

## FINIDORI METHOD, TREATMENT OF MALROTATION AND LLD IN OI

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### INTRODUCTION:

Osteogenesis Imperfecta (OI) type 2 has good survival capacity, however patient have to withstand lifelong fractures and its complications.

### REPORT:

14year malay girl weighing 20kg with underlying scoliosis, diagnosed as OI at 25weeks pregnancy, born via ELLCS, 3rd out of 4 siblings, no family history of OI. She ambulates with assistance prior to this (afraid of fracture) mostly with wheelchair. No history of surgery prior to this though had multiple LL fracture since birth (>20). Her last fracture 4 months before the surgery was when she felt a pricking sensation on her left thigh. She sustained proximal third of left femur fracture after she attempted to ambulate with complication of non-union.

Her physical examination findings were shortening of 5cm with externally rotated left LL at 135 degrees and mobile fracture site

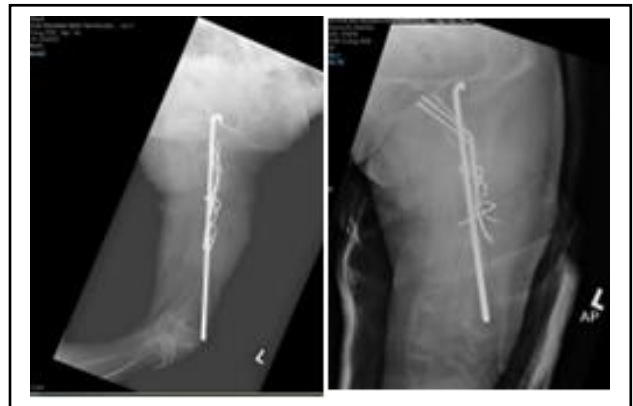
While planning for her surgery we had to address a few issues namely the non-union, shortening, and rotation. So,we opted for Finidori method with illipsoas lengthening and bone grafting. The non-united fragment resected and bone was cannulated via the resected site. A 3.5mm rush rod inserted and reinforced with cerclage wires and k wires for the neck a transfixing wire at the osteotomy site.

One of the early methods in correcting coxa vara is the Wagner method that involves passing two Kirschner wires through the femoral neck and the external portion of the wires moulded and fixed to the femoral shaft by cerclage wires. Fassier improved this technique by combining Wagner's method with Finidori's technique (intramedullary rods) to fix the subtrochanteric corrective osteotomy. Frassier showed a good outcome with 18 hips in OI and 3 hips in FD(1),

**Figure 1: Clinical picture and Pre operative Xray**



**Figure 2: Post Operative Xray**



with a few complications were all implant related.(1)

Modified method where they didn't penetrate the lateral cortex of distal portion of proximal fragment, instead used cannulated drill bit to create the canal and able to maintain desired neck shaft angle (NSA). K wires helps to maintain the NSA and prevent rotation (1).

### CONCLUSION:

We modified this technique and choose a rush rod as there are suitably sized for this petite patient and its far more cost effective.

### REFERENCES:

- 1.Ibrahim MA, Nik-Mohamed N, Munajat I, Sulaiman AR, Mohd EF. Treatment of Malrotation and Limb Length Discrepancy in Osteogenesis Imperfecta Patients: Report of Two Cases. *Malays Orthop J.* 2022 Mar;16(1):112-114. doi: 10.5704/MOJ.2203.016. PMID: 35519526; PMCID: PMC9017910.