



SYNTHETIC VAGINAL TAPES FOR STRESS INCONTINENCE

What does the procedure involve?

Vaginal tapes are implanted to treat stress incontinence (leakage of urine when you exercise, sneeze or strain). The tape is placed under the urethra (water pipe) like a hammock to support it and keep it in the correct position.

Synthetic tapes are made from a plastic material, mostly from a non-absorbable polypropylene mesh, which is usually well accepted by the body. This means that the tape will remain in the body forever.

The first tape of this kind, introduced 15 years ago, is called the tension-free vaginal tape (TVT); many manufacturers now sell similar tapes. An alternative to the TVT is the trans-obturator tape (TOT). The TVT and TOT are now the most commonly performed operations for stress incontinence .

Both procedures are relatively quick, taking around 30 minutes to perform, either under general or local anaesthetic. The operations are usually performed as a day case, meaning that you can go home on the same day.

The results of TVT and TOT are roughly equal. About 2 out of 3 women will be completely dry after the operation and 1 out of 3 will have some degree of leakage. Most of those who still have some leakage are much better following surgery.

The overall success can also be expressed as the satisfaction rate. Approximately 9 out of 10 women are satisfied with the result after either a TVT or a TOT.

What are the alternatives to this procedure?

The most common operation done for stress incontinence is called the Burch colposuspension. This is a more invasive procedure and involves making a cut in the lower abdomen to support the neck of the bladder.

Injection treatment is sometimes done but is less likely to be successful than either TVT or TOT.

Other alternatives to the procedure include observation, physiotherapy and usage of pads.

What does the procedure involve?

Placement of drainage tube into the bladder through an incision in the skin (just above the pubic hairline). Cystoscopy (inspection of the bladder) is often performed to aid insertion of this tube

What should I expect before the procedure?

A pre-operative visit will be arranged by the hospital to check on your fitness for anaesthesia and surgery, at which:

- You may have blood tests, a heart tracing (ECG) and a chest X-ray to check that you are in good health;
- You may be given oral or vaginal oestrogen (hormone) if you are near the menopause (or have



already reached it). This thickens your vaginal tissues for easier surgery and faster healing; • You must tell your surgeon about all the drugs you are taking;

- If you are taking warfarin, aspirin or clopidogrel, please let us know because you may have to stop taking them before surgery;
- We will advise you about starving before surgery;

You will usually be admitted to hospital on the same day as your surgery. Once you have been admitted, you will be seen by members of the medical team which may include the consultant, specialist registrar, house officer and your named nurse. You will be given an injection of a drug called Clexane under your skin. Together with elasticated stockings provided by the ward, this will help to prevent venous thrombosis (clots in your legs). You may also be given a mild laxative to clear your bowels. You may be given intravenous antibiotics at the time the anaesthetic is given, and possibly after surgery too. You will be asked not to eat and drink for six hours before surgery. Immediately before the operation, the anaesthetist may give you a pre-medication which will make you dry mouthed and pleasantly sleepy.

Please tell your surgeon (before your surgery) if you have any of the following:

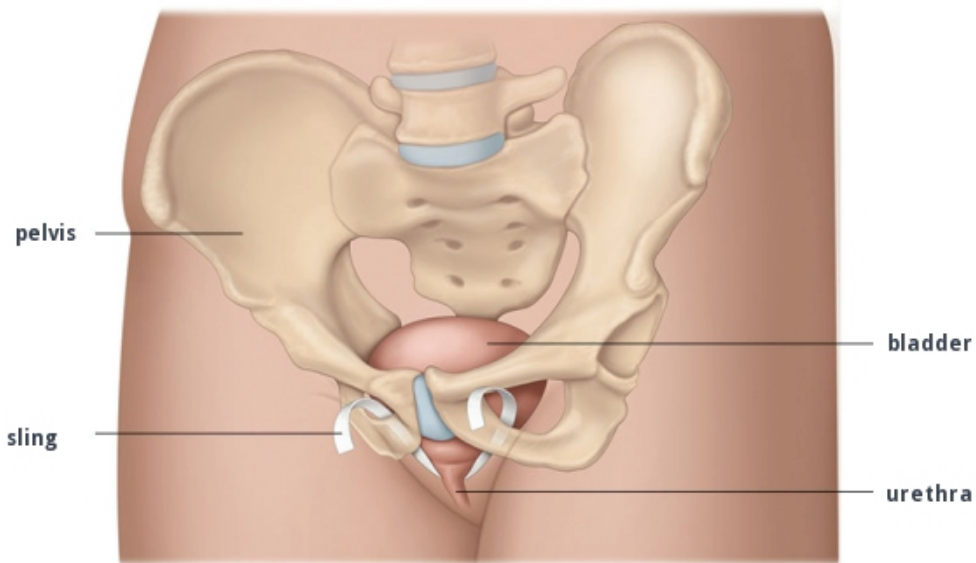
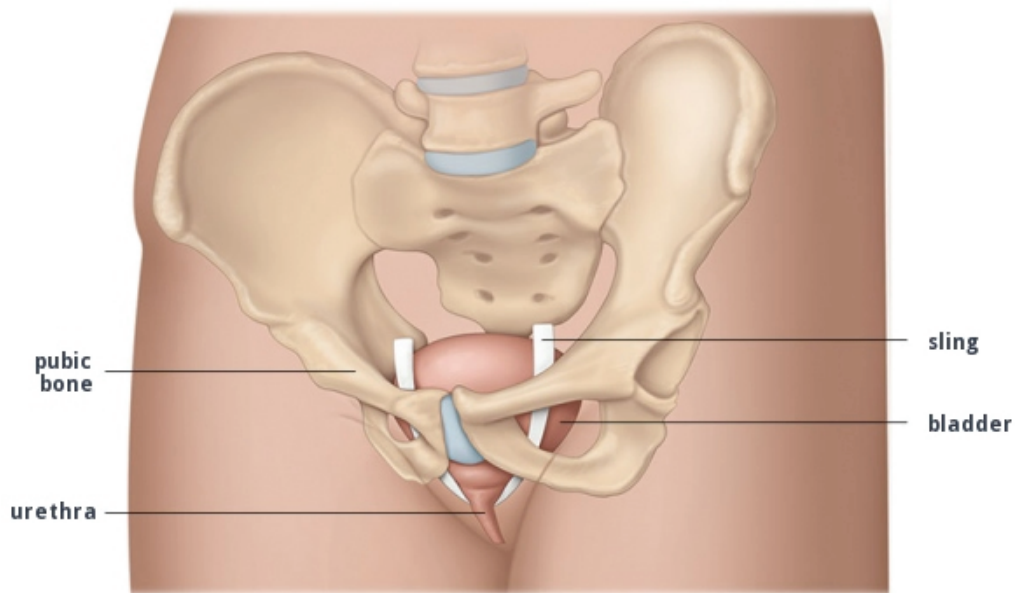
- An artificial heart valve
- A coronary artery stent
- A heart pacemaker or defibrillator
- An artificial joint
- An artificial blood-vessel graft
- A neurosurgical shunt
- Any other implanted foreign body
- A regular prescription for a blood thinning agent such as warfarin, aspirin, clopidogrel (Plavix®), rivaroxaban, prasugrel or dabigatran
- A previous or current MRSA infection
- A high risk of variant-CJD (if you have had a corneal transplant, a neurosurgical dural transplant or injections of human-derived growth hormone).

When you are admitted to hospital, you will be asked to sign the second part of your operation consent form giving permission for your operation to take place, showing you understand what is to be done and confirming that you want to go ahead. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

What happens during the procedure?

TVT/TOT continence surgery is usually performed either under local anaesthetic (when you will be awake) or under general anaesthetic (when you are asleep). All methods reduce the level of pain afterwards. Your anaesthetist will explain the pros and cons of each type of anaesthetic to you. In the TVT operation you will have two small cuts (each 0.5cm long) in the lower part of your tummy (below the pubic hairline) and a 1.5cm cut in the front wall of the vagina. The TVT tape is inserted from the vagina up to the small incisions in your tummy. The tape lies between the vaginal skin and your urethra (water pipe).

The TOT operation is similar except that a small incision at the top of each of your thighs, on the inner side, just below the groin and the tape is brought out through these incisions. For both procedures, the tape is cut off level with the skin and "buried" under the skin with a stitch to close the incisions. At the end of the procedure, a bladder catheter may be put in to allow free urine flow and a vaginal pack is often used.



What happens during the procedure?

You should be told how the procedure went and you should:

- Ask the surgeon if it went as planned;
- Let the medical staff know if you are in any discomfort;
- Ask what you can and cannot do;
- Feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team; and
- Make sure that you are clear about what has been done and what happens next.



You may experience sickness and occasional vomiting but we will give you drugs to relieve these symptoms. Pain from the wound is usually mild and you will be given painkillers to use as required. If you have had a spinal anaesthetic, a six-hour period of rest is recommended before you can get out of bed; after that, we will encourage you to move around. You will be allowed to eat and drink on the same day as the operation. Your vaginal pack, if put in, will be removed before you go home (or arrangements made to have it removed later).

You will be encouraged to pass urine on your own and we will measure how well you empty your bladder.

The average hospital stay is one day.

Are there any side-effects?

Most procedures have possible side-effects. But, although the complications listed below are well-recognised, most patients do not suffer any problems.

Common (greater than 1 in 10)

- Need to go to the toilet frequently, due to a feeling of having to rush to the bathroom (urgency) &, sometimes, with urine leakage due to urgency, especially if you had this before the operation.
- Failure, so that you still have bad leakage. Some women still have mild leakage.
- Inability to empty the bladder completely so that you need either to keep a catheter in all the time or insert a catheter several times a day (intermittent self catheterisation).
- Infection.
- Slow urine flow.
- Recurrence of stress incontinence can happen years after the tape has been inserted, even your symptoms were cured at first.
- You will get some discomfort/pain for a while, usually where the skin was cut during the operation. TOT can cause thigh or groin pain but this can be relieved by simple painkillers in most patients. There are occasions when more powerful painkillers may be needed.

Occasional (between 1 in 10 and 1 in 50)

- Injury to the bladder during the TVT operation; the risk is much less for TOT surgery.
- Misplacement of the tape (which should be discovered at the time of surgery and the tape re-positioned).
- Bleeding.
- Injury to surrounding tissues (e.g. bladder, rectum and blood vessels).
- Erosion of the tape into the vagina, bladder or urethra; we know that this can occur years after the operation. The estimated risk is in 5 out of every 100 operations.
- Migration of the tape into the vagina, bladder or urethra which can happen several years after the tape was inserted. Symptoms such as recurrent urinary infection, change in urinary symptoms, vaginal discharge and discomfort during intercourse may occur.

Rare (less than 1 in 50)

- None.

Hospital-acquired infection

- Colonisation with MRSA (0.9% - 1 in 110).
- MRSA bloodstream infection (0.02% - 1 in 5000).



- SSSClostridium difficile bowel infection (0.01% - 1 in 10,000).

Please note: The rates for hospital-acquired infection may be greater in “high-risk” patients. This group includes, for example, patients with long-term drainage tubes, patients who have had their bladder removed due to cancer, patients who have had a long stay in hospital or patients who have been admitted to hospital many times.

What should I expect when I get home?

When you are discharged from hospital, you should:

- Be given advice about your recovery at home;
- Ask when you can begin normal activities again, such as work, exercise, driving, housework and sex;
- Ask for a contact number if you have any concerns once you return home;
- Ask when your follow-up will be and who will do this (the hospital or your GP); and
- Be sure that you know when you get the results of any tests done on tissues or organs that have been removed.

When you leave hospital, you will be given a “draft” discharge summary. This contains important information about your stay in hospital and your operation. If you need to call your GP or if you need to go to another hospital, please take this summary with you so the staff can see the details of your treatment. This is important if you need to consult another doctor within a few days of being discharged.

You may require pain-killing tablets at home for several days and it may take a week or more at home to become comfortably mobile.

You are advised:

- Not to drive for at least one week after surgery (you should be confident that you can perform an emergency stop);
- Not to douche your vagina or have sex for at least a month after surgery;
- Not to carry weights of more than 5kg for a month; and
- To take at least two weeks off work after, unless you and your surgeon agree something different.

If you have an infection or other complications(s), your recovery is likely to take longer.

What else should I look out for?

You should seek help from your doctor or your surgeon if you experience:

- Severe vaginal bleeding;
- Severe abdominal pain or swelling;
- Foul-smelling discharge from the wound;
- High fever (you should take your temperature if you suspect this);
- Pain on passing urine;
- Difficulty passing urine; or



- Pain or swelling of the calves.

Are there any other important points?

Different hospitals have different policies for reviewing women after sling surgery. Some like to see all their patients three to six months after the operation; others simply arrange telephone follow-up.

All hospitals, however, would wish to see you again if you have any problems or there is anything you are worried about. Make sure you keep a record of the name of your consultant, the ward you were on, the date of your operation, the telephone number of the hospital and the ward you were on.