

## Interlocking Nail As A Method Of Fixation For Selected Diaphyseal Fractures Of The Radius: A Case Series

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### INTRODUCTION:

Diaphyseal fractures of the radius have traditionally been treated with plate osteosynthesis to achieve axial and rotational stability. This can also be achieved with an interlocking nail (ILN). We report 2 patients that have been treated with an ILN of the radius.

### CASE SERIES

Patient A had sustained an open fracture of his left radius and ulna, closed fracture of his right tibia and an open fracture of his left lateral malleolus. Meanwhile, the Patient B had sustained closed fractures of the right radius and ulna complicated with compartment syndrome, and open fractures of the proximal phalanges of his 2<sup>nd</sup> and 5<sup>th</sup> fingers and the 5<sup>th</sup> metacarpal bone (MCB). Patient A was brought into surgery for wound debridement, exploration and toileting along with intramedullary nailing of the ulna and application of a backslab. 4 days after that, he was brought in for a second surgery, for external fixation of the radius, interlocking nail of the tibia and below knee casting of the left leg.

For Patient B, he initially underwent a fasciotomy of the forearm, intramedullary nailing of the ulna, wound debridement, toileting of the left hand and nailing of his phalanges, the 5<sup>th</sup> MCB and external fixation of the radius.

Both of these patients were deemed unsuitable for plating of the radius, due to the overlying skin wound, and the fact that the fracture of the radius was comminuted and segmental.

Once the wound conditions were suitable, both patients were brought into the operating theatre for an ILN of the radius.



Figure 1: Patient A



Figure 2: Patient B

### DISCUSSIONS:

Plate osteosynthesis can cause large operating wound, periosteal stripping, disruption of blood supply, refractures (after extraction of implants), and higher chances of infection compared to nailing.<sup>1</sup> Newer interlocking nails are now contoured and have options for both or either distal or proximal locking screws. This allows relative stability, rotational and axial stability, restoration of radial bow and early return of range of movement.<sup>2</sup>

### CONCLUSION:

Interlocking nail is comparable to plate osteosynthesis and a better option in selected cases of fractures of the radius.

### REFERENCES:

1. P.Visna et al. Acta Chir Belg, 2008, 108, 333-338
2. G Saka et al. Injury, Int. J. Care Injured 45(S) 2014 S16-S23.