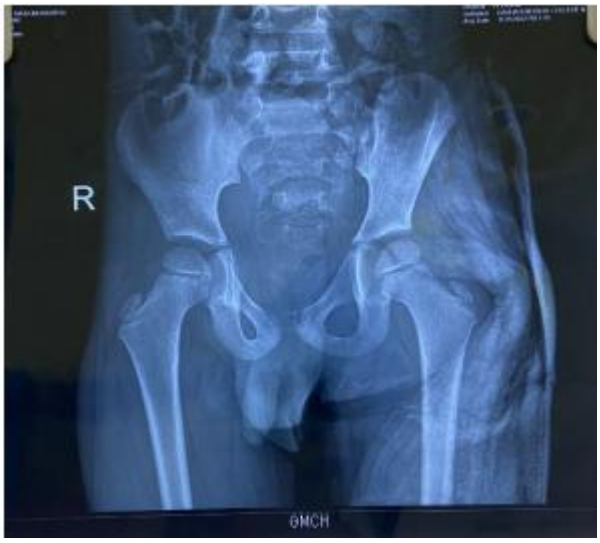


Figure 1: X - ray showing posterior (Lft.) Hip dislocation of Hip AP view (A) lateral view



After 2 days of skin traction, the patient was discharged from the hospital with advice not to bear weight on the affected limb for 6 weeks. At 6 weeks post - reduction,

clinical and radiological assessments revealed no abnormality.



3. Discussion

A review of the literature confirms that traumatic dislocation of the hip in children is indeed rare1, 2, 3 and is frequently associated with trivial degrees of trauma, especially in children under the age of 5 - 6 years.2, 4, 5 The diagnosis is usually made promptly by recognition of the classic deformity, i. e. shortening with adduction, flexion and internal rotation, but there are many reported cases of delayed diagnosis.1 - 3, 6 - 10 The most potent cause of a missed diagnosis appears to be associated femoral shaft fracture6, 9, the fracture directs attention away from the hip and may obscure the usual deformity by its own displacement. Other reasons for missing the diagnosis are (as in this case) the misleading minor degree of trauma and the rarity of the condition. Multiple injuries may also obscure the diagnosis.6, 10 It is mollifying to note that the literature suggests that in cases of ipsilateral femoral shaft fracture the diagnosis was missed less often in the pre - radiography era than it is now. Anterior traumatic dislocation of the hip is far less frequent than the posterior form1 - 3 and the diagnosis is usually obvious.

The chief associated problem is compression of the femoral vessels. Early diagnosis and reduction of a dislocated hip is essential to prevent its chief complication, avascular necrosis of the femoral head, the overall incidence of which is between 4% and 10%.3, 7, 10, 11 It is universally agreed that early reduction (within 24 hours) and the age of the patient (less than 5 years) are major factors in reducing this incidence.2, 3.12 Most authors state that a severe degree of initial trauma predisposes to avascular necrosis, ll, 12 but some disagree.8, 13 Sciatic nerve damage4, 6, 9, I2 and associated acetabular fractures2 are very rarely reported. Other uncommon complications of traumatic hip dislocation in children are late osteo - arthrosis, with or without coxa magna7, 1O and recurrent dislocation.5, 14 The treatment of traumatic dislocation of the hip is prompt reduction by closed manipulation performed under general or spinal anaesthesia. This is usually relatively easy. Rare cases of failed manipulation are either due to buttonholing of the femoral head through the hip capsule or infolding of the labrumacetabulare, and in such cases open reduction is necessary. There is no uniformity of opinion about the length of time required for immobilization, but a distillation of the literature would suggest that 6 weeks in traction or hip spica followed by immediate weight - bearing is reasonable. There is, however, no specific evidence to support this regimen.

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