

# A RARE CASE OF PAEDIATRIC ISOLATED HOFFA FRACTURE OF MEDIAL FEMORAL CONDYLE

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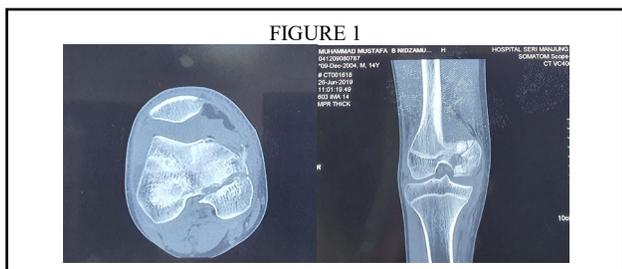
## INTRODUCTION:

Hoffa fractures are coronal-plane fractures of the femoral condyle. An isolated Hoffa fracture of medial femoral condyle is extremely rare in pediatric patient.

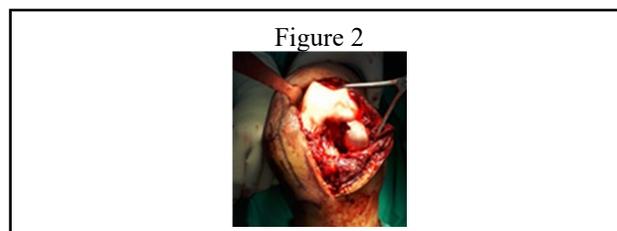
## REPORT:

A 14-year old boy presented to emergency department with alleged motor vehicle accident with a lorry while riding a motorbike. Clinical examination showed an injury to the right knee without neurovascular deficit. Imaging studies of plain radiographs and CT scan of the right knee revealed a comminuted Hoffa fracture involving epiphysis and medial corner of its metaphysis. Open reduction was performed via subvastus approach. Under direct vision, fracture was realigned anatomically and provisionally stabilized with a pointed reduction clamp and 3 Kirschner wires. The reduction was done without breaching the epiphyseal plate and fixed with 3 half-threaded 4.0mm cancellous screw. The screws were buried through the articular cartilage. Strict instructions were given to avoid any weight-bearing ambulation and gradually progressed until full weight-bearing achieved for 16 weeks. At 20 weeks post trauma, fracture was united and patient successfully underwent removal of screws from his knee. At 6 months of follow-up, the patient has 120° range of motion, with full extension. He was also pain free and ambulatory without walking aids.

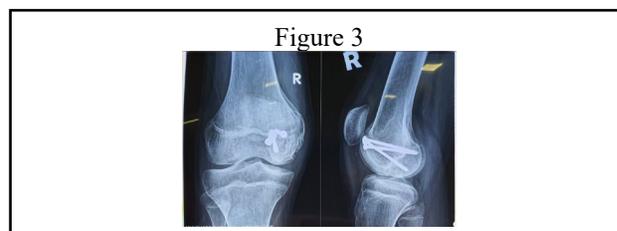
**Figure 1: CT scan with axial (left) and coronal (right) view of right knee.**



**Figure 2: Intraoperative finding during fracture reduction using pointed reduction clamp.**



**Figure 3: Radiograph showing postoperative screw fixation of Hoffa fracture**



## CONCLUSION:

Hoffa fracture in pediatric is extremely rare. Such injury can be missed without thorough clinical examination and modalities. It can be successfully treated with open reduction and screw fixation avoiding epiphyseal plate hence reduces undesirable complications that may arise if left untreated.

## REFERENCES:

1. Kamal Bali MS et. al. 2011; Bulletin of the NYU Hospital for Joint Diseases 2011;69(4):335-8
2. Hasna B et. al. 2016; JCOT-332; No. of Pg 2