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CLINICAL IMAGE

Traumatic posterior hip dislocation in a child

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ABSTRACT

Traumatic hip dislocation in children is an uncommon injury and constitutes an orthopedic emergency. We herein present a traumatic posterior dislocation of the hip in a 4-year-old child and emphasize on the role of early correction of the injury, preferably within 6 h since its occurrence to prevent long-term complications such as osteonecrosis, coxa magna, and osteoarthritis.

Key words: Avascular necrosis, hip dislocation, pediatric, trauma

A 4-year-old boy, escorted by his mother, presented to our emergency room with pain, deformity, and swelling of the left hip following immediate fall from a tricycle. On examination, patient was unable to move his left lower limb actively. The affected limb was internally rotated, adducted, and flexed at knee with obvious shortening [Figure 1a]. Distal neuro-vascular status was intact. A plain roentgenogram of the pelvis favored the diagnosis of posterior dislocation of the left hip without any fracture [Figure 1b]. Patient was transferred to the emergency operating room for a closed reduction of the hip under general anesthesia. Post reduction X-ray taken on Thomas splint confirmed reduction of the hip without any fracture [Figure 1c]. Following successful reduction, hip spica cast was applied for 6 weeks with position of the hip maintained in abduction and extension. The patient returned for follow-up at 6th week as advised and the cast was then removed. The hip appeared stable, and movements were painless. The child was permitted to walk. There were no clinical or radiological signs suggestive of avascular necrosis (AVN).

Traumatic hip dislocations (THD) are rare and represent 2-5% of all dislocations in all age groups [1]. Although 25 times less commonly seen in children under 14 years of age [1,2], and constituting only 5%, or 0.8 cases per million of all the cohort of THD [1,3], prompt identification of the injury is essential for a definitive early correction. Early reduction, preferably within 6 h of injury as followed in our patient, drastically reduces the potential of developing AVN by 20 folds [3,4]. Delay in management could impact prognosis and lead to the development of long-term complications such as osteonecrosis, coxa magna, and osteoarthritis in such patients.

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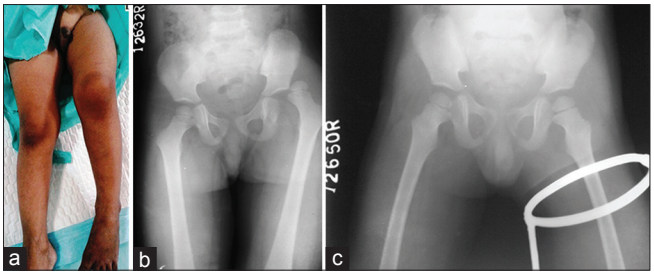

Figure 1 Traumatic hip dislocation (a) swelling at left hip with shortening of the left lower limb along with internal rotation, adduction, and flexion at knee. (b) Roentgenogram of the pelvis showing posterior dislocation of the left hip. (c) Post reduction radiograph showing reduction of the hip with no associated fracture

References

1. Rieger H, Pennig D, Klein W, Grünert J. Traumatic dislocation of the hip in young children. *Arch Orthop Trauma Surg* 1991;110(2):114-7.
2. Stewart MJ, Milford LW. Fracture-dislocation of the hip; an end-result study. *J Bone Joint Surg Am* 1954;36(A: 2):315-42.
3. Herrera-Soto JA, Price CT. Traumatic hip dislocations in children and adolescents: pitfalls and complications. *J Am Acad Orthop Surg* 2009;17(1):15-21.
4. Mehlman CT, Hubbard GW, Crawford AH, Roy DR, Wall EJ. Traumatic hip dislocation in children. Long-term followup of 42 patients. *Clin Orthop Relat Res* 2000;(376):68-79.

Authors' Contributions

KS and AK contributed to sequence alignment, literature search, and drafting the manuscript. AK, PK, and SG were involved in the management of the patient and clinical care. PJ helped revise the manuscript. All authors have read and approved the final version of the manuscript.

Consent

The authors certify that a written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the editor-in-chief of this journal.

Competing Interests
Nil

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