

## Preparation for Hand Surgery- General Anesthesia

### Fasting Instructions

Fasting is essential prior to surgery. In the event you did not follow the instructions, the surgery will be rescheduled. No food or drinks (except plain water) after midnight or as instructed. Last drink allowed is half a cup (100ml) of plain water.

### Medicine

Certain medications need to be stopped in preparation for the surgery. Please inform your doctor of all medications you are on, especially blood thinners or herbal medications.

### Special Instructions

- Any recent infection involving the throat, lung, urinary tract or skin must be highlighted to the surgeon prior to surgery. Your surgery might have to be postponed.
- Have a parent / legal guardian to give consent if you are below 21 years old.
- Smoking causes breathing problems and hinder wound healing. Try to cut down on smoking and seek help on smoking cessation
- It is important to manage the blood glucose to reduce risk of infection after surgery.

### Diet and Nutrition

- Good nutrition / Well-balanced meals is essential for recovery
- Include food rich in Vitamin C, Calcium, iron and fiber in the diet
- Drink plenty of fluids and stay hydrated unless otherwise instructed

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## **Pre-Operative Assessment**

Financial counselling for estimated bill for hospital stay and surgery will be discussed.

You would be asked to come to the Pre operation assessment before scheduled surgery date to do tests that determine your fitness for the surgery. Examples include:

- Blood tests
- MRSA screening
- Chest Radiograph
- Electrocardiogram

## **One day before Surgery**

The nurse from Same Day Admission (SDA) Clinic will contact you one working day before your scheduled surgery date. The nurse will inform you on the following:

- Time to report to hospital and time of surgery. Please bring along your admission kit.
- Instruction to fast before surgery.
- Medications to consume before surgery.
- Bring all CD / X-rays or any medical notes from doctors on the day of admission and hand over to the nurse.
- Safekeeping of personal items and valuables in the hospital. Do not bring valuables to hospital.
- Remove any nail polish
- Sleep early and have a good rest
- Follow given instructions to shower with antiseptic solution.

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## Pre-operative Bath and Shampoo for Elective Surgical Patient: Antiseptic wash eg: Chlorhexidine Gluconate 4% or Octenisan

Step 1 : Wet the hair and body.

Step 2: Shower

1. Apply adequate amount (about half a palm size) of antiseptic solution onto the scalp and massage the scalp thoroughly. Allow 5 mins to take effect before rinsing off.
2. Apply adequate amount (about a palm size) of antiseptic solution onto a piece of damp cloth and scrub the body according to the instruction in **Step 3**.

Step 3: Follow the sequence and direction as shown in the diagram to ensure maximum body surface contact with the antiseptic solution:

1. Scalp
2. Face
3. Fingers      Shoulder
4. Neck      Groin
5. Umbilicus
6. Back of body – Neck      Heel
7. Toes      Groin
8. Genital area

Step 4: Leave the solution on the body for 5 mins.

Step 5: Rinse off the hair and body thoroughly with water. The antiseptic solution could be very drying to skin, hence adequate rinsing is important.

Step 6:

Dry with clean towel. To perform the wash daily for 2 days.

### Day of Surgery

Do not bring valuables. Do not wear makeup. You are advised to bring your dentures, spectacles or hearing aids if any. You should report to Same Day Admission (SDA) Clinic at the scheduled timing. You would be given a gown to change to before going to the operating theatre.

### During Surgery

An IV will be started in the non-operative arm to deliver medicine that puts you to sleep, so you will be unconscious and unable to feel anything during surgery. Your condition will be monitored closely by Anesthetist in the operating room.

A “block” (additional anesthesia) may be injected into the arm for additional numbing, primarily for post-operative pain control. The hand may remain numb for up to a day after surgery.

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## **After the Surgery**

After your surgery, you will be brought to the recovery room in the operating theatre for monitoring before returning to the ward. In the recovery room, the nurse will frequently monitor your vital signs (blood pressure, heart rate, respiration rate, temperature and pain level).

Your loved ones are advised to wait at the waiting area. Please be informed that the recovery time varies and may take up to several hours. You may be transferred to the short stay ward / general ward / high dependency unit depending on your condition.

## **Care after Hand Surgery**

The aim of care after your surgery is to allow you to return to your daily activities and hand functions. You are cared by a multidisciplinary team comprising of the Hand Surgeons / Doctors / Advanced Practice Nurses/ Nurses/ Hand Occupational Therapist.

### **1. Activity/rehabilitation**

The Surgeon, nurses and hand occupational therapist will assist / advice you on your daily activities. They will teach you on the specific exercises.

- Continue with your daily activities using the unaffected hand.
- Only perform daily activities using your operated hand if instructed by the doctor.
- Continue with the daily exercise regime as taught by the Hand Therapist.
- Avoid performing heavy chores or lifting heavy objects with your operated hand until further advice from the doctor.
- You should keep unaffected joints mobilised to prevent stiffness

During your hospital stay, inform the nurses if you need assistance to go to the toilet or take a shower, the operated hand / arm should be kept dry and clean. It should be protected away from water. This should continue until the wound healed.

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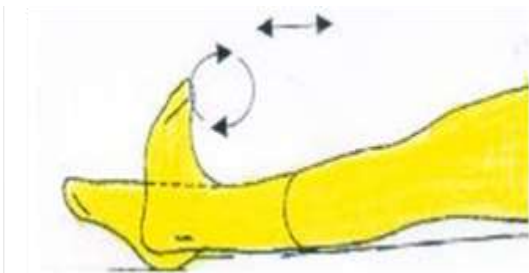
## 2. Breathing

There may be an oxygen tube in your nose which would be removed when you are feeling better. You can do deep breathing exercise and coughing exercise to help expand your lungs and get adequate oxygen to your lungs.

## 3. Circulation

It is important to perform ankle pump exercises to help your blood flow. Lie on your back with straight legs. Keeping your heels flat, pull your toes toward your head, flexing your feet, then point your toes away from you. Move your feet and ankles back and forth, completing a full range of motion.

A mechanical device known as a calf pump may be used to squeeze the leg muscles and improve circulation while you are in the hospital.



Ankle pump exercise



Pneumatic pumps

## 4. Pain Management and Medication Safety

You will have pain after surgery. The degree of pain you may have will vary and differ for individual. Your nurse will ask you to rate your pain on a scale. The goal is to minimize the pain so that you can rest and exercise. Pain medicine can be given in different ways. You will be prescribed with oral medication to manage your pain and keep you comfortable.

You may receive pain medication through an intravenous (IV) access into your blood vessel (vein) for better pain control if required.

In addition, you may also receive an injection around the nerve for adequate pain management. It will be done by the surgical team.

Report to your care team if pain is not relieved.

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Pain medications should be taken around the clock for best effect during the acute phase and gradually decreased as pain reduces

You should ONLY take the medications served by the nurses. Inform the care team if you have any own medication.

## **5. Swelling Management**

Swelling may persist up to few weeks after operation. Controlling the swelling helps to improve pain and speed up your recovery.

- You should keep your operated hand above the level of your heart
- When sitting or lying, you should use pillows to support your operated hand
- You may not need arm sling, however, if arm sling is required, to use for support your operated arm only when walking
- Do the hand exercises that you have been taught to do. Movement of other unaffected fingers to prevent stiffness and help with swelling reduction

## **6. Food/Fluids**

You will have fluids through intravenous at first. It will be stopped when you are eating and drinking well. Increasing food slowly may help to avoid nausea that can happen after anesthesia or with use of pain medicine. Inform your care team if you experience nausea/ vomiting badly after general anesthesia.

## **7. Bladder /Bowel care**

You may have a tube (catheter) to pass urine from your bladder. This catheter will be removed once you are ambulating. Anesthesia and pain medication can cause constipation .Drink plenty of fluids and eat vegetables and fruits. A stool softener or laxative can help with normal bowel function. Inform your doctor/ nurse if you are unable to open your bowels.

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## 8. Wound Care

Your incision may be closed by stitches, surgical tape, or surgical glue. The stitches are usually removed 14 days after surgery (unless otherwise instructed by your doctor). If absorbable sutures are used, that do not need removal. The wound will be covered with dressing such as bandage. You may also have a temporary tube (a drain) coming out of the wound. Your surgeon will decide when to remove the drain.

The wound may heal within 2-3 weeks. You should keep the dressing dry and clean, avoid hand washing for the operated hand. You may use a wet tissue to wipe the unaffected fingers over operated hand. The dressing should be protected with a waterproof cover during shower.

Upon discharge, the ward nurse will provide information to you on how to manage your wound.

## 9. Discharge plans

You are encouraged to discuss with your family and identify a caregiver that will care for you after discharge. The caregiver can receive training from the healthcare team in caring for you after discharge. You may also explore the options of transferring to a step down facility (Community hospitals) for rehabilitation/wound care if there is no available caregiver. Please inform your Staff Nurse-in-charge of your choice of step down facility. You may approach the nurse to find out about the list of community hospitals available.

### On the Day of Discharge

You will be advised and reinforced on how to care for yourself at home, such as wound care, hand elevation, pain management and relevant rehabilitation exercises.

You will be given scheduled appointment at outpatient clinic for follow up.

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