Oxford Radcliffe Hospitals NHS
NHS Trust

Women's Health

The TVT procedure

Information for patients

What is a TVT procedure?

A TVT (Tension-free Vaginal Tape) procedure is an operation to help women with stress incontinence – the leakage of urine when coughing, sneezing or moving. Stress incontinence is caused by a weakening of the ligaments which support the urethra (the tube which carries urine from the bladder), caused by having babies and with age.

Two small (0.5cm) cuts are made on your abdomen just above the pubic area and another small cut is made in the vagina. The tape, made of a synthetic mesh, is then passed through these cuts and placed around the urethra to form a sling. The tape prevents leakage by supporting the urethra. The tape stays in place permanently.

The TVT operation can be performed under local anaesthetic and sedation but in this hospital it is usually done under general or spinal anaesthetic. If you have a spinal anaesthetic you will be awake during the operation but will have no sensation in the lower half of your body. Some green towels will be placed over your legs which act as a screen, so that you don't see the operation.

What are the chances of success?

In the short term this operation seems to be just as successful as any major procedure used for controlling bladder leakage, but with a quicker recovery.

About 90-95 in every 100 women are happy with their operation and feel that their incontinence is a lot better. An audit of the TVT procedure at the John Radcliffe Hospital in 2003 showed that more than 95 out of 100 patients felt that their condition was cured or improved. However there are a small group of women for whom the operation does not seem to work. The operation is less likely to be a success if you have had previous surgery to your bladder (such as a repair operation).

This operation has now been available for over 10 years and follow up studies show that most patients continue to benefit in the long term.

What are the risks?

With any operation there is a risk of complications.
The following complications could occur with a TVT:

- Bladder perforation – During the operation the needles which are used to make sure the mesh is positioned correctly may accidentally pierce the bladder. An audit in Oxford shows that bladder perforation occurs in 4 in 100 patients. The bladder is always checked to make sure that this hasn't happened. If it does happen, the needle will be removed and repositioned. A tube (catheter) will be put into your bladder to drain the urine and will be left in overnight.

  If this happens you will need to stay in hospital overnight, but this does not affect the success of the operation.

- Haematoma – Occasionally a small blood vessel is punctured where the needles go through the skin. This causes a small

lump (haematoma) that will get better by itself. This happens in about 1 in 100 people.

- Severe bleeding – Rarely there can be severe bleeding. This occurs in less than 1 in 500 patients. If this happens it would be necessary to give you a general anaesthetic and open up your tummy to stop the bleeding.
- Bladder infection – causing symptoms of burning on passing urine. This happens in approximately 1 in 5 patients within the first 6 weeks after the operation. If the doctor thinks you have a bladder infection you will be advised to take a course of antibiotics to clear it.
- Passing urine frequently – The TVT operation is unlikely to cure symptoms of passing urine frequently and needing to rush to the toilet with urgency. If you have these symptoms as well as stress incontinence you need to be aware that these symptoms are likely to continue and may be made worse by surgery.
- Some women find that their bladder is much slower to empty afterwards. This normally improves over time. In less than 5 in 100 patients the bladder doesn't work properly after the operation. If this happens we will teach you how to put a catheter into your bladder to empty it yourself ('intermittent self catheterisation'). This is usually a short term problem but if it continues the tape can be 'loosened'.
- As the mesh is a foreign tissue there is a risk of it wearing through or 'eroding' into the vagina. When this happens it can cause a vaginal discharge. The problem can usually be helped by trimming the mesh and re-stitching inside the vagina. This occurs in less than 1 in 100 patients and it did not occur in the audit of 95 cases at the John Radcliffe Hospital.
- In less than 1 in 1000 patients very rare complications of bowel and nerve trauma will occur.

What are the alternatives to TVT?

It is difficult to predict what will happen to your bladder, or if you have an operation, how long the effects will last. You should have the operation only if you feel the stress incontinence is badly affecting the quality of your life.

Pelvic floor exercises – If you have been doing these on your own you may like to see a physiotherapist to check that you have been doing them correctly. If this has not been suggested, you should ask the doctor.

Trying to avoid things that may put too much stress on the bladder can help to stop it getting worse and might even improve your symptoms. If you are very overweight you should try and lose weight. You should make sure your bowels are regular and not become constipated, as straining to open your bowels increases pressure on the bladder. If you are a smoker you should stop, as smoking makes you more likely to get chest infections, which put stress on the bladder when you cough.

Pre-admission clinic

Before your surgery you may be asked to come to a pre-admission clinic to check that you are fit and well for the operation.

A nurse practitioner or doctor will see you. We will ask you about your general health, past medical history and any medicines that you are taking. If you need any investigations (for example, blood tests, ECG (heart tracing), chest x-ray), we will organise these. We will tell you about your admission, the operation itself and your care before and after the operation.

This is the time to ask any questions you may have or to raise any concerns.

Before the operation

You will be asked to come into hospital on either the day before or the same day as your operation. You will be seen by the anaesthetist and the surgeon (or a senior member of the team) who will explain to you the purpose of the operation, what will happen during the operation, and the risks associated with it. You will be asked to sign a consent form if you have not already done so. You will also have an opportunity to ask any further questions about anything you are still unsure about.

After the operation

Most women experience some pain or discomfort for the first few days and we will offer you painkillers in the form of injections, suppositories or tablets to help with this. The anaesthetist will discuss pain relief with you before you have your surgery.

Some patients have difficulty emptying their bladder immediately after the operation. You may need a tube (called a catheter) to empty your bladder. The catheter will be removed the day after surgery.

Occasionally the bladder takes longer to return to normal. In this case, although rare, you may need to be taught to put a catheter into your bladder to empty it yourself (called 'intermittent self catheterisation'). This is usually a short term problem and you can generally stop using the catheter after a week or so. If the problem continues we will discuss 'loosening' the tape with you.

Most women have this surgery done as a day case, or stay in hospital for one night.

Getting back to normal

Recovery

Because major incisions are avoided, recovery is much quicker than after other surgery for stress incontinence such as colposuspension. Recovery after a TVT usually takes 1 to 4 weeks. Most patients take 2-4 weeks off work.

Driving and other activities

You should be able to drive and be fit enough for your usual activities within 1-2 weeks of surgery. We advise you to avoid heavy lifting and sport for 6 weeks to allow the wounds to heal and the mesh to settle into place.

Sex

We usually advise you to wait for 4 weeks after the operation before having sexual intercourse. If you leak urine during intercourse or if your incontinence symptoms spoil your sex life, the operation might make this better, but unfortunately this is not always the case.

Sources for the information in this leaflet

K. Ward, P. Hilton. Prospective multicentre randomised trial of tension-free vaginal tape and colposuspension as primary treatment for stress incontinence. British Medical Journal. July 2002, Vol. 325, pp. 67 – 70.

C. Nilsson, C. Falconer. Seven Year Follow-up of the Tension-Free Vaginal Tape Procedure for the Treatment of Urinary Incontinence. Obstetrics and Gynaecology. 2004, Vol 104, 1259-1262

Guidance on the use of tension-free vaginal tape (Gynaecare TVT) for stress incontinence. National Institute for Clinical Excellence. February 2003.

Further information

The Cystitis and Overactive Bladder Foundation
Gives support to people with all forms of cystitis and overactive bladder. Phone: **01908 569169**
Website: www.cobfoundation.org

Bladder and Bowel Foundation
Helpline: **0845 345 0165**
SATRA Innovation Park
Rockingham Road
Kettering
Northants NN16 9JH
www.bladderandbowelfoundation.org

How to contact us

If you have any questions or concerns, please telephone:

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If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@orh.nhs.uk**

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