

Total Laparoscopic Hysterectomy (TLH) and Bilateral Salpingectomy; Laparoscopic Vault Suspension

Definition and purpose

TLH means removing the uterus (womb) using an operating telescope (laparoscope) inserted through the abdominal wall. This avoids having a large abdominal wound, so usually your recovery is much faster and cosmetic result superior. The vast majority of hysterectomies can be done in this way although the skill set required to do this is not universally held. The cervix (neck of the womb) is also removed so you usually will not need cervical screening (previously called Pap smears) any more. The ovaries may or may not be removed depending on your wishes and condition. The term TLH refers to removing the uterus and cervix only, entirely using the telescope. There is no medical equivalent of the lay term “complete hysterectomy”, but some take this to mean removal of the ovaries as well. The ovaries are not part of the uterus, they simply lie close by and their removal at the time of hysterectomy is termed “hysterectomy and bilateral salpingo-oophorectomy”.

The fallopian tubes are also removed at TLH. These are part of the uterus, and are now thought to be responsible for a rare type of cancer previously attributed to the ovaries. This is termed bilateral salpingectomy.

Preparation

You will be required to fast for around six hours. Please check with my secretarial staff if you are not sure when to fast from. Some patients, depending on the medical condition and associated conditions, may need blood tests, imaging studies or other investigations to be performed. *It is important to give Dr. Thomas a full list of your medications prior to the procedure. This also includes natural therapies, herbal preparations and fish oil tablets, which may have an unpredictable effect on the bloods ability to clot. If in doubt stop any herbal remedies one week before the operation. Some oral hypoglycemic agents such as Jardiance need to be stopped a full week before.*

Please carry out a home pregnancy test the day before the surgery unless you or your partner has been sterilized, or you are over 50.

How is the operation performed?

Under general anaesthetic carbon dioxide gas is used to inflate the abdomen and to create space for the surgeon to work. A surgical assistant is required. A laparoscope is inserted through an incision close to the umbilicus. Other instruments are inserted through three or so small incisions in the abdomen. The uterus is freed from the tubes, ligaments and blood vessels on each side. An incision is made around the cervix, into the top of the vagina to enable the uterus to be removed through the vagina. This incision is then closed with medium duration absorbable stitches.

If the ovaries and tubes are being removed at the same time their attachments are freed and these are also removed through the vagina.

The pelvic cavity is then washed out with a sterile solution, as much gas as possible is removed, and the wounds closed with sutures or glue. Local anaesthetic is instilled into the peritoneal cavity and wounds. A *cystoscopy* is performed to check the inside of the bladder and ureters, which lie close by.

Sometimes a small drain tube is inserted through one of the wounds; this will drain some blood stained fluid and gas after the operation and is removed soon after.

Laparoscopic vault suspension

The top of the vagina is called the *vault*. Sometimes the vault is prone to dropping through the vagina in the years subsequent to the operation (known as prolapse). By its very nature the chance of this occurring is less with TLH than with open surgery, however I will often insert further sutures during the procedure to further reduce this possibility (*laparoscopic vault suspension*).

The operation usually takes from 30 minutes to several hours dependant on your specific situation.

Subtotal laparoscopic hysterectomy (SLH)

This refers to removal of the uterus (with tubes, with or without the ovaries) but NOT the cervix.

It was once thought that this resulted in improved sensation/sexual feelings after a hysterectomy, in addition to less chance of vault prolapse. The former has been disproven, and in the case of TLH (especially with vault suspension) the latter is also dubious. Advantages however may include less post operative discharge, at the expense of ongoing need for Pap smears, and less chance of minor problems with the suture line after the operation such as persistent spotting. The cervix itself may however continue to bleed, similar to a period and bleeding after sex may occur.

Important- if the cervix is left in place the uterus must be reduced into small pieces to be removed (morcellation, see below).

A note about morcellation

In order to deliver a large uterus through the vagina by morcellation, or in order to perform a subtotal laparoscopic hysterectomy, both patient and doctor need to be confident beyond all reasonable doubt that there isn't an undetected cancer in the uterus or in its lining. This will be determined by an analysis of your specific situation, history, imaging (sometimes MRI), and blood tests in the case of fibroids, endometrial biopsy or a formal curette. However the final diagnosis rests on pathology.

After 2018, the option of in-bag morcellation under direct vision exists. Although this contains the specimen nicely there is a lack of evidence that it improves the prognosis of a cancer/sarcoma.

After the operation

You can expect to wake up with a tube in the bladder (catheter), an IV drip to keep you hydrated, perhaps a drain tube as described above and wearing an oxygen mask. After four hours you will be offered something to drink. You will probably be able to eat breakfast the following day, when you will also be able to shower and have the drip and catheter removed. Most patients are discharged on the second day. If your operation is early in the day and you recover well you may be able to go home the following day.

Complications

All operations have a small risk of complications, and there may be specific risks related to any particular operation on any particular person. Your risks may be higher if you smoke, have heart disease, have diabetes or are overweight. You should write down any questions you may have. Overall, if you are offered an operation it is because I believe the benefits far outweigh the potential for harm. Refer to the specific document on my website regarding complications.

General risks

- Infection of wound- antibiotics are given into the drip whilst you are asleep to lessen the chance of this
- Bleeding- a small percentage of women may require a blood transfusion during or after the procedure. Rarely postoperative bleeding may occur a while after the operation, requiring a further operation. My average blood loss for this procedure is less than 50 ml (usually less than a period). For this reason prior donation of blood is considered unnecessary.
- Blood clots in legs (deep venous thrombosis), which may rarely break off and travel to the lungs (pulmonary embolism). You will be given medication to reduce this risk, and will wear TED stockings. Early mobility is also important.
- As tissues heal inside the abdomen loops of bowel or other tissues may become stuck together (adhesions), which occasionally causes pain and may warrant further surgery. Measures are taken to reduce this possibility, including meticulous surgical technique and use of adhesion barriers where appropriate.

Specific risks:

- Urine infection which may require antibiotics
- Damage to the bladder or ureters. No greater risk of this in my hands than with any other kind of hysterectomy (e.g. abdominal). During the early days of developing this operation this was thought to be a potential additional concern but this is no longer the case.
- Bowel damage (less than 1/1000) or major blood vessel damage (less than 1/3000 for all laparoscopies) which may require a larger cut on the abdomen (laparotomy) in order to correct, and rarely may remain unrecognized for some time. Highly unlikely! Many such issues can be dealt with laparoscopically at the time of the procedure.

- If the operation cannot successfully and safely be carried out via the laparoscope the operation may be converted to a conventional abdominal hysterectomy, which may require a longer hospital stay of around three to five days.
- If you have the ovaries removed and you were not already menopausal, you will begin to experience hot flushes. Around 1% of patients, in my experience, actually enter the menopause after a TLH, the reasons for this are not clear however may involve alteration in blood supply to the ovaries and already diminished "ovarian reserve".
- A hysterectomy is irreversible, pregnancy is impossible, and you will no longer need contraception or cervical screening.
- If the uterus is morcellated and there is an undetected cancer (in the case of fibroids estimated risk as little as 1 in 10,000) theoretically the cancer may be made worse.

THE RECOVERY PHASE

Pain/bloating

Some pain is usual. You may also experience a period-like cramping sensation or pain in the shoulders. This is thought to be due the Carbon Dioxide gas used to inflate the abdomen. This and a sensation of bloating usually last 1-2 days but in some people last weeks. Try simple analgesics such as paracetamol/Panadeine or Naprogesic. Please see my website www.philipthomas.com.au for detailed notes on pain relief.

Wound care and dressings

Leave dressings intact unless soiled or wet. Prior to your review you may remove them, and either leave the wounds open, or preferably cover with a Band-Aid if you wish, as it has been shown that keeping wounds slightly moist and warm enhances healing. Do **NOT** apply antiseptic creams, Dettol, Betadine, methylated spirits etc to the wounds. These are unnecessary and in most cases harmful to healing tissue. The best way to achieve a good scar is to leave the wounds alone until healed. Sutures will need to be removed by me preferably no later than five days from the date of operation. After that you may massage the wounds with a moisturizer containing Vit E. Please use pads instead of tampons.

Some **redness or 'flare'** is usual especially around the umbilical port site, but if the redness is spreading, the wound is discharging or if you feel unwell/feverish then seek advice.

Do not have sex for eight weeks (two weeks after your final check up).

Showering/bathing/pools

You can get the wounds wet the day after the operation. There will be some “spotting” for a number of weeks. Don’t use public pools for the first couple of weeks. If after that the discharge is easily controlled by a tampon, public saline pools are acceptable but I would avoid heavily chlorinated pools or spas. The beach is acceptable.

Sore throat and nausea

These are common; the former is due to the endotracheal (breathing) tube used whilst you are anaesthetised. Analgesics & small quantities of fluids will help. Nausea and drowsiness is due to the anaesthetic itself.

Dizziness/loss of concentration

This may be due to the anaesthetic or analgesics (especially ones such as Panadeine or morphine). Avoid operating machinery or dangerous household appliances or making important decisions for at least 48hrs. You should take at least 2 weeks off work, longer if your work involves strenuous activity or using machinery. Avoid strenuous exercise for about five days.

Driving a car

Generally, avoid driving for around one week. Once you can comfortably sit in the car, do not feel inhibited in your movements by pain and feel that your concentration has returned (e.g. can easily read a newspaper without mind wandering) it is probably safe to drive.

Post-operative review

You will need to see me in around 5-7 days to have the stitches removed. An appointment will be scheduled prior to discharge. Please abstain from sex for eight weeks after a TLH.

I will then see you around six weeks after your surgery.

Paging number for urgent matters, 0393871000.