**Original article:**

**A study of supracondylar fractures of humerus in children by open reduction and internal fixation with kirschner wires**

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**Abstract:**

**Background:** Supracondylar fractures of humerus is the commonest injury, constitutes about 65.4% of all fractures about the elbow in children. Displaced supracondylar fracture of humerus demand great respect and challenging one to treat, since it requires accurate anatomical reduction and internal fixation to prevent complications. So in this study we reported the results of open reduction and internal fixation with K-wires in the displaced (Gartland’s type III) supracondylar fracture humerus in children.

**Materials & Methods:** 30 cases of displaced (Gartland’s type III) supracondylar fractures treated by open reduction and internal fixation with K-wires were studied between September 2011 to August 2013 at our institution and followed for an average of 24 months.

**Results:** We came across 36 male patients and 14 female patients. Majority of the cases (38) were due to high energy trauma of road traffic accidents involving relatively younger patients. At the end of five months, all except four patients could mobilize independently without any aid. We did not come across complications like fracture of femur and failure of fixation and no reoperations were required.

**Conclusions:** Proximal femoral nails are a good implant for subtrochanteric fracture of the femur. The advantages include minimal exposure (closed technique), better stability and early mobilization. Fractures united in all cases and postoperative functional outcome was satisfactory. PFN could be preferred implant of choice in treating subtrochanteric fractures especially in elderly since it allows early and stable mobilization.

**Key-words:** Supracondylar fracture humerus; K-wire, Internal fixation