SYNTHETIC MID-URETHRAL TAPES FOR STRESS URINARY INCONTINENCE (SUI)

Information about your procedure from
The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

To view the online version of this leaflet, type the text below into your web browser:

http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Synthetic sling female.pdf

Key Points

- Mid-urethral tapes are used to treat stress urinary incontinence
- This is a relatively minor procedure with a short recovery time
- Two thirds (66%) of women are completely dry after this procedure
- 80 to 90% of women are happy with the result of their surgery even though some still have minor leakage
- 10% of women develop urgency (a need to rush to the toilet)
- Some women have difficulty emptying their bladder
- A small number of women develop long-term complications from the tape that may include chronic pain and erosion
- All vaginal mesh procedures are subject to a comprehensive national audit and complications must be reported to the national medical devices watchdog

What does this procedure involve?

This is an operation to treat stress incontinence (leakage of urine when you exercise, cough, sneeze or strain). It involves making a small cut inside your vagina and passing a tape under your urethra (waterpipe). The tape is like a ribbon, made out of plastic mesh, and stays inside the body permanently.

When you exercise or cough, there is downward pressure on the bladder. The tape acts as a support underneath your urethra to hold it closed when the bladder is pushed down; this stops any urine leakage.

© British Association of Urological Surgeons (BAUS) Limited

What are the alternatives?

Stress incontinence can be treated without surgery. We recommend that all patients try non-surgical treatment before having an operation because it avoids the risks of side-effects or complications of surgery.

- **Incontinence pads** - if your symptoms are not a bother, you may choose to do nothing and use pads for urine leakage.
- **Pelvic floor exercises** – done under supervision by a continence advisor or physiotherapist can improve stress incontinence in 70% of women
- **Weight loss** and **giving up smoking** - can also help.
- **Continence pessaries** - placed temporarily inside your vagina can help leakage that occurs only during exercise

Tape operations are the procedures most often done for stress incontinence, but there are other procedures available. Each one has advantages and disadvantages, and different operations may be better for different people. You should discuss these with your surgeon before making a decision:

- **Urethral bulking** – an injection around your urethra (waterpipe)
- **Autologous sling procedure** – using a piece of strong tissue from your abdominal (tummy) wall to support your urethra from below
- **Colposuspension** – an open operation which lifts the tissues around your bladder neck on to the back of your pubic bone
- **Artificial sphincter operation** – an implant that squeezes your urethra

For further information about the options available to treat stress urinary incontinence, see the BAUS leaflet on the comparison of treatment options for stress incontinence.

What happens on the day of the procedure?

You will be seen by the surgeon and the anaesthetist who will go through the plans for your operation with you.

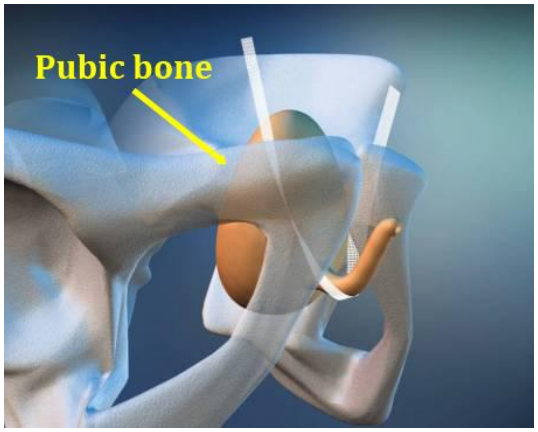
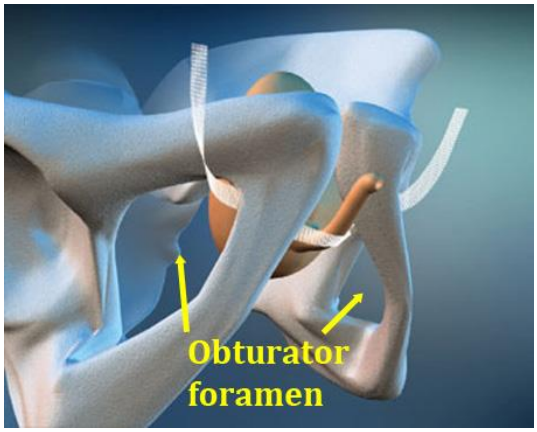
We may provide you with a pair of TED stockings to wear, and we may give you a heparin injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

© British Association of Urological Surgeons (BAUS) Limited

Details of the procedure

Tape operations are done in two different ways. Both methods involve putting the tape in through a small incision in your vagina; the tapes are made out of the same kind of plastic mesh. In one operation, the tape is brought out through two very small cuts on your lower abdomen (tummy); this is called a transvaginal (or retropubic) tape (TVT). In the other method, the tape is brought out through two very small cuts in your groin; this is called a transobturator tape (TOT).

Both procedures can be done under general anaesthetic (with you asleep), spinal anaesthetic (with you awake) or local anaesthetic (with you awake). The operations are usually done as a day case, meaning that you can go home on the same day:

Retropubic Tape (TVT)	Transobturator Tape (TOT)
	
TVT is the longer established mesh tape procedure	TOT has been introduced more recently
The top ends are passed upwards using two small cuts in your lower abdomen (tummy)	The top ends are passed sideways using two small incisions, one in each groin
Bladder injury: higher risk **Poor emptying**: higher risk **Chronic pelvic pain:** lower risk	**Bladder injury**: lower risk **Poor emptying**: lower risk **Chronic pelvic pain:** higher risk

What happens immediately after the procedure?

You will usually be able to go home on the same day but, sometimes, an overnight stay is needed.

© British Association of Urological Surgeons (BAUS) Limited

When you wake up from your anaesthetic, you may have a catheter in your bladder and a gauze pack in your vagina. There may be some bleeding from your vagina to start with. The nurses will check to make sure the bleeding is not excessive.

When you first pass urine, it may be uncomfortable and your urine flow may be slower than normal. The nurses will measure the amount of urine you pass and then check a scan of your bladder afterwards to make sure you are emptying well.

Your catheter

A catheter is a small tube made out of latex or silicone that is put into your bladder, through your waterpipe, to let the urine drain out. If your bladder is not emptying properly after the operation, the nurse will empty the bladder using a catheter. Sometimes a catheter is left in for a few days (an indwelling catheter) and sometimes you will be taught how to drain the bladder yourself regularly using a disposable "in-and-out" catheter (self-catheterisation).

This problem affects 10% of patients (1 in 10), but it is uncommon for this to be needed for more than a few days. If you go home with an indwelling catheter, you will come back to have your catheter removed at a convenient time. The team will then measure your bladder emptying with a scanner again.

How effective is the procedure in curing stress urinary incontinence?

About two thirds of women will be completely dry after the operation and one third will have some degree of leakage. Most people are much better after surgery, even if they still have some leakage. To put it another way, about 80 to 90% of women (eight to nine out of 10) are satisfied with the result after synthetic tape operation.

These results are very similar to those for colposuspension and autologous sling operations, both in the short and long term. Outcomes for surgery in women with recurrent stress urinary incontinence after previous surgery, however, are not as good.

Are there any after-effects?

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you

© British Association of Urological Surgeons (BAUS) Limited

should ask your surgeon's advice about the risks and their impact on you as an individual:

After-effect	Risk
Vaginal bleeding for the first 48 hours	 Almost all patients
Temporary pain in the incisions requiring simple painkillers	 Between 1 in 2 & 1 in 10 patients
Failure to improve the incontinence significantly	 Between 1 in 5 & 1 in 10 patients (10 – 20%)
Recurrence of stress incontinence at a later stage even if it was cured straight after the procedure	 1 in 10 patients (10%)
Worsening urinary frequency and urgency with urge incontinence (leakage), especially if already present to a minor degree before the procedure	 1 in 10 patients (10%)
Injury to your bladder during the procedure requiring a catheter for slightly longer than usual	 Between 1 in 10 & 1 in 20 patients (5 - 10%)
Urinary infection requiring antibiotics	 Around 1 in 20 patients (5%)
Temporary inability to empty the bladder completely requiring either a catheter or intermittent self-catheterisation	 Between 1 in 10 & 1 in 20 patients (5 - 10%)
Inability to empty the bladder completely that **does not get better on its own** requiring a catheter or intermittent self-catheterisation	 Between 1 in 20 & 1 in 50 patients (2 – 5%)

© British Association of Urological Surgeons (BAUS) Limited

Migration of the tape into your vagina several years after tape insertion resulting in infection, vaginal discharge or pain on intercourse		Between 1 in 20 & 1 in 50 patients
Severe pain in your vagina, tummy or groin, including pain during sexual intercourse		Between 1 in 50 & 1 in 250 patients
Inadvertent injury to surrounding structures (e.g. urethra, bowel, blood vessels) requiring further surgery		Between 1 in 50 & 1 in 250 patients
Migration of the tape into your urethra, bladder or rectum several years after tape insertion (resulting in urinary infection, pain etc)		Between 1 in 50 & 1 in 250 patients
Severe bleeding requiring a further procedure		Between 1 in 50 & 1 in 250 patients
Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)		Between 1 in 50 & 1 in 250 patients (your anaesthetist can estimate your individual risk)

PLEASE NOTE

It is a national requirement that all mesh-related adverse events are reported by urologists to the Medicines & Healthcare Products Regulatory Agency (MHRA)

A leaflet about mesh-related complications has been written by the NHS and will be provided for you, along with this information sheet

What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is approximately 8 in 100 (8%); this includes getting *MRSA* or a *Clostridium difficile* bowel infection. This figure is higher if you are in a "high-risk" group of patients such as patients who have had:

- long-term drainage tubes (e.g. catheters);

© British Association of Urological Surgeons (BAUS) Limited

- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

What can I expect when I get home?

- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- any antibiotics or other tablets you may need will be arranged & dispensed from the hospital pharmacy
- we may discharge you with a catheter in your bladder
- if you do have a catheter, we will show you how to manage it at home and arrange for it to be removed at a suitable time
- you may get pain in your groin or abdomen for up to two weeks afterwards; simple painkillers will usually help

A mesh tape fixes itself in place over the first few weeks, as the body heals around it. During that time, it is possible for the tape to loosen so it is important to rest after the operation, even if you feel able to resume your normal activities:

- for the first two weeks, you should avoid any strenuous activity or heavy lifting (no more that 5 kg – equivalent to two, four-pint milk cartons)
- after two weeks, you may start to return to everyday activities
- but, if you have a very physical job, work out in a gym or do a lot of running, you should wait a further two weeks (four in total)
- you should avoid sexual intercourse for four weeks after the procedure

Your data and data protection

It is important that surgeons monitor the success rates and complications of the operations they perform, to be sure that their patients get good results. This helps us to tell future patients what to expect and makes sure that the all surgeons are performing well. All stress incontinence operations are recorded on a national database so that we can do this.

BAUS runs a national audit and collects data from all urologists undertaking this surgery. There are two reasons for this. First, surgeons are required by the Department of Health to look at how well the surgery is being done under their care and, second, to look at national trends for the procedure.

Some basic patient data (e.g. name, NHS number and date of birth) are entered and securely stored. This is required so that members of the

© British Association of Urological Surgeons (BAUS) Limited

clinical team providing your care can go back to the record and add follow-up data such as length of stay or post-operative complications. This helps your surgeon to understand the various outcomes of the procedure.

Although BAUS staff can download the surgical data for analysis, they **cannot** access any patient identifiable data. This information is used to generate reports on individual surgeons and units; these are available for the public to view in the Surgical Outcomes Audit section of the BAUS website.

General information about surgical procedures

Before your procedure

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (warfarin, aspirin, clopidogrel, rivaroxaban or dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask

If you wish to learn more about what will happen, you can find a list of suggested questions called "Having An Operation" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home

We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

© British Association of Urological Surgeons (BAUS) Limited

Smoking and surgery
Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or
- ring the free NHS Smoking Helpline on **0800 169 0 169**.

Driving after surgery
It is your responsibility to make sure you are fit to drive after any surgical procedure. You must not drive for 24 hours after a general anaesthetic. If you experience pain while moving around your vehicle or during braking, you should not drive until it has settled completely. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

What should I do with this information?

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?

This leaflet uses information from consensus panels and other evidence-based sources including:

- the Department of Health (England);
- the Cochrane Collaboration; and
- the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:

- the Royal National Institute for Blind People (RNIB);
- the Information Standard;
- the Patient Information Forum; and
- the Plain English Campaign.

© British Association of Urological Surgeons (BAUS) Limited

Disclaimer

We have made every effort to give accurate information but there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE

The staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you do have any questions, you should contact your urologist, specialist nurse or GP.

© British Association of Urological Surgeons (BAUS) Limited