# Information on Ligation and Stripping for Varicose Veins

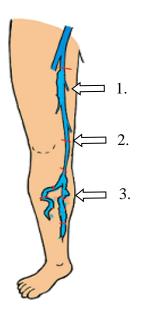
#### Introduction

Peripheral veins have valves which prevent the reflux of blood and facilitate venous return to the heart. Venous valvular insufficiency or calf muscle pump malfunction may lead to reflux of blood, resulting in venous hypertension and dilated veins, known as varicose veins. Patients may also have calf/ankle swelling, tiredness/heaviness in legs, distending pain, skin changes, thrombophlebitis, ulcer or even bleeding. Surgery may be warranted to relieve symptoms, reduce the occurrence and enhance the recovery of complications.

## The Operation

Under general, spinal or local anesthesia, the procedure as described in the following diagram will be performed. Most people will be able to walk independently and return home on the day of the procedure.

- 1. A small incision is made at groin to ligate the connection between the deep vein and the great saphenous vein.
- 2. Another incision is made below the knee and a stripper is then passed along the great saphenous vein to strip the vein.
- 3. Multiple small stab wounds (0.5 to 1 cm) are made to avulse varicose veins at the calf region.



## **Preoperative Preparation**

- 1. Admit 1 day before or on same day of this "elective" operation. Preliminary tests including electrocardiogram, chest X-ray and blood tests will be arranged if necessary.
- 2. Sign an informed consent.
- 3. Anesthetic assessment. **Inform your doctors** about drug allergy, regular medications or other medical conditions.
- 4. After marking the varicose veins, a local anesthetic cream will be applied onto your thigh or leg if necessary.
- 5. Keep fast for 6 to 8 hours before operation.
- 6. Shaving at the groin / leg if necessary.
- 7. Empty bladder and change to operation clothes before transfer to operating room.
- 8. Pre-medication, antibiotic prophylaxis intravenous line may be required.

#### **Postoperative Instruction**

#### A. General

- 1. Mild throat discomfort or pain because of intubation.
- 2. Mild discomfort or pain over the operation site. Inform nurse or doctor if pain severe.
- 3. Nausea or vomiting are common; inform nurses if symptoms severe.
- 4. Inform nurses if more analgesics are required.
- 5. Continue compression bandaging or graduated compression stockings after the procedure.
- 6. You should elevate your operated limb and perform ankle / calf exercise to promote venous return.
- 7. Avoid strenuous exercise within 2 weeks after the procedure.



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#### B. Wound care

- 1. Keep wound dressing clean and dry. Change dressings at the out-patient clinic according to instruction.
- 2. Mild bruising may occur over the thigh and leg region. They will resolve gradually.
- Take the prescribed analgesic as needed.
- Stitches will be removed 7 to 10 days after the procedure.

#### C. Diet

Resume diet, usually 4 hours after anesthesia, and when taking sips of water well.

#### **Common Risks and Complications** (not all possible complications are listed)

#### A. Anesthesia related complications

- Cardiovascular: myocardial infarction or ischemia, stroke, deep vein thrombosis, pulmonary embolism, etc.
- Respiratory: atelectasis, pneumonia, asthmatic attack, exacerbation of chronic obstructive airway disease. 2.
- Allergic reaction and shock.
- Toxicity of local anesthetic may result in serious complication although rare.

#### **B.** Procedure related complications

- 1. Wound hematoma and bruising.
- 2. Wound infection.
- 3. Deep vein thrombosis.
- 4. Neuritis resulting in paranesthesia.
- 5. Recurrence of varicosities.

#### Things to take note after discharge

Continue measures to prevent/reduce recurrence of varicose veins.

- 1. Avoid prolonged standing or sitting.
- 2. Activate the calf muscle pump to promote venous return, e.g. ankle/calf exercise, walking.
- 3. Elevate the leg on a stool during the day, raise the leg above the heart level in bed.
- 4. Weight reduction if indicated.
- Put on during daytime below knee compression stockings (20-30 mmHg at ankle).
- Contact your doctor or a nearby Accident & Emergency Department if you find increasing discharge, pain and or redness around the wound.
- Take analgesics prescribed by your doctor if required.
- Resume daily activity gradually.

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

Hospital Authority: "General Information on Ligation and Stripping for Varicose Veins" (2022) Smart Patient: https://www.ekg.org.hk/pilic/public/surgery\_pilic/vascularsurg\_ligationandstrippingforvaricoseveins\_0177\_eng.pdf (20-07-2023)