

Outcome of Alternative Surgical Intervention in Paediatric Distal Femur Fracture

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INTRODUCTION:

Distal femur fracture in paediatric age group usually treated with percutaneous fixation and supported with cast which may cause prolonged immobilization.¹ We had a case of paediatric distal femur fracture done surgery using PHILOS (Proximal Humerus Internal Locking System). Here, we presenting outcome of the surgery after patient undergoes removal of plate.

REPORT:

A patient 9 years old girl, alleged fall at home, seek treatment in hospital 2 weeks post trauma. At that time x-ray shows comminuted fracture of distal right femur. Patient undergoes open reduction and internal fixation using an 11 holes PHILOS plate. Patient was on regular follow up and fracture site achieved union. After 15 months from the first surgery, she undergoes another surgery for removal of plate. During follow up, we noticed patient had slightly varus deformity over fracture site. She was then monitored closely in our clinic and subsequent visit does not show any worsening varus deformity. Following 4 years post injury she was well with no limitation in range of motion or daily activity and able to function as other normal girls.

Figure 1: Initial x-ray showing distal right femur fracture.

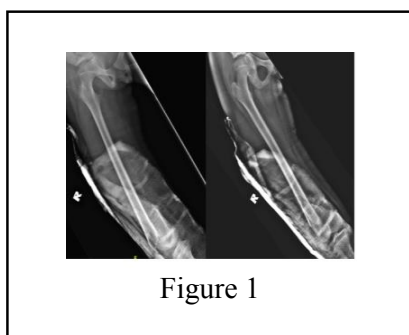


Figure 2: Post-operative 10 months x-ray right femur.

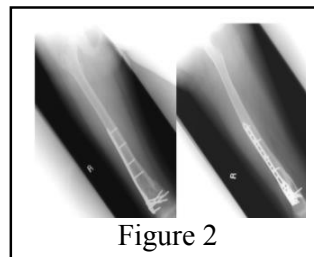


Figure 3: X-ray scanogram bilateral lower limb post trauma 3 years (after removal of implant).



CONCLUSION:

Paediatric distal femur fracture is challenging to manage. It may be treated with PHILOS plate as an alternative method. In this case, it is proven that this fixation is relevant and achieved the objective for fracture union. This alternative method is suitable to achieve early range of motion for patient. However, patient selection and proper assessment prior to surgery is vital. In view of patient is still in growing age, proper regular follow up is necessary to detect and prevent complications.

REFERENCES:

1. Sepúlveda M et al., Distal femoral fractures in children. EFORT Open Rev. 2022 April 25;7(4):264–73. doi: 10.1530/EOR-21-0110. PMID: PMC9069856.