MFT Hand Trauma WALANT Pathway
Standard Operating Procedure

DEPARTMENT: Plastic & Reconstructive Surgery (Wythenshawe and Withington)

DESCRIPTION: The aim of this Standard Operational Policy (hereinafter SOP) is to assist staff to:-

- Consider which cases are suitable for WALANT
- Arrange appropriate referral to Withington
- Perform safe WALANT
- Understand procedures to reverse WALANT
- Ensure safe discharge and Follow up

EFFECTIVE DATE: 23.03.2020

REVIEW DATE: NUMBER:

REPLACES SOP: N/A VERSION NUMBER

RECOMMENDED BY: Jason Wong APPROVED BY:

DATE: 18th March 2020 DATE:

SCOPE: This SOP covers decision making

POLICY:

Introduction
In the current climate of the COVID-19 crisis our resource to theatres and anaesthetic support will be limited, and our current trauma working patterns require us to adopt a new approach. There will be an increased need to move patients with isolated hand injuries through the department quickly. We will adopt an ambulatory hand surgery service at Withington Hospital to cater for emergency hand trauma that can be performed using a “Wide Awake” approach or WALANT (Wide-Awake Local Anaesthetic No Tourniquet). The document will outline how to decide which patients are suitable and how to perform this safely. This will liberate essential theatre space and anaesthetic staff on the Wythenshawe site to manage the increasing number of respiratory cases.

Cases that should be considered for WALANT;
Any single digit injury involving nail, bone, nerve, tendon, with no vascular compromise (suspected single vessel injuries are NOT a contraindication to this technique)
Any multiple digit injury involving nail, bone, nerve tendon, with no vascular compromise that can be completed within 2 hours. (suspected single vessel injuries are NOT a contraindication to this technique).
Superficial foreign bodies of the digit
Wrist lacerations which are likely to be completed within 2 hours
Superficial infections of the digit tip
Soft tissue cover requiring simple or pedicled flaps or skin grafts
Cases that should be performed under general anaesthetic (not suitable for Withington);
- Complex single/multiple digit injuries that require revascularisation or replantation
- Wrist injuries that are likely to take longer than 2 hours
- Penetrating Injuries proximal to the distal third forearm
- Deep foreign bodies of the palm and wrist and forearm
- Deep infection cases of the digit, palm wrist or forearm
- Soft tissue cover requiring free flaps

Patient considerations for general anaesthesia/ contraindications for WALANT ;
- Patient does not wish to be awake
- Patient who you suspect will be anxious and non-compliant to instruction
- Paediatric cases
- Patients with previous vascular injury, vasculitis, Buerger’s disease, scleroderma
- Patient with infection at sites of injection

Planning
Patients will be assessed and consented in the trauma clinic. Those identified as suitable for WALANT will be registered with the Trauma Co-ordinator for a planned surgical slot at Withington hospital. A patient information sheet will be provided (Appendix 1)

Check-in
On arrival at Withington day case surgery, patients will be checked in, consent and planned operation will be reconfirmed, surgical site re-checked, patient marked, and reassessed by the operating surgeon.

Pre-operative preparation
- Patient into gown and identification
- Non inflated tourniquet to operating arm (optional)
- Access to appropriately sized finger tourniquets
- Pulse oximetry monitoring should be used in all cases
- Pre op checklist

Local Anaesthesia
Injection site will be cleaned and prepared with alcohol prep
1% Xylocaaine with 1:200000 adrenaline premixed will be used in all cases. It is optional to mix this with 0.25% bupivacaine in a 1:1 admixture, +/- 1ml of 8.4% sodium bicarbonate, but in doing so they must be adhere to recommended safe volumes (see Appendix 2). Recommended maximum volume of injections for sites are;
- Forearm – 20 mls
- Wrist- 10-15 mls
- Hand- 10-15 mls (with high volumes avoid injecting all in one compartment)
- Finger- 2-10 mls (with high volumes avoid injecting all in one site)
- When in doubt use lower volume and top up as necessary. Avoid high volume injections into the flexor tendon sheath. Guidance for injection can be found in Appendix 3.
- (Slow gentle injection is key to avoid pain, site should be massaged to spread local anaesthesia)
- Full field anaesthesia and vasoconstriction will usually be achieved in 15 mins (be patient!)

Surgery
Patient will be cleaned and prepared
Standard surgical procedure performed depending on injury
In cases where a complete blood free field is desired, a temporary tourniquet can be applied. Max. 30 minutes for arm, forearm, and digital tourniquet. Microscopes, C arms and hand fixation kits will be available to cover the broad range of trauma hand surgery.

**Dressings**
As per surgeon’s preference

**Post-operative care**
Patients will have the appropriate discharge forms completed
Patients will be observed in recovery until perfusion to digit returns
Patients advised to contact Hand Therapy clinic if anaesthesia not resolved after 24 hours
Discharge with follow up with Hand Therapy Clinic under the respective consultant

**Rare complications/ Reversal of WALANT**
In cases where the finger remains white;
Rewarm the finger, massage the digit, locate phenolamine (1mg in 1ml) and inject at previous injection sites or topically for reversal
In cases where there is vascular damage, inform supervising consultant and attempt repair. If finger remains devascularized, arrange transfer to Wythenshawe site.
Anaesthesia should reverse after 5-6 hours for xylocaine only, and 12 hours for bupivacaine.

Of note: there will be an increasing number of unique cases that will be managed by WALANT and there is an opportunity here to document some interesting cases with consent for images and video for future education purposes.

**Reporting of Serious Incidents/ Near Misses**
Incidents and near misses will be reported in accordance with the Hospital Incidence Reporting system.

**REFERENCE / RELATED POLICIES:**
1. LALONDE D. **WIDE AWAKE HAND SURGERY EDITION 1.** 2016 CRC PRESS
2. El-Boghdadly K, Pawa A, Chin KJ. Local anesthetic systemic toxicity: current perspectives. *Local Reg Anesth.* 2018;11:35-44 https://doi.org/10.2147/LRA.S154512