

Operation Information

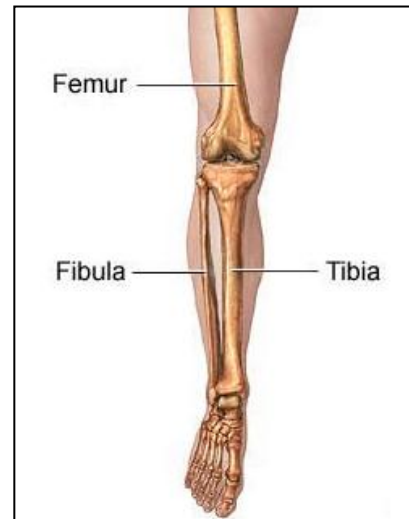
Above or Below-Knee Amputation

Introduction

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

Indication

1. Dead limb: usually results from peripheral vascular disease, but sometimes follows severe trauma or burns
2. Dangerous limb: with a malignant tumour 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



Source:
<http://health.allrefer.com/pictures-images/leg-skeletal-anatomy.html>

In Hong Kong, the most common causes for 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 is performed under 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 may be 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.
6. Open amputation may be required in rare situation. For such situation, stump closure is required at later stage.

Possible Risks and Complications

1. General Risks and Complications
Heart attack, chest infection, stroke, deep vein thrombosis and pulmonary embolism, urinary tract infection etc. All can be fatal if severe enough.
2. Specific Risks and Complications
 - i) Slow or non-healing of stump wound from bleeding haematoma, infection or wound dehiscence, requiring revision or further amputation
 - ii) Wound scar problem such as repeated breakdown, hypersensitivity or contracture
 - iii) Stump pain and numbness, phantom limb pain
 - iv) Progression of disease and further amputation if not well controlled
 - v) Prosthesis related complications including skin ulceration, impingement by bony prominence, contracture etc.

** It is impossible to mention all the possible complications that may happen and the above is only a few important complications which may occur. Before agreeing for the operation, you must acknowledge and accept the fact that no matter how ideal the situation may be, these events may occur. Damage to peripheral organ, severe haemorrhage and leakage after operation, it may require another operation to deal with the complications.

Pre-operation Preparation

1. Your doctor will explain to you the reason, the procedure and the possible complications. Patient will need to sign the consent form.
2. Use of Antibiotics to control infection if necessary.
3. Regular wound dressing.
4. Counseling for rehabilitation plan.
5. No food or drink is allowed six to eight hours before operation.
6. Nursing staff will assist you to clean the skin and perform shaving if necessary.
7. Change to operation attires and removal of loose objects (e.g. dentures, jewellery, contact lens etc).
8. Empty bladder before surgery.

Post-operation Instruction

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 a sterile and 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. A prosthesis may be prescribed for ambulatory rehabilitation, depending on the patient’s training potential, condition before and after the operation.

Advice on discharge

1. Please contact your attending doctor or go back to hospital if you have any excessive bleeding, collapse, severe pain, fever (body temperature above 38°C or 100°F), signs of wound infection such as redness, swelling or stinking discharge etc.
2. Follow up: Please attend the follow-up as arranged.

Remarks: Should you have any enquiries, please consult your doctor.

Reference

Hospital Authority – Smart Patient (Website: http://www21.ha.org.hk/smartpatient/tc/operationstests_procedures.html)

Compiled by Union Hospital Consent Form Taskforce

The above information is for reference only, please enquire your physician for details
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification