

EMERGENCY CASEBOOKS

Posterior dislocation of hip in adolescents attributable to casual rugby

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A 11 year old boy was brought to the accident and emergency department with a painful left hip after having been injured it in a tackle in a casual game of rugby. On examination the hip was found to be flexed, adducted and internally rotated with no distal neurovascular deficit. All movements of that hip were extremely painful. Posterior dislocation of hip was confirmed by radiograph (fig 1). This was reduced under general anaesthesia within three hours of the injury. After reduction he was on skin traction for a week and followed by non-weight bearing mobilisation for a further four weeks. Computed tomography was done to rule out any intra-articular bone fragments. He had regained full range of movements at

eight weeks and magnetic resonance imaging of the hip at six months ruled out avascular necrosis of the head of femur.

Posterior dislocation of hip usually occurs when force is directed proximally up the shaft of femur from knee to the flexed hip¹. Although it is commonly seen after high energy road traffic accidents, it can occur in children resulting from relatively minor injury such as a casual game of rugby as reported here. Such dislocations have been reported attributable to jogging, skiing, mini rugby² and basketball. Major complications of traumatic hip dislocation include nerve injury, avascular necrosis of femoral head, secondary osteoarthritis, coxa magna, premature epiphyseal fusion, recurrent dislocation and persistent limp. After such dislocation the overall incidence of hip abnormality at skeletal maturity is around 30%.

The factors that predispose to complications are older age, delay in reduction and associated fracture of both femoral head and acetabulum. From our review of the literature it is evident that these injuries are not uncommon and a high index of suspicion is required as early recognition and prompt relocation can prevent potentially serious complications.

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Figure 1 Posterior dislocation of hip.

- 1 Glass A, Powell HDW. Traumatic dislocation of the hip in children. An analysis of 47 patients. *J Bone Joint Surg (Br)* 1961;43:29–37.
- 2 Rees D, Thompson SK. Traumatic dislocation of the hip in a mini rugby. *BMJ* 1984;289:19–20.
- 3 Funk FJ Jr. Traumatic dislocation of the hip in children. Factors affecting prognosis and treatment. *J Bone Joint Surg (Am)* 1962;44:1135–45.