

Trimalleolar Fracture Fixation using WALANT technique during COVID-19 pandemic

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INTRODUCTION:

Trimalleolar fracture fixation is challenging. During COVID-19 pandemic, resources are limited, and this requires surgeons to come out with alternative treatment option. Fracture fixation with wide-awake local anaesthesia, no tourniquet (WALANT) technique has gain attention and popularity in foot and ankle surgery. (1) We present a case of trimalleolar fracture fixation operated with WALANT technique.

REPORT:

A 60-year-old lady presented with left ankle pain and deformity after a fall. She was examined and radiograph confirmed diagnosis of ankle subluxation with trimalleolar fracture, Lauge Hansen classification supination-external rotation stage 4.

She was scheduled for emergency operation, open reduction and internal fixation. Due to limitation of manpower during pandemic, operation was delayed for 4 days.

Patient was counselled for operation under WALANT technique.

WALANT solution was prepared with 50ml of normal saline, 50ml of lignocaine 2%, 1ml of adrenaline (1:1000) and 10ml of sodium bicarbonate 8.4%. This made the concentration of lignocaine at 1% while the concentration of adrenaline at 1:100 000. WALANT solution was infiltrated over skin and subcutaneous layer of patient's left ankle, including site of planned incision at medial malleolus, around 10cm along distal fibula and posterior ankle around the site of incision, 30 minutes prior to incision.

Planned incision site blanched and anaesthetic effect was tested prior to incision. Patient was monitored and pain score was reassessed intermittently. WALANT solution was added on whenever patient was in pain.

Distal fibula fracture was reduced and fixed with a hook plate. Medial malleolus fracture was fixed with 2 headless compression screws. Posterior malleolus fracture was percutaneously fixed with 2 cannulated headless compression screws.

Patient was discharged on post op day 5.



Figure 1: Trauma radiograph



Figure 2: post fixation radiograph

CONCLUSION:

Future studies should investigate the long-term outcomes, complications, and medical economics impact of WALANT surgery in foot and ankle surgery.

REFERENCES:

1. Li YS, Chen CY, Lin KC, Tarng YW, Hsu CJ, Chang WN. Open reduction and internal fixation of ankle fracture using wide-awake local anaesthesia no tourniquet technique. *Injury*. 2019;50(4):990-4.