

# Retropubic Mesh (TVT) Sling

## Patient Information – Urology Service

### What is a retropubic mesh (TVT) sling?

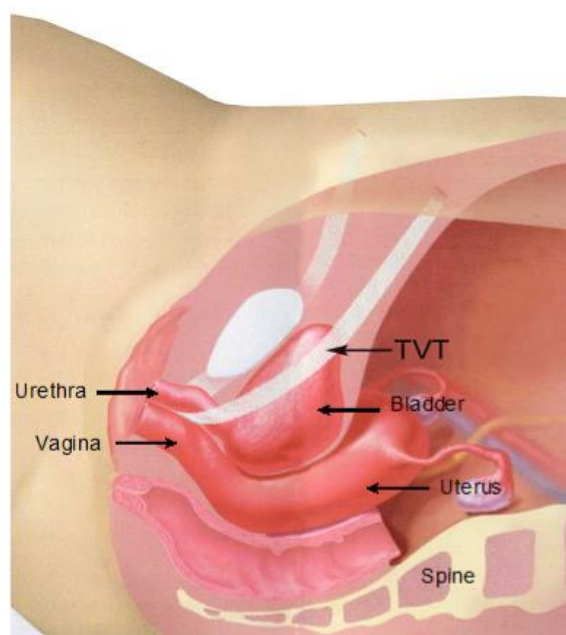
Tension-free vaginal tape (TVT) is an operation using mesh to treat stress urinary incontinence.

Stress incontinence is leakage of urine that occurs with activities that cause an increase in abdominal pressure, such as coughing, sneezing, jumping, lifting, exercising and in some cases, walking.

This leakage occurs because the muscles at the bladder neck have lost their supports and strength. As a valve mechanism, the urethra (tube from the bladder that empties the urine) no longer stays closed when extra pressure is put on the bladder.

Stress urinary incontinence is initially managed conservatively (without surgery) with pelvic floor muscle exercises. These may be taught by a continence nurse or physiotherapist. You may also have been given a handout about pelvic floor muscle exercises. If these are not effective, then surgery is the next treatment option.

TVT is one surgical option to manage stress urinary incontinence and uses a synthetic mesh sling. It is popular due to its fast recovery time and short hospital stay. Another option is a rectus fascial sling, which uses your natural body tissue. There is a separate patient information leaflet about this type of surgery.



### Mesh complications

Mesh slings have been around for more than 20 years and most women have had very successful results. The success rate is about 80%.

Erosion of the mesh into the bladder or urethra (tube from the bladder to empty the urine) may occur in a small number of women (<1%), sometimes many years after the initial surgery. This will require surgery to correct. This surgery may require going through the abdomen or the vagina.

Erosion of the mesh through the vaginal wall occurs in 2-5% of women. If this occurs, a further surgery to cover or remove the mesh will be necessary.

Pain after the surgery is normal for two to three weeks. Uncommonly, this pain in the lower

abdomen may persist.

Mesh used to treat stress incontinence has a much lower risk of complication compared to mesh used to treat prolapse, as a much smaller piece of mesh is used, like a ribbon. If you have concerns, discuss this with your urologist. Alternatives are available, such as making the sling out of a piece of tendon from your abdomen.

## **What happens before my operation?**

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The surgery and outcomes will be explained to you by your surgeon before the surgery. When you feel comfortable that you understand what is to be done and have had all your questions answered, you will be asked to sign a consent form. This consent form should be signed by both yourself and your surgeon and forwarded to the hospital prior to your admission.

A blood test will need to be performed and a urine sample may need to be taken a few days prior to your surgery.

If you are over 60 years of age or have other medical conditions, you may also have an electrocardiogram (ECG) prior to surgery to check the health of your heart.

You will be advised when to stop eating and drinking before surgery. This includes water and chewing gum. You can swallow tablets with a small sip of water.

You should bring your own medications with you to hospital.

It is important to avoid constipation. Try to establish and maintain a regular, soft bowel habit leading up to your surgery. Identify the foods that can help you maintain a regular bowel habit for your post-op period.

You will be taught how to perform pelvic floor exercises to help you regain control of your bladder.

**Please inform your surgeon if you are taking anti-coagulant (blood thinning) medication (e.g. warfarin, clopidogrel, dabigatran, rivaroxaban or ticagrelor), or any medication for diabetes. Your surgeon will advise when to stop and restart these medications. If you are taking aspirin, it is okay to continue taking this.**

## **What happens on the day of my operation?**

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You will go to Christchurch Hospital on the day of your surgery. Be aware that this is not a day surgery. On arrival, the staff will guide you through what is required prior to your surgery.

You will have a clean hospital gown and protective stocking fitted.

An IV (intravenous) line will be placed in a vein in your arm or hand that will be used to supply fluids or medications during the surgery.

You may be given a medication to prevent blood clots.

You will be encouraged to commence deep breathing and coughing exercises pre-operatively. This prevents any breathing complications or chest infection from occurring, following the surgery and anaesthetic.

This surgery is performed either under spinal (lower half of your body is numbed) or general (you are completely asleep) anaesthesia, which will be decided after a discussion with the anaesthetist. Just prior to your surgery, you may be given a pre-medication tablet to relax you.

## **What happens during my operation?**

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This is minimally-invasive surgery requiring three small incisions to insert and position the tape (a sling made from synthetic mesh). A 1 cm cut is made on either side of the abdomen, with a 2 cm incision inside the front wall of the vagina to allow the mesh to be put in place.

## **What to expect after my operation?**

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You will usually be in hospital for one night following this type of surgery.

When the operation is completed you will go to the recovery room for a short while where you will be cared for and monitored closely until you are ready to be transferred to the Urology Unit. When you wake up it is common to feel an urgent desire to pass urine. This is due to the catheter in your bladder.

### **Pain control**

You will be given oral pain relief to manage your pain.

You may have a patient-controlled analgesia (PCA) pump. This means you can control your own pain relief by pushing a button connected to the pump.

### **Wound**

Your abdominal cuts will be just below your pubic hair line and should heal within 7-10 days. The stitches are dissolvable and do not need removing.

There is also a 2 cm incision inside the vagina. Slight vaginal bleeding is to be expected for the next two to three weeks. The stitches in the wound will also dissolve.

### **Catheter**

You will have a fine tube (catheter) placed in your bladder via your urethra (tube from the bladder to empty urine), draining the urine into a catheter bag. Your nurse will monitor your catheter drainage. This will usually be removed on day one or two after your surgery, depending on the instructions of your surgeon.

### **Occasionally after this surgery you may experience difficulty passing urine after your catheter has been removed**

If you cannot pass urine, pass only a small amount or have bladder discomfort, please let your nurse know. The nurse will use an ultrasound scanner to record the volume of urine retained: this is called the residual urine.

If the volume is significant then it might be necessary for you to learn how to pass a catheter into the urethra to empty the bladder yourself. This is called intermittent self-catheterisation (ISC) and can be performed in the privacy of your own bathroom or any toilet. Initially you may have to

catheterise each time you need to pass urine, but as things return to normal, the frequency of your ISC will be reduced.

If needed your nurse will give you a booklet that outlines this technique and will help you in learning ISC. When you feel confident inserting the catheter, you can be discharged home.

If you are unable to do ISC, or depending on the instructions from your surgeon, you will be discharged home with an indwelling catheter (IDC). Your surgeon will decide when this should be removed.

Keeping a regular soft bowel motion is important. While in hospital you may be prescribed a laxative such as lactulose to help with this. Kiwifruit or Kiwi Crush are also recommended.

## **What happens after discharge?**

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Following surgery, it is important to avoid any abdominal straining while your surgery heals. In particular, you must avoid heavy lifting (5 kg or more) and exercise (eg cycling, jogging) for at least four to six weeks after surgery.

You can usually return to other normal activity after one or two weeks.

### **Things you can do:**

- Showering
- Preparing light meals
- Walking up and down stairs slowly
- Gentle walking is to be encouraged – it is better to do two short walks in the day rather than one long walk.

### **Things you should NOT do for four to six weeks include:**

- Heavy lifting
- Shifting the furniture
- Lawn mowing or digging the garden
- Weights at the gym/exercise
- Carrying supermarket/rubbish bags
- Carrying children/pets.

Wait at least one month before resuming sexual intercourse.

You can resume driving after one week if you feel safe to do so.

You may also feel more tired during your recovery period and perhaps a bit low, but as you start to recover you should find this improves.

### **Pelvic floor exercises**

It is important to recommence pelvic floor exercises once you have recovered from surgery.

If you have any concerns about your technique, please contact our continence nurse.

### **Bowels**

- You may eat and drink normally.

- Try to keep your bowel motions soft by using high fibre foods such as fruit (kiwifruit), vegetables, wholemeal bread, nuts and seeds.
- Do not become constipated or strain to have a bowel motion.
- Use a footstool to help bowel emptying. Discuss this with one of our continence nurses if you need further information.

## Possible complications

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All procedures have a potential for side effects. You should be reassured that, although these complications are well-recognised, the majority of patients do not suffer any problems after a urological procedure.

Please contact your GP immediately or visit the Emergency Department at Christchurch or Ashburton Hospital if you develop:

- Flu-like symptoms
- A temperature over 38°C
- Discomfort that is not controlled by pain medication
- Bleeding or difficulty passing urine
- Pain or tenderness in the calf or thigh
- Symptoms of a urinary tract infection, such as pain on passing urine, going more often or smelly urine.

## Change in toileting habits

It is quite normal to have trouble emptying your bladder to start with. This is because there is swelling around the area where the sling is placed.

You may have trouble passing urine after your catheter is removed. Two thirds of woman will have to have a catheter replaced or learn how to do clean intermittent catheterisation (CIC) prior to going home until they can pass urine independently. The technique for this (explained above) will be shown to you before the operation, and teaching will be given by the ward nurses if this is necessary.

This difficulty voiding settles over the next six weeks or so. The flow starts to improve in the afternoon then gradually becomes more normal throughout the rest of the day. First thing in the morning is the slowest to come right.

Some woman may notice their flow always remains a bit slower than normal.

1-2% of women may continue to have problems with emptying their bladder after six weeks. When you are seen in clinic after your operation, if there are any problems emptying your bladder at this clinic, then you will be seen again. If voiding problems persist, you may need another operation through the vagina to free the sling up. This is usually a day case surgery.

## Bladder perforation

This can occur during the operation and is usually recognised by your urologist at the time. You will need to keep a catheter in place for a few more days to allow the perforation to heal, but

there are no long-term effects. It does not affect the success of your surgery.

## Follow-up

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The continence nurse may contact you by telephone to check on your progress. If you have any concerns, you may phone the continence nurse or make a time to be seen in person.

You will receive an appointment in the mail to attend the Urology Outpatient clinic. This is usually about six weeks following your surgery. At this visit, you may see either your urologist or the continence nurse. A letter will also be sent to your own doctor about your operation.

## Contact information

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For more information about:

- Hospital and specialist services, go to [www.cdhb.health.nz](http://www.cdhb.health.nz)
- Your health and medication, go to [www.healthinfo.org.nz](http://www.healthinfo.org.nz)
- NZ Continence Association, go to [www.continence.org.nz](http://www.continence.org.nz)

For information on parking, how to get to the hospital, and visiting hours, please visit [www.cdhb.health.nz](http://www.cdhb.health.nz)