

Delayed Presentation of Paediatric Neck of Femur Fracture

¹Zulkifli, M Amir; ²Ku Ishak KA; ¹AMansor Norzakiah
¹Orthopaedics Department, Hospital Tuanku Fauziah, Kangar, Perlis

INTRODUCTION:

We report a case of delayed presentation of paediatric neck of femur fracture that has united with no evidence of avascular necrosis.

REPORT:

A 3 year old girl first presented to our centre 3 weeks post fall complaining of left hip pain. On examination there was shortening of left lower limb and there was a limping gait. Xray showed neck of left femur fracture. She was planned for MRI over left hip but subsequently defaulted and sought traditional treatment.

She presented again one year later with limping gait following another fall at home. Reportedly she was able to weight bear without limp prior to the second fall. On examination there was shortening of left lower limb. She subsequently underwent MRI of left hip which showed non union of neck of left femur fracture with no evidence of avascular necrosis. She underwent open reduction and screw fixation neck of left femur with valgus osteotomy of left femur and proximal femoral plating. Union of the fracture with no evidence of AVN was achieved at 5 months post op.

Neck of femur fractures represent less than 1% of all paediatric fractures and is associated with many complications¹. Avascular necrosis (AVN) is the most feared complication with incidence of 20-25%². Other complications of this fracture include non-union, coxa vara, and premature growth arrest. Various risk factors of AVN have been proposed, including fracture type and displacement, age, timing and quality of fixation. Anatomic fracture reduction and stable construct are essential to minimize risk of these complications.

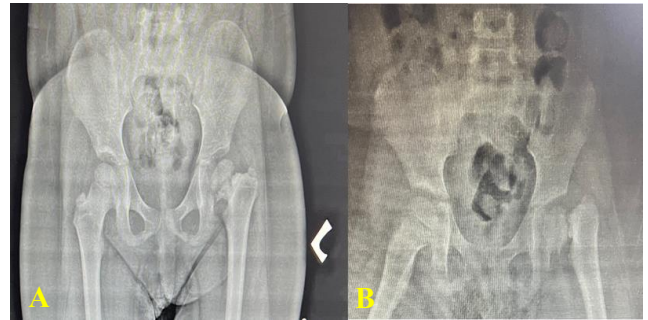


Figure 1: First presentation (A) and second presentation (B) one year later.



Figure 2: Union is achieved at 5 months post op.

CONCLUSION:

This injury is relatively uncommon, complications are many and dire. Although union has been achieved and patient did not develop avascular necrosis even after the first injury, it is essential that she is followed up closely.

REFERENCES:

1. Palocaren T. Femoral Neck Fractures in Children: A Review. *Indian J Orthop.* 2018 Sep-Oct;52(5):501-506.
2. Li Y, Sun D, Wang K, Liu J, Wang Z, Liu Y. Postoperative avascular necrosis of the femoral head in pediatric femoral neck fractures. *PLoS One.* 2022 May 12;17(5):e0268058.