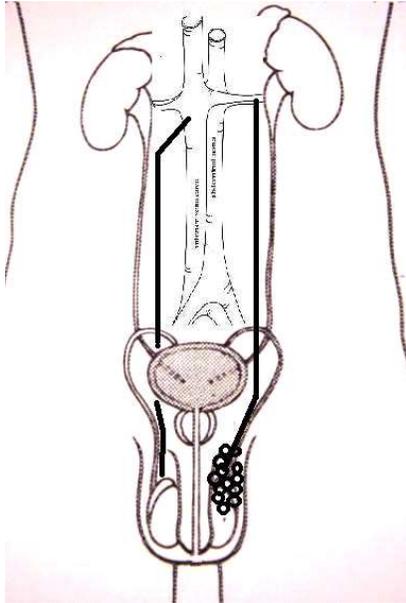




## HIGH LIGATION OF VARICOCOELE



Varicocoele is the development of varicose, tortuous, dilated veins around the testicle. It occurs most commonly on the left, and only rarely on the right, related to the underlying anatomy of venous drainage. 20% of normal men have varicocoele and the majority are small, asymptomatic and can be left alone. Nonetheless, varicocoele may be associated with male factor infertility and abnormal sperm count and with impaired testicular growth in children and adolescents. Large varicocoeles may be unsightly and may produce a dragging sensation and ache in the scrotum. However, they do not usually cause sharp pain and treatment of varicocoele rarely corrects true testicular pain. Treatment does appear to improve sperm count and allow normal testicular growth, and relieves the dragging sensation and ache. Correction of varicocoele involves ligation of the drainage veins and the artery above the scrotum, so reducing the venous backpressure and filling of the varicocoele. The varicocoele veins are not removed and some scrotal fullness will therefore persist. The varicocoele may not correct immediately following treatment but resolve over the succeeding few weeks.

Options for treatment include laparoscopic (key-hole) and open surgery, and radiological embolisation. The respective success rates are reportedly similar, although there is less experience with radiological embolisation in New Zealand. All treatments are performed on a daystay basis. Laparoscopy is probably the commonest treatment option performed at present. It is associated with less pain, fewer complications and superior recovery, compared to open surgery. Internally, the surgery is very similar to the older open operation, but with the improved vision and dissection provided by laparoscopy reducing the recurrence / failure rate. In common with all laparoscopic surgery, hospital stay is short and recovery is quicker than the open procedure with few or no wound-related problems. The procedure is performed under general anaesthetic and surgery performed using a camera and telescope system through the ports (keyholes).

### WHAT TO DO BEFORE YOUR PROCEDURE:

- ensure laboratory tests are done > 48 hours prior to surgery, unless advised otherwise



- discontinue aspirin and other anticoagulants 1 week prior, other medications may also need to be stopped
- nothing to eat or drink from 6 hours prior to procedure - see Admission Booklet regarding diet restrictions
- you will be admitted to hospital on the day of surgery.
- you do not need to shave prior to surgery

**WHAT HAPPENS IN HOSPITAL AFTER YOUR PROCEDURE:**

- your surgery is performed on a day-stay basis

**WHAT HAPPENS AFTER YOU LEAVE HOSPITAL:**

- recovery is reasonably quick, with return to normal activities including driving after 2 days.
- withhold aspirin and other anticoagulants for 1 week but reinstate other usual medications.
- the Steristrip (tape) dressings should be left on the wounds for 4 weeks. If the Steristrips come off, the wounds should be left exposed without further dressings applied
- post-operative constipation may be minimised with good fluid intake, dietary fibre and laxatives.
- you may not drive for 24 hours post procedure and see Admission Booklet regarding further restrictions following general anaesthetic
- avoid heavy lifting for 2 weeks; thereafter resume normal activity including sexual intercourse

**WHAT CAN GO WRONG:**

Although most cases proceed without particular difficulty and have excellent outcomes,

- varicocele recurrence or persistence may occur in 5-10% of patients, from neighbouring veins that open up to form new varicocele channels or from veins missed at the time of surgery. This may require a revision procedure.
- hydrocoele is a collection of fluid around the testicle may occur in 5% of patients and results from lymphatic obstruction from the surgery. This may require a revision procedure.
- testicular atrophy occurs in 1% of patients.

Other surgical complications occur overall in 5% of patients. The list below details complications recognised as common or serious, but this does not include the rare and extraordinary. Risk of death is approximately 0.03% in generally healthy patients.

**AT THE TIME OF AND EARLY AFTER SURGERY:**

- Failed procedure and conversion to open procedure <1%
- Bleeding requiring blood transfusion in < 1%
- Infection may require antibiotic treatment <3%
- Temporary shoulder pain is common after laparoscopy
- Damage to other organs, including bowels, spleen, liver and gall bladder, nerves and lymphatics, and CO2 gas embolism
- Numbness or tingling in legs, genitalia and perineum is usually temporary
- Clots (DVT, PE), gas embolism
- Risk of death may be estimated using the nzRISK <https://nzhrisk.com> on-line pre-operative calculator. It has been developed and validated for patients in New Zealand over the age of 18, to help patients and doctors balance benefits and risks of treatment.

**LATER POTENTIAL COMPLICATIONS :**

- Port site hernia
- Adhesions