**Techniques of Performing Splint Bone Removal Surgery**

Equipment

* 22-gauge needle
* 5 mL syringe
* Operating table
* Endotracheal tube
* Tourniquet
* Wound drape
* Scalpel blade
* Wound distractors
* Chisel (Osteotome)
* Mallet
* Absorbable suture & Needle
* Needle holder
* Forceps
* Penrose drains
* Gauze
* Tetanus antitoxin
* Antibiotics
* Local anaesthetics
* General anaesthetics
* Surgical staples
* Oscillating Saw

**Surgical procedure**

* A longitudinal incision is made through the skin and subcutaneous tissues, over the full length of the lateral aspect of the fourth metatarsal bone. (2 cm proximal to the head and 2 cm distal to the button, of the fourth metatarsal)
* Locate the bone by placing a 20 gauge, 3.3 cm needle at the most proximal end of the bone in the tarsometatarsal joint.
* Sharply dissect out the splint bone and elevate the bone from surrounding tissues, beginning distally.
* Preserve the metatarsal artery and surrounding soft tissues.
* Remove the distal part of the splint bone below the fracture site
* Once the fracture site is reached, remove the fracture fragments and debride any infected or damaged tissue skin or sequestra.
* Sharply dissect the proximal end of the bone through the proximal ligamentous attachments (lateral long collateral ligament and plantar ligament attachments to the fourth metatarsal bone) and the tarsometatarsal articulations.
* Use an osteotome/periosteal elevator and small hammer if necessary to transect the interosseous attachment to the 3rd metatarsal bone
* Debride and curette damaged area as required
* Curette articular facets of the tarsometatarsal joint and any localised damage at the fracture site involving 3rd metatarsal bone.
* Collect tissue for culture and sensitivity if necessary.
* Flush the entire surgical site liberally with sterile isotonic fluid +/- 0.1% povidone-iodine solution
* Close routinely with deeper tissue and subcuticular layers of simple continuous synthetic absorbable sutures plus surgical skin staples or simple interrupted non-absorbable skin sutures
* If excessive amounts are present the insertion of a small Penrose drain left for 24-48 h will encourage drainage
* Apply a sterile absorbable wound dressing and two or three layer full limb Robert Jones pressure bandage
* To protect against possible fracture of the third metatarsal bone and/or luxation of the tarsometatarsal joint, two splints are attached to the bandage (laterally and from point of calcaneus distal to foot) for recovery from GA. Assisted recovery procedures are also helpful