

# **Procedure Information Sheet - Above or Below-knee Amputation**

**Introduction** 

Amputation is the surgical removal of all or part of a limb. Below or above-knee amputation are some of the most commonly practised major amputations in orthopedic surgery. To patient, major amputation represents a loss of a major body part.

#### **Indications**

- 1. Dead limb: usually result from peripheral vascular disease but sometimes follows severe trauma or burns.
- 2. Dangerous limb: with a malignant tumor or potentially lethal infection or because of a crush injury.
- 3. Nuisance limb: because of rest pain, recurrent infection, gross deformity beyond reconstruction (either congenital or acquired) or severe loss of function.
- ♦ In Hong Kong, the most common causes of lower limb amputation are peripheral vascular disease and complications of diabetes mellitus, such as infection or intractable ulcerations. The level of amputation i.e. below or above the knee joint depends on the viability of the soft tissue, the level of infection and the knee joint deformity.

### Procedure

- 1. The operation will be performed under either general or spinal anaesthesia.
- 2. The skin, muscles, nerves and blood vessels are divided around the selected level of amputation; the bone(s) is then sawed.
- 3. Stop the bleeding; the soft tissue is closed around the bone end to create a stump.
- 4. A plastic drain is inserted into the stump to drain haematoma. The drain is usually removed within 2 days after the operation.
- 5. The skin is closed with stitches or staples and they are usually removed 2 weeks after the operation if the wound heals uneventfully.

#### **Pre-operative preparation**

- 1. You will need to sign a consent form and your doctor will explain to you the reason, procedure and possible complications.
- 2. Optimization of the underlying disease: better control of the blood sugar level, improves the circulation by vascular surgery if possible and the nutritional status

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etc.

- 3. Use of antibiotics to control infection if necessary.
- 4. Regular wound dressing.
- 5. Counseling for rehabilitation plan.
- 6. Keep fast for 6-8 hours before operation.
- 7. Nursing staff will assist you to clean the skin and perform shaving if necessary.

## Possible risks and complications

#### A. General risks

➤ Heart attack, chest infection, stroke, deep vein thrombosis and pulmonary embolism, urinary tract infection etc. All can be fatal if severe.

## B. Specific risks and complications

- > Slow or non-healing of stump wound form bleeding haematoma, infection or wound dehiscence, requiring revision or further amputation.
- ➤ Wound scar problem such as repeated breakdown, hypersensitivity or contracture.
- > Stump pain and numbness, phantom limb pain.
- **Progression** of disease and further amputation if not well controlled.
- Prosthesis related complications including skin ulceration, impingement by bony prominence, contracture etc.
- Repeated surgery may be necessary to rectify the complications.

### **Post-operative information**

## A. Hospital care

- 1. Compressive wound dressing is commonly used for controlling and minimizing of swelling.
- 2. Patient with above-knee amputation is usually given a soft dressing which is sterile, compressive stump bandage.
- 3. Patient with below-knee amputation is usually given a rigid dressing, such as a Plaster-of-Paris cast to protect the stump immediately after the operation. This "constant volume" dressing offers some advantages in minimizing the stump pain and controlling edema and knee joint contracture.
- 4. Prosthesis may be prescribed for ambulatory rehabilitation, depending on the patient's training potential, condition before and after the operation.

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# B. Home care after discharge

- 1. Please contact your doctor if your wound has any excessive bleeding, collapse, severe pain, fever (body temperature above 38°C or 100°F), signs of wound infection such as redness, swelling or purulent discharge occurs.
- 2. Follow up on schedule as instructed by your doctor.

### **Remark**

The above mentioned procedural information is not exhaustive, other unforeseen complications may occur in special patient groups or individual differently. Please contact your physician for further enquiry.

**Reference**:http://www21.ha.org.hk/smartpatient/en/operationstests\_procedures.html

I acknowledge that the above information concerning my operation/procedure has been explained to me by Dr I have also been given the opportunity to ask questions and receive adequate explanations concerning my condition and the doctor's treatment plan.	
Name: Pt No.: Case No.: Sex/Age: Unit Bed No: Case Reg Date & Time: Attn Dr:	Patient / Relative Signature:  Patient / Relative Name:  Relationship (if any):  Date:

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