

Variable Angle Locking Plate (VALCP) Of Distal Radius With Wide Awake Local Anesthesia No Tourniquet (WALANT)

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INTRODUCTION:

WALANT is a very patient-focused approach and offers several advantages related to the type of anesthesia as well as the elimination of the tourniquet. This technique was first introduced by Dr. Donald H.Lalonde in 2007 , used in many hand procedures such as trigger finger and tendon repair . However it can be done on distal radius fracture fixation .

MATERIALS AND METHOD :

We presented a case of 55 years old female with right wrist pain after fall at home . Examination revealed tenderness on her right wrist, and radiograph showed fracture of distal end right radius , and need fixation . Adequate information regarding WALANT was given and she agreed.

RESULTS :

The patient underwent open reduction and internal fixation , using 2.5mm variable angle locking plate (VALCP) . WALANT mixture was given one hour prior to operation. Visual analog score was used intraoperatively to monitor the pain . She comfortable throughout procedure and the anesthesia effect lasted for 6 hours.

DISCUSSION :

The solution used was mixture of 50ml lignocaine 2% (for local anesthesia) , 1ml of adrenaline 0.18% (for hemostasis) , 10ml of sodium bicarbonate 8.4% (to buffer the solution) and diluted with 50ml normal saline for tumescent anesthesia effect. Safe dosage of lignocaine with adrenaline is 7mg/kg with patient's weight is 70 kg. 10ml of mixture injected subcutaneously over volar incision site and 10ml of mixture injected over each three dots area at midline radial distal forearm as periosteal nerve block . Operation need to wait

at least 30 minutes to allow adrenaline to reach maximal vasoconstriction and provide dry operative field. Without usage of tourniquet can avoid complications such as hematoma and post operation swelling.

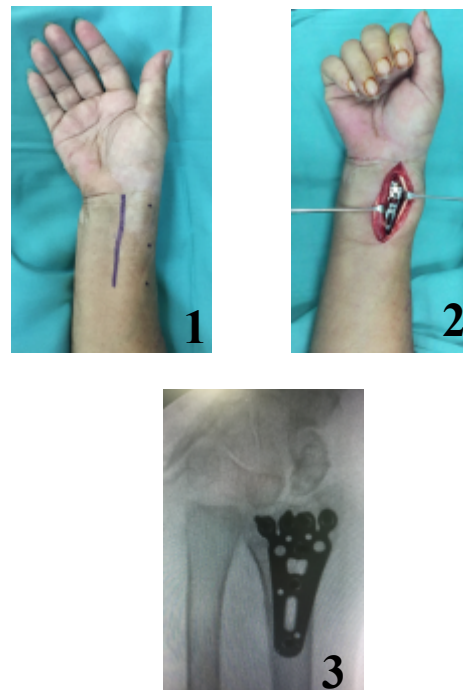


Figure 1: WALANT injection sites

Figure 2: Intraoperative view

Figure 3: Check xray

CONCLUSION:

With WALANT, pain and complications can be minimized , and profoundly beneficial for high risk patients with general anesthesia .

REFERENCES :

1. Lalonde D. Wide Awake Hand Surgery (2016) : pg 3-32