

## A Case Of Neglected Neck Of Femur Fracture In A 6 Years Old Girl

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### INTRODUCTION:

Proximal femoral fracture in children are relatively rare event, accounting for about 1% of all fractures in childhood. The most used classification is Delbet system (1907) which is based on the location of fracture line, later popularized by Colonna (1929), which divides fractures in types I, II, III and IV, which may assist in treatment decision-making, in addition to being a predictor of risk for complications.<sup>2</sup>

### MATERIALS & METHODS:

A 6-years old girl presented to our clinic after 2 months post motor vehicle accident. She was presented with pain and swelling over right hip for past 2 months post trauma. No x-ray done post trauma until she came to our clinic and x-ray right hip and pelvic shown neglected neck of right femur fracture (Delbet Type III). She underwent open reduction, screw fixation and hip spica.

### RESULTS:

On subsequent follow up shows evidence of callus at fracture site with no radiological evidence of avascular necrosis.

### DISCUSSIONS:

By definition any case which is not receive any active orthopedic treatment for 3 weeks



should be labeled as “neglected” case.<sup>3</sup>

We must suspect a femoral neck fracture when the child is unable to weight bear on the affected lower extremity and presents with a shortened and/or externally rotated limb.<sup>4</sup>

X-ray Figure 1&2: Pre and post fixation pelvic AP

In 2006, Moon et al, demonstrated that the risk for development of osteonecrosis increases



with the complexity of the fracture and progressively correlates with the Delbet type of injury. Types I, II, and III fractures were 15, 6, and 4 times more likely to develop osteonecrosis than type IV fractures, respectively.

As in our case Delbet type III which is unstable fracture cannulated screw fixation is necessary.<sup>1</sup>

### CONCLUSION:

Femoral neck fractures are rare in the pediatric population, but the potential complications are severe, and pediatric orthopedic surgeons must be familiar with management of each type of injury appropriately in order to minimize risk of developing complications.

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