TVT/TVT-O mesh excision-patient information leaflet

Stress urinary incontinence (SUI) is the condition where urine leaks with coughing, sneezing, laughing or with lifting and exercise. Retropubic and Transobturator mesh tapes have been used to treat stress incontinence.

Retropubic mesh tape procedure (TVT) -This was the first mid-urethral tape procedure introduced and the synthetic material is inserted through a small incision on the anterior vaginal wall, emerging through two small incisions in the lower abdomen above the pubic bone.

Transobturator mesh tape procedures (TVT-O) -This procedure was developed to minimise the potential for bladder and bowel injuries associated with the retro-pubic mesh tape procedure. The synthetic material is inserted through a similar incision on the anterior vaginal wall, emerging through a small incision in each groin area.

Procedure for removal of mesh-

1. TVT- This involves combined abdominal (through your tummy) and vaginal approach. The incision on the abdomen is just above the hair line. The incision in the vagina is just below the urethra (water pipe). The mesh is identified thru abdomen as well as vagina and then removed. There can be a partial removal of the vaginal portion of mesh also where you don't need to open the abdomen and is completed through vagina.

2. TVT-O- The complete removal of this mesh involves opening the vagina through incision just below the urethra along with 6-7 cm incision in the groin (both left and right side). The partial removal does not include incision on the groin. The removal of mesh from groin area can be technically challenging if the vaginal part of the mesh has already been removed before. You may also have a drain left in after the surgery for a few days.

After mesh removal, if needed, the vaginal walls will be repaired by stitching together the stronger tissues that are underneath the skin of your vagina that lines inside the vagina

Possible risks during surgery includes-

- Infection- This includes urinary tract infection and wound infection
- Damage to urethra, bladder, major blood vessel (0.6-2%)
- Excessive blood loss needing blood transfusion- The risk of having blood transfusion is 2 in 100
- Recurrence of the incontinence symptoms. Around 1 in 3 patients may develop significant SUI needing a subsequent anti-incontinence procedure
- Discomfort during sexual activity- The risk is about 5 in 100
- No resolution in pain or persistence of pain- At least 1 in 2 women will have persistence of pain.
- Pain might increase following the removal of mesh due to triggering of central sensitisation
- Nerve damage- There is small risk of damaging the nerves by the surgery itself and there is also a risk of nerve compression due to your position during surgery. Nerves often recover, but it can take many months.
- Scar tissue**:** Tissue thicker than normal skin forms where surgery was done. There may be pain at the scar tissue. Scar tissue rarely requires treatment.

- Urinary symptoms: Temporarily unable to empty your bladder normally when you urinate. Within the first 2 weeks after surgery, the risk of incomplete bladder emptying is up to 40 in 100. If needed, you will be taught how to use a catheter.

Alternative strategies to deal with mesh complications-

1. Vaginal estrogens- Small mesh exposure can be managed with vaginal estrogen especially if they are asymptomatic. It also prevents the occurrence of mesh exposure
2. Neuromodulators- Drugs like Gabapentin, Pregablin, Amitriptyline, and Nortriptyline may be used to help the pain component. Discuss with your consultant
3. Physiotherapy- Relaxation of pelvic floor muscles might help to release some tension in pelvic floor and hence relief in pain
4. Injection of steroid and Local Anaesthesia at the site of mesh insertion
5. Combination of all of the above can be used at the same time along with input from counselling with clinical psychologist using strategies of acupuncture and hypnotherapy to manage pain

Preparations before the operation

- A Pre-assessment will determine your fitness for surgery and can take place face-to-face or during a telephone conversation. You will be placed on the waiting list for surgery. You will be given a minimum of one week's notice of the Pre-assessment and a minimum of two weeks' notice of your surgery date.

- You will usually be seen by your surgeon either 1-3 weeks before the operation to sign your consent and discuss details of the operation or the

consent will be taken in Pre-assessment clinic or during consultation at the gynaecology clinic, or on the day of surgery.

- Personal care: Shower or bath on the day of surgery, avoiding the use of body creams, talcum powder, deodorants or make-up. Remove nail varnish, all jewellery and body piercing. A surgeon may ask you to shave, this needs to be done a few days before the operation to avoid scratches on the skin and reduce the risk of infection. You should avoid becoming constipated before your operation; this is to avoid excessive straining afterwards. Use laxatives if necessary.

What should I bring to hospital?

- Dressing gown, slippers, pyjamas (or night dress) and comfortable clothes (e.g. track suit) to wear while you are recovering.
- A wash bag with toiletries and a small towel.
- Your medicines.
- A small amount of change for the purchase of newspapers and magazines.
- Other items (if used): glasses, contact lenses, hearing aids, dentures, etc.

Avoid bringing valuables as the hospital cannot accept responsibility for loss or damage to any personal property unless it has been handed over to staff for safekeeping.

What happens on the day of my operation?

- Fasting: You should not eat for six hours before your operation. This means that if you have a morning operation you should not eat after midnight. If your operation is in the afternoon you can have an early breakfast and should not eat after 7.30 a.m. You can drink water up to 2 hrs before surgery before you leave your home.
- Advice on your medications will be given at Pre-assessment.
- Admission is usually at 7.00 a.m. for morning surgery and 9.30 a.m. for afternoon surgery.
- Your anaesthetist will usually see you on the day of your operation.
- When your turn comes you will be taken to the operating theatre.
- After the operation you will wake up in recovery with a drip (to receive fluids), a catheter (to empty the bladder) and a vaginal pack (to stop vaginal bleeding) and sometimes a drain to stop bruise forming.

What pain-relief is available?

The degree of pain and discomfort experienced following surgery varies. Often pain-relief is given by mouth, rectally (as a suppository) or by injection. Pain management can also be given by patient-controlled analgesia (an infusion into the arm, which is triggered by the patient pressing a button).

After about 12-24 hours the strong pain-relief (containing morphine) will not usually be required and can be stopped. Tablets and suppositories should be sufficient to reduce any discomfort. This will allow you to get out of bed and mobilise, helping to reduce the risk of complications.

What happens after the surgery?

After spending some time in recovery you will go to the ward. On return from the operating theatre you will have a fine tube (drip) in one of your arm veins with fluid running through to stop you getting dehydrated.

You may have a bandage in the vagina, called a ‘pack’ and a sanitary pad in place. This is to apply pressure to the wound to stop it oozing. You may have a tube (catheter) draining the bladder overnight. The catheter may give you the sensation that you need to pass urine but this is not the case. Usually the drip, pack and catheter come out the morning after surgery or sometimes later the same day. This is not generally painful.

The day after the operation you will be encouraged to get out of bed and take short walks around the ward. This improves general well-being and reduces the risk of clots in the legs.

You will be allowed to eat and drink as soon as you feel like it. You will be encouraged to get out of bed as soon as you are comfortable.

What happens after discharge from hospital?

Wound healing / vaginal discharge

Unusual sensations such as tingling, numbness or itching are common. The vagina feels ‘lumpy’. A slight discharge/bleeding is usual for up to six weeks as the vagina heals and stitches dissolve. It is possible for the discharge to contain threads from dissolving vaginal stitches. Contact your GP if the discharge becomes offensive smelling or bright red/heavy.

Hygiene

You will be able to have a shower on the first day after your operation and then daily. Having a short bath will be possible when you can comfortably get in and out, avoiding the use of ‘bubble bath’ in the water.

Pelvic floor exercises

You can perform pelvic floor exercises as soon as you feel comfortable. Ask for advice.

Lifting

Heavy lifting should be avoided for up to 6-8 weeks after your operation to allow for adequate healing. You can lift without concerns anything that can be lifted easily and without a strong effort. When you are lifting, brace your pelvic floor muscles and your stomach muscles to help support your back and the organs in your pelvis.

Rest and mobility

After surgery it is normal to feel tired and you will need to take it easy and rest for at least one week. You may need help for household jobs. However, it is important to remain mobile, get up and walk regularly. It is quite safe to go up and down stairs from the day you go home if you feel well.

If your mobility is reduced for any reason it will be important to move your legs as often as possible to reduce the risk of thrombosis (developing clots in your legs and

lungs). Your doctor may advise you to keep your hospital stockings (TEDS) for a few weeks.

Build up your activity gradually and be guided by how your body responds.

Eating

Some people find that their appetite changes and they get a ‘bloated’ feeling or indigestion after meals. These symptoms usually clear up by themselves as you become more active. Small meals taken regularly can reduce the likelihood of this happening.

Driving

It is usually safe to drive a car 4-6 week after your operation but it depends if you are confident to do an emergency stop and whether you can concentrate enough to drive.

Back to work

You will need to be off work for 4-8 weeks depending on the type of excision (partial or total). If you have a very physical job that requires lots of lifting you may need to be off work for longer, possibly four weeks. You will be advised by your surgeon. A medical certificate can be arranged for you at discharge from hospital.

Sport and activities

Gentle swimming is good exercise and can be started after two weeks. More strenuous sports can be started after four weeks but should be built up gradually over a few weeks.

Making love

You are advised to wait approximately eight weeks after the operation to be sure that the vagina is completely healed. Obviously your husband or partner should be gentle at first. It may also help to use a lubricant such as K.Y. jelly, SILK or YES.

Post-operative check

Women will have their post-operative check either in the community with a telephone call from one of our nurses or secretary or via a gynaecological outpatient appointment. Both will take place approximately 6-8 weeks after the operation. If the check is done via telephone, the nurse or the secretary will contact you beforehand to book the time of the call. You will be asked about your progress and given the opportunity to discuss any relevant issues. An appointment can be arranged if necessary.

If you have any concerns beforehand an earlier telephone call or consultant appointment can be arranged if necessary.

Further Information

The Internet is a useful and powerful source of information. We have selected reputable sites where patients can obtain valid information about their condition and proposed surgery.

Please follow the instructions to navigate each site:

Royal College of Obstetricians and Gynaecologists (RCOG)

http://www.rcog.org.uk

Go to ‘Women’s Health’ / ‘Patient Information’ / ‘Recovering well’

Surgery for stress incontinence	Mid-urethral sling operatio for stress incontinence
	Mesh complications and recommendations

International Urogynecological Association (IUGA)

http://www.iuga.org

Go to ‘Patient information’ / ‘Patient brochures’ (remember to ‘select language’)

Stress urinary incontinence, mesh surgery and complications
Urodynamics
Overactive bladder
Pelvic floor exercises

British Society of Urogynaecology (BSUG)

http://www.bsug.org.uk

Go to ‘Guidelines and Information’ / ‘Patient Information’

Stress urinary incontinence, Colposuspension, autologous sling, bulking agent

Mesh complications and recommendations, centres for removal

Urodynamics

The British Association of Urological Surgeons

www.baus.org.uk

Stress incontinence, mesh complications and recommendations

MHRA- The Medicines and Healthcare products Regulatory Agency (MHRA) is a government body for the regulation of medicines and medical devices and equipment used in healthcare and the investigation of harmful incidents. Side effects and complications of mesh such as pain, mesh erosion can be reported to your clinician or to MHRA directly through yellow card scheme. You can access yellow card scheme via following link “https://yellowcard.**mhra**.gov.uk”

References-

1. Bergersen A, Hinkel C, Funk J, Twiss CO. Management of vaginal mesh exposure: A systematic review. *Arab J Urol*. 2019; 17(1):40–48. Published 2019 Apr 4. doi:10.1080/2090598X.2019.1589787
2. Crosby EC, Abernethy M, Berger MB, et al. Symptom resolution after operative management of complications from transvaginal mesh. Obstet Gynecol. 2014;123:134–139
3. Ramart P, Ackerman AL, Cohen SA, et al. The risk of recurrent urinary incontinence requiring surgery after sub urethral sling removal for mesh complications. Urology. 2017;106:203–20

Useful contacts:

Re-scheduling of surgery:

Waiting List Co-ordinator

Directorate of Women and Child Health

Swansea Bay health board

Tel: (01792) 205666 Ext 32800 or EXT 35256

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