



Oxford University Hospitals
NHS Foundation Trust

Department of Urogynaecology

TVT for Stress Incontinence

Information for patients



What is stress incontinence?

Stress incontinence is the leakage of urine, usually caused by an increase in pressure in the abdomen (tummy) when there is existing weakness in the neck of the bladder.

This weakness is usually caused by childbirth, which can cause damage to the pelvic floor muscles. Further weakening can occur during and after the menopause, as the supporting tissues around the bladder start to become weaker.

The pressure in the abdomen increases when you cough, sneeze, bend over, jump, or do other physical activities, which then results in urine leakage.

What is a TVT?

A Tension-free Vaginal Tape procedure (TVT) is an operation to help treat the symptoms of stress incontinence.

The tape, made of a synthetic polypropylene mesh, is inserted through a small cut made just inside the vagina. It is placed around the urethra (the water pipe) to form a sling, using needles, and then passed through two small cuts just above the pubic area. The ends are then cut flush to the skin and stitched in place.

A small camera will then be inserted into your bladder to check no damage has been done by the instruments used during the operation. This is called a cystoscopy.

The tape prevents leakage by supporting the urethra. It is intended to remain permanently in place.

The TVT operation can be carried out under local anaesthetic (to make the area numb) and sedation (to make you feel drowsy). However, in this Hospital Trust, it is usually carried out under a general or spinal anaesthetic.

If you have a general anaesthetic you will be unconscious during the operation. 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. A screen will be put in place, so that you don't see the operation.

What are the intended benefits?

The main reason for opting to have a TVT procedure is to improve or cure your symptoms of stress incontinence. It is not intended to improve symptoms of an overactive bladder, such as having to urinate frequently, with urgency (a sudden and strong need to urinate), leaking urine because you have not made it to the toilet in time or needing to wake in the night to pass urine. This is a different condition, requiring different treatment. There is a chance that the TVT procedure may even make these symptoms worse.

This operation will not cure all urinary symptoms. It will only cure urinary symptoms caused by a weakness in the bladder neck. Many urinary symptoms are not caused by a weakness in the bladder neck. If you have other urinary symptoms not caused by a weakness in the bladder neck, we will talk with you about this before you make the decision whether to have the TVT.

What are the chances of success?

About 80-90 women in every 100 feel that their incontinence is a lot better after the operation. However, there are a small group of women (10-20) 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.

This operation has now been available for over 15 years. Follow up studies show that most women continue to benefit in the long term.

What are the risks?

With any operation there is a risk of complications.

General risks of surgery:

- **Anaesthetic risk**

This risks of the anaesthetic are likely to be low, unless you have any specific medical conditions. The anaesthetist will discuss the risks with you before your operation.

- **Bleeding**

There is a risk of bleeding with any operation. Knowing your blood group beforehand allows us to have blood available to give you, if needed. This is known as a blood transfusion. It is rare to need to receive a blood transfusion after this operation. Severe bleeding occurs in less than 1 in 500 women. If this happens, it may be necessary to open up your abdomen to stop the bleeding. This will be done under a general anaesthetic.

- **Infection**

There is a risk of infection at any of the wound sites. A severe infection is rare. We will reduce the risk of infection by giving you antibiotics during the operation.

- **Thrombosis**

A deep vein thrombosis is a blood clot in the deep veins of the leg. The risk of this happening is around 4-5 in 100. This risk is significantly reduced by wearing special stockings and having injections to thin your blood. You may have to continue with

these injections when you go home.

Specific risks of the TVT procedure:

- **Failure**

The number of women who do not gain any benefit from the operation or whose symptoms fail to significantly improve is 10-20 in 100. It is possible that stress incontinence may continue or return following a TVT procedure. This may happen years after the TVT was first inserted, even if it originally cured leaking symptoms. If this happens, there is a possibility that the operation can be repeated, but we would discuss this in detail with you, as success rates can be lower.

- **Bladder perforation or urethral injury**

During the operation, the needles which are used to make sure the mesh is positioned correctly may accidentally pierce the bladder or (more rarely) the urethra. In this Trust, bladder perforation occurs in 5-10 in 100 women. The bladder is always checked after the procedure to see whether this has happened or not.

If this does happen, a tube (catheter) would then be put into your bladder to drain urine and left in overnight. This stops your bladder from stretching and filling with urine, giving it time to heal. You would need to stay in hospital overnight and the catheter would be removed the following morning. This would 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). This will get better by itself. A haematoma develops in about 1 in 100 women.

- **Bladder infection**

This can cause burning or stinging when passing urine. It happens in approximately 1 in 5 women 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 oral

antibiotics to treat it.

- **Bladder overactivity**

Any operation around the bladder has the potential for making the bladder overactive. This can lead to symptoms of passing urine frequently, needing to rush to the toilet with urgency, or waking to pass urine in the night.

If you already have these symptoms, the TVT operation is unlikely to cure them. You need to be aware that these symptoms are likely to continue and may be made worse by the surgery. It is important to try to manage and treat these symptoms before your TVT operation. We will discuss ways to help manage these symptoms with you.

- **Difficulty emptying your bladder**

Some women find that their bladder is much slower to empty after the TVT procedure. This normally improves over time. Between 5-10 in 100 women will not be able to empty their bladder 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'). If you are unable to do this, we may send you home with a different type of catheter, which will stay in your bladder for approximately one week.

Not being able to empty your bladder properly after the operation is usually a short term problem, but if it continues the tape can be loosened.

- **Mesh exposure**

The tissue where the tape has been inserted through the vaginal wall may not heal properly or may become infected. There is a risk of the mesh to begin wearing through or 'eroding' into the vagina. If this happens it can cause an increase in vaginal discharge, as well as offensive smelling or unusual-coloured discharge. The mesh may be felt by your partner during sexual intercourse. This may occur in up to 1 in 10 women.

This problem can usually be helped with further surgery, by either trimming the exposed mesh or re-covering the TVT tape again with vaginal tissue. This may result in the original TVT treatment being less effective.

Erosion of the mesh into the urethra or the bladder is very rare. This may occur shortly after or years after surgery and would require a further operation to remove the tape from either the bladder or urethra. The risk of mesh erosion is increased by smoking and with certain diseases. If this happens it can cause new symptoms of repeated urine infections or cystitis, as well as pain and overactive bladder symptoms.

- **Short-term pain**

This may occur where the tape was inserted or within the pelvic area. Short term pain may also occur during sexual intercourse or other physical activities. This may be caused by scar tissue in the vagina, as a result of the small cut that was made. The pain will often get better after some weeks. Over the counter painkillers may be used during this time, to manage the pain.

- **Long-term pain**

This may occur where the tape was inserted or within the pelvic area. Long-term pain may also occur during sexual intercourse or other physical activities. Although uncommon, nerve and muscle damage and pain may be permanent and severe enough to negatively affect your quality of life. The long term consequences of this cannot be confirmed. If this affects you, you may need to be referred to a specialist physiotherapist or our pain management team.

- Less than 1 in 1,000 women experience very rare complications of bowel and nerve damage as a result of the operation.

Other considerations:

- It is strongly advisable that you do not have the TVT procedure until you have finished having children. Although the TVT procedure will not affect your ability to conceive, there is a possibility of failure of the tape (causing stress incontinence to return) during pregnancy and childbirth. To reduce this risk, a Caesarean section delivery may be recommended. Please talk with your doctor if you plan on having more children.

- **Removal of the TVT**

If the TVT is to be removed, this may involve several procedures, as the tape is a permanent implant. With mesh removal procedures there are higher risks of damage to nearby organs or nerves.

Some women have requested removal of the TVT tape due to symptoms of repeated urine infections or cystitis, pain, or severe overactive bladder symptoms. However, following the partial or complete removal of the TVT tape, some women reported that these symptoms continued or became worse.

Partial or complete removal of the TVT tape may also result in the return of incontinence. You may then need to consider further alternative surgery to treat this.

What are the alternatives to TVT?

It is difficult to predict what will happen to your bladder or, if you have the operation, how long the effects will last.

Non-surgical options:

- **Do nothing**

If your incontinence is not troubling you, you can choose to have no treatment. You should have the operation **only** if you feel the stress incontinence is affecting your quality of life.

- **Pelvic floor muscle exercises**

If you have been doing these on your own, you may like to see a physiotherapist to check you have been doing them correctly. Supervised pelvic floor muscle exercises with a specialist women's health physiotherapist can successfully help to treat stress incontinence.

Avoiding activities which may put too much pressure on your bladder can also help to stop it getting worse and may even improve your symptoms. Factors affecting stress incontinence include:

- being overweight
- straining due to constipation
- smoking (due to the increase likelihood of chest infections and coughing).

- **Containment products**

Incontinence pads or pants may be an option to help manage leaking.

Alternative surgical options:

If you're unable to carry out the non-surgical options, or have tried them and had no success, we may be able to offer you an alternative operation. The following operations are offered by this Trust:

- **Urethral bladder neck injections**

This is a procedure during which a synthetic bulking agent is injected around the bladder neck. This improves the seal at the bladder neck and supports the way in which the bladder neck closes.

- **Colposuspension**

This operation uses sutures (stitches) to lift the front wall of the vagina, to help support the urethra.

- **Autologus (fascial) sling**

This procedure uses fascia (tissue) from your abdominal wall as a sling to support your urethra.

If you would like to know more about any of these procedures, please speak with your doctor or the Urogynaecology Specialist Nurses.

Tel: **01865 222 767**

(Monday to Friday, 8.00am to 5.00pm)

An answerphone is available for you to leave a message and we aim to return your call by the end of the next working day.

Pre-admission clinic

Before your surgery you will 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, such as blood tests, an ECG (heart tracing), or 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 or to raise any concerns you may have.

Coming into hospital

You will be asked to come into hospital 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 surgical 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 to confirm you are happy for the operation to go ahead, if you have not already done so. You will also have an opportunity to ask any further questions, if there is anything you are still unsure about.

After the operation

You will usually be able to eat and drink shortly after your return to the ward.

You are likely to experience some pain or discomfort for the first few days, but 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.

You may have difficulty emptying your bladder immediately after the operation. We will check how well you are emptying your bladder using a bladder ultrasound scan.

When we are happy that you are emptying your bladder well, you may go home. This is likely to be the same day, but you may need to stay overnight if you are experiencing difficulty emptying your bladder. You may need a tube (called a catheter) to be inserted into your bladder to help it to empty. The catheter would be removed the day after surgery.

Occasionally the bladder takes longer to return to normal. Although this is unlikely to occur, if it does happen, you may need to be shown how to put a catheter into your bladder to empty it yourself ('intermittent self-catheterisation'). You will be taught how to do this on the ward before going home.

This is usually a short term problem and you are likely to be able to stop using the catheters after a week or so. If the problem continues, we will discuss loosening the tape with you.

Getting back to normal

Recovery

You may have some slight vaginal bleeding after your surgery, and may need to wear a sanitary pad. As the operation only involves small cuts, recovery is usually much quicker than after other operations for stress incontinence. Recovery after a TVT usually takes 1-4 weeks. You are likely to need to take 2-4 weeks off work, depending on the type of job you do.

Driving and other activities

You should be able to drive and be fit enough for your usual activities within 1-2 weeks of surgery. You should avoid more strenuous activities (such as heavy lifting and sports) for 6 weeks, to allow your wounds to heal and the mesh to settle into place.

Sexual activity

We advise you to wait for 4-6 weeks after the operation before having sexual intercourse or inserting anything into your vagina, such as creams, tampons, or devices. If you leak urine during intercourse or if your incontinence symptoms affect your sex life, the operation may make this better, but unfortunately this is not always the case.

Stitches

The two stitches in your pubic area will dissolve on their own in approximately 4 weeks. The stitches in your vagina may appear in your underwear after about 2 weeks. They will have fully dissolved approximately 6 weeks after surgery.

Follow-up

One of the Urogynaecology Specialist Nurses will telephone you approximately 12 weeks after surgery, to check you have recovered and assess your response to the TVT. If you have any worries or concerns you would like to discuss before this, please telephone the Urogynaecology Specialist Nurses. Their contact details are on the back of this leaflet.

Further information

National Institute for Health and Clinical Excellence (NICE)

NICE is an independent organisation responsible for providing national guidance on promoting good health and preventing and treating ill health.

- *Guidelines from NICE for Urinary Incontinence in Women*

Website: www.nice.org.uk

Bladder & Bowel Community

The Bladder & Bowel Community help support people in the UK who are living with conditions that affect their bladder or bowel.

Website: www.bladderandbowel.org

Helpline: 0800 031 5412

Oxford Gynaecology and Pelvic Floor Centre

This centre provides specialist services for women with gynaecological and pelvic floor problems.

Website: www.oxfordgynaecology.com

How to contact us

If you have any questions or concerns, please telephone the Urogynaecology Specialist Nurses.

Tel: **01865 222 767**

(Monday to Friday, 8.00am to 5.00pm)

An answerphone is available for you to leave a message and we aim to return your call by the end of the next working day

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

Authors: Urogynaecology Specialist Nurses
Consultant Urogynaecologists

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Oxford University Hospitals NHS Foundation Trust

Oxford OX3 9DU

www.ouh.nhs.uk/information

