ABSTRACT

Traumatic hip dislocation in children is relatively rare accounting for about 5% of all hip dislocations. Most of the hip dislocations seen in children are of the posterior type but the much rarer anterior and anterior-inferior (obturator) types have also been described. We present the case of an eight years old girl with an obturator type of hip dislocation following trivial trauma. She was treated with closed reduction and immobilisation in skin traction for three weeks. She was followed up closely for one year and did not develop any complications during that period.

Key Words:
Hip, anterior dislocation, child, trauma

INTRODUCTION

Traumatic hip dislocation in children is relatively a rare injury accounting for about 5% of all hip dislocations.1 Most of the hip dislocations seen in children are of the posterior type but the much rarer anterior and anterior-inferior (obturator) types have also been described. We report the case of an eight years old girl who presented to the accident and emergency department with this rare injury following a fall.

DISCUSSION

Traumatic hip dislocation in children is relatively a rare injury accounting for about 5% of all hip dislocations. Most of the hip dislocations seen in children are of the posterior type but the much rarer anterior type has also been described accounting for about 5% to 10% of all paediatric hip dislocations2,3. The anterior-inferior (obturator) type has been reported in less than five cases in the English literature1. This dislocation can be caused by high or low energy trauma2,3. Complications include associated fractures (40%)4, neurological and vascular compromise (25%)5, AVN (10%)6, and articular cartilage injury (6%)7.
This injury should be treated as an emergency and reduced within six hours of injury, as a delayed reduction predisposes to AVN. Although the outcome of AVN in children is similar to that in adults, the complication is more devastating in children as treatment options for AVN present a challenge in children. To reduce the risk of AVN, reduction should be carried out as early as possible with sufficient sedation and analgesia to lower the risk for physeal injury.

After an early reduction and activity modification our patient recovered well with no signs of AVN or physeal injury after one year and parents were advised for an annual follow-up of the child with MRI scan and modification of lifestyle.

REFERENCES

1. Avery DM 3rd, Carolan GF. Traumatic obturator hip dislocation in a 9-year old boy. *Am J Orthop* 2013; 42(9): 81-3.
2. Vialle R, Odent T, Pannier S, Pauthier F, Laumonier F, Glorian C. Traumatic hip dislocation in childhood. *J Pediatr Orthop* 2005; 25(2): 138-44.
3. Herrera-Soto JA, Price CT. Traumatic hip dislocations in children and adolescent: pitfalls and complications. *J Am Acad Orthop Surg* 2009; 17(1): 15-21.
4. Mehlan CT, Hubbard GW, Crawford AH, Roy DR, Wall EJ. Traumatic hip dislocation in children. *Clin Orthop Relat Reser* 2000; 376: 68-79.
5. Notzli HP, Siebenrock KA, Hempfing A, Ramseier LE, Ganz R. Perfusion of the femoral head during surgical dislocation of the hip. Monitoring by laser Doppler flowmetry. *J Bone Joint Surg Br* 2002; 84(2): 300-4.