# Use of WALANT Technique in Flap Surgery of The Finger – A Case Report Gan, Han; Gunasagaran, Jayaletchumi

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## **INTRODUCTION:**

The Wide Awake Local Anaesthesia with No Tourniquet (WALANT) technique, widely adopted in hand surgery, has replaced traditional methods due to its advantages, including enhanced patient safety, cost-effectiveness, improved communication during surgery, and early postoperative mobilization. However, its application in flap surgery has been controversial, particularly regarding flap necrosis due to the use of epinephrine. WALANT involves performing surgery under wide awake local anesthesia without a tourniquet, while concerns initially existed about using WALANT in flap surgery due to perceived risks of flap necrosis with epinephrine, recent evidence has disproven this, affirming the safety of the technique.

### **REPORT:**

This 72-year-old patient presented with a finger swelling lasting 18 months that occurred after a thorn prick. The patient opted for excision and biopsy as it did not resolve with antibiotics. WALANT was administered using lidocaine, epinephrine, and sodium bicarbonate. The excision resulted in a 1.4x1.4cm defect, requiring a flap for closure. Real-time communication with the patient during the surgery, facilitated by WALANT, allowed for immediate decision-making. A local bi-lobed flap was designed, preserving dorsal veins and achieving hemostasis with epinephrine. The patient reported minimal pain during the postoperative period, avoiding opioid use. The flap showed no signs of ischemia, and the patient experienced excellent functional outcomes.



**Clinical pictures :** (A) Swelling over the proximal interphalangeal joint of the right little finger. (B) Skin defect post excision with marking of the bi-lobed flap incision. (C) Transposition of the flap into primary defect. (D) Flap sutured with Nylon 5/0. (E) 2 weeks postoperative – flap is viable and healthy. (F) 6 weeks postoperative

### **CONCLUSION:**

WALANT in finger flap surgery offers advantages, including the absence of general anesthesia risks, intraoperative communication, early mobilization, and cost-effectiveness. The vasoconstrictive effect of epinephrine aids in hemostasis without jeopardizing flap survival. The technique eliminates the reliance on limited operating theater slots, allowing for more flexibility in scheduling.

### **REFERENCES:**

1. Lalonde D. (2015). Wide awake local anaesthesia no tourniquet technique (WALANT). BMC Proceedings, 9(Suppl 3), A81.