

# Hand And Wrist Surgery Using Wike Awake Local Anaesthesia No Tourniquet (WALANT) Technique In District Hospital

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## INTRODUCTION:

Ideal situation for any surgery would be painless and blood-less. Tourniquet plays a vital role in hand and wrist surgery for better visualization. Discomfort caused by tourniquet leads to the need of sedation or regional anaesthesia, which is too costly or unavailable in district hospital in Malaysia. Thus, this WALANT technique enable us to perform most of hand and wrist surgery effectively in district hospital.

## MATERIALS & METHODS:

Total of twelve patients for hand and wrist surgery were operated in our center in the year of 2018 (from 01-02-2018 till 31-12-2018). In all cases, WALANT technique used. Example of cases that operated were trigger finger release, carpal tunnel release and post traumatic finger refashioning.

Parameters	Male	Female
No of patients	6	6
Age, mean (range)	60.83 years (41-72)	58.5 years (34-77)

**Figure 1: Demographic data of the patients.**

## RESULTS:

Postoperatively, patient had high satisfaction level as they are not required to travel to tertiary hospital to get operated. WALANT technique also is time effective as no time required to set up tourniquet or/and provide anaesthesia and no pre/post-operative investigations and monitoring are required. Apart from that patient with multiple co-morbidity also can be operated using this technique safely and adverse effect of sedation or regional anaesthesia can be avoided.

Prcedure	Range (Min)	Mean (Min)
Trigger finger release	25-35	29.43
Carpal tunnel release	30-35	32.67
Finger refashioning	25-30	27.5

**Figure 2: Average time required for the procedures**

## DISCUSSIONS:

Based on this study, we able to underline the importance and advantages of WALANT technique in hand and wrist surgery in district hospital, where facilities such as tourniquet and anaesthesia equipments not widely available. Study done by Lalonde D et al. [1] proved that low-dose epinephrine does not cause infarction/necrosis of the fingers. Teo I et al. [2] also reported high satisfaction level among 100 patients who underwent wide awake hand surgery.

## CONCLUSION:

Based on our study, we can conclude that hand and wrist surgery can be performed in district hospital, without tourniquet and anaesthesia equipments. However, further study involving more number of hospitals and larger number of patients is necessary to provide more data regarding WALANT technique in district hospital.

## REFERENCES:

1. Lalonde D et al. A multicenter prospective study of 3,110 consecutive cases of elective epinephrine use in the fingers and hand: the Dalhousie project clinical phase. *J Hand Surg* 2005;30A:1061– 7
2. Teo I et al. Patients' perspective on wide-awake hand surgery—100 consecutive cases. *J Hand Surg Eur Vol.* 2013 38(9)