

# **Operation Information**

## Varicocelectomy

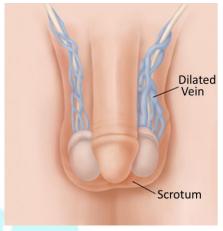
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### Introduction

Varicocele is an abnormal dilatation of the pampiniform plexus which consists of veins draining the testicle. The exact cause of varicocele is unknown. About 1 in 7 men develops a varicocele - usually between the ages of 15 and 25. The majority of varicocele is on the left side. It is usually painless and causes no symptoms but it might cause aching pain or heavy feeling in the scrotum. Varicocele is thought to impair sperm quality and may increase the chance of being infertile. It may affect testicular development.

Varicocelectomy is the treatment for varicocele which involves ligation of the spermatic veins. Your doctor may recommend this operation to you if your pain is associated with varicoceles or if you have a fertility problem. The surgery may be done with an open varicocelectomy, a microsurgical varicocelectomy or a laparoscopic varicocelectomy.



Source: https://www.saintlukeskc.org/health-library/l aparoscopic-varicocelectomy

### **Outcomes**

The procedure improves the symptoms caused by varicocele, and the quality of sperm to enhance the chance of fertility.

### **Procedures**

#### Open Varicocelectomy

- 1. The operation is performed under general anaesthesia.
- 2. A urethral catheter is placed to empty the bladder (if applicable).
- 3. A small incision is made over the groin of the affected side.
- 4. The distended varicocele veins are identified.
- 5. The abnormal veins are ligated.
- 6. The wound is closed with stitches or staples and covered with sterile dressing material.

#### Microsurgical Varicocelectomy

- 1. The operation is performed under general anaesthesia.
- 2. A urethral catheter is placed to empty the bladder (if applicable).
- 3. A small incision is made over the groin of the affected side.
- 4. The distended varicocele veins are identified under optical or digital magnification.
- 5. The abnormal veins are ligated.
- 6. The wound is closed with stitches or staples and covered with sterile dressing material.

#### Laparoscopic Varicocelectomy

- 1. The operation is performed under general anaesthesia.
- 2. A urethral catheter is placed to empty the bladder.
- 3. 3 tiny incisions are made in the abdomen.
- 4. A laparoscope and laparoscopic instruments are inserted into the abdomen through the incisions.

- 5. Varicocele(s) on the right or left, or both can be approached.
- 6. The abnormal veins are identified, clipped and divided.
- 7. The wounds are closed with stitches or staples and covered with sterile dressing material.

### Possible Risks and Complications

- 1. Wound Infection (1%)
- 2. Haematoma (1%)
- 3. Atrophic testis (<1%)
- 4. Testicular artery injury (<1%)
- 5. Vas deferens injury (<1%)
- 6. Hydrocele (<10%)
- 7. Recurrence (1-10%)
- 8. Injury to internal organs (For laparoscopic surgery)
- 9. Peritonitis (For laparoscopic surgery)
- \*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

### **Pre-operative Preparations**

- 1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of the operation.
- 2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
- 3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation, such as Aspirin, Warfarin, Xarelto or Pradaxa and Chinese medicine.
- 4. You may have a blood test, ECG, X-ray and ultrasound before the operation if needed.
- 5. Shaving on the operation site may be required and the nurse will supply surgical soap to you for washing the operation site as necessary.
- 6. Prophylactic antibiotics may be prescribed by your doctor.
- 7. No food or drink six hours before the operation.
- 8. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
- 9. Please empty your bladder before the operation.

### **Post-operative Instructions**

#### General

- 1. After general anaesthesia, you may:
  - experience discomfort in the throat after tracheal intubation.
  - experience side effects of anaesthesia including feel tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
- 2. Please inform the nurse of wound pain. Proper pain relief treatment by injection or oral medication may be prescribed by the doctor.
- 3. An indwelling urinary catheter may be inserted into your bladder. It will be removed in 1-2 days.

#### Wound Care

- 1. Wounds are covered with sterile dressings. Please keep them clean and dry.
- 2. Stitches or staples will be removed or dissolved in 2 weeks.
- 3. All outer dressings are removed 48 hours after the operation according to the doctor's instructions.
- 4. The small strips of tape (Steri-Strips) are left in place for 7-10 days before removal.
- 5. Apply ice or a cold compress to the scrotum every 2 hours, 10 minutes at a time for the first 48 hours to reduce swelling.
- 6. It is common to have minor bruising and slight discoloration around the incisions but are self-limited.
- 7. The sensation of hardness around the incision site will resolve in 3 weeks.
- 8. A very small amount of thin, clear, pinkish fluid draining from the incision for a few days are common post-operatively.
- 9. Showering is allowed 48 hours after the operation. Be reminded to pat the wound dry afterward. Avoid bathing until the wound is completely healed.
- 10. Scrotal support may be applied as instructed by the doctor.

#### Activities

1. You may return to normal activities after two days.

#### Diet

1. A normal diet may be resumed after recovery from anaesthesia. You may start with fluids and gradually return to solid foods.

### **Advice on Discharge**

- 1. Please comply with the medication regime as prescribed by your doctor.
- 2. Please avoid heavy lifting, straining or strenuous exercise for two to four weeks.
- 3. Sexual intercourse can be resumed after the period indicated by your doctor.
- 4. Immediately consult your doctor or return to hospital for professional attention in the event of increased swelling, worsening pain, heavy bleeding or purulent drainage from the wound, chest pain, breathing difficulty, pain or swelling of the legs, persistent swelling or pain of the scrotum, trouble in passing urine, shivering, high fever over 38°C or 100.4°F, or any other unusual symptoms.
- 5. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee