

Incontinence

Prolonged incontinence post prostatectomy

Following a prostatectomy, some degree of urinary incontinence is common and expected due to the disruption of the urinary sphincter and the removal of the prostate gland. However, in most cases, this incontinence gradually improves over time as the body adjusts and the urinary sphincter muscles regain strength.

Prolonged incontinence occurs when the loss of urinary control persists for an extended period beyond what is typically expected during the recovery period. The exact duration that defines "prolonged" may vary, but generally, if urinary incontinence continues for more than six to twelve months after the surgery, it is considered prolonged.

Several factors can contribute to prolonged incontinence post prostatectomy, including:

1. Nerve damage: Surgical trauma or injury to the nerves responsible for controlling urinary function can lead to prolonged incontinence.
2. Surgical technique: The surgical approach and technique used during the prostatectomy can affect the risk of incontinence.
3. Pre-existing urinary incontinence issues before the surgery, may increase the risk of prolonged incontinence post prostatectomy.
4. Age and certain health conditions can impact the recovery process and increase the risk of prolonged incontinence. Obesity is often associated with difficulties in recovery of continence. By losing weight, patients can reduce the strain that excess weight can put on the bladder.
5. Weakness or damage to the pelvic floor muscles, which support the bladder and control urine flow, can contribute to prolonged incontinence.

There are options to assist with correction of incontinence. No man should ever suffer in silence beyond 12 months. It is important that you do not blame yourself, there are anatomical reasons why some people just cannot get dry no matter how many pelvic floor exercises they do. Please ask for help.

Treatment options

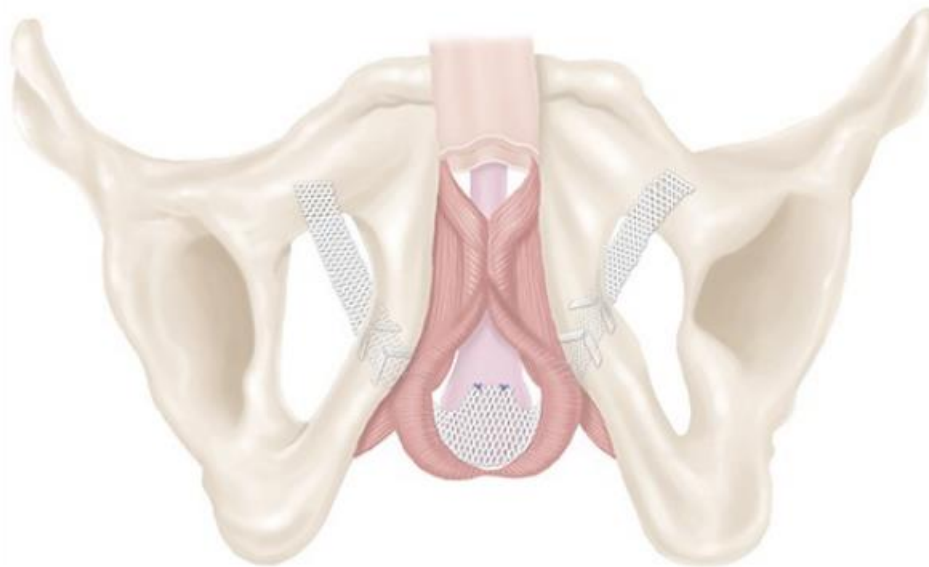
There are two common treatment options when pelvic floor training has not resulted in continence. These are the sling and Artificial Urinary Sphincter. The sling is best for loss up to 300g/24hrs with 85-90% of men having this procedure being completely dry following insertion and the rest are improved. The sling is also good for climacturia (when someone leaks urine with orgasm/orgasm associated incontinence) or arousal leakage (when someone leaks urine when aroused).

Less if radiotherapy - 60-70%. The result is generally maintained long term as long as a small amount of pelvic floor maintenance is done. If loss is over 300g/24hrs or the sling fails, an artificial sphincter is no problem to insert.

1. Male sling procedure

The male sling is a treatment option for addressing stress urinary incontinence in men. It is typically recommended for those experiencing mild to moderate urinary incontinence when conservative treatments such as bladder training and pelvic floor exercises have not yielded satisfactory results.

During the procedure, a synthetic mesh-like tape is positioned around the urethral bulb. This placement applies pressure and repositions the urethra, aiding in the closure of the bladder sphincter and improving urinary control.



To be eligible for this treatment, the following criteria must be met:

1. Attempted conservative treatment for approximately 12 months and undergone a 24hr pad test (counting and weighing pads over a 24-hour period).
2. In good overall health.

3. Demonstrated good bladder function, including a bladder capacity greater than 250ml and a post void residual urine volume of less than 50ml. These parameters can be assessed during Urodynamic testing.
4. Absence of a urinary tract infection or any medical condition that could impede the healing process.
5. Undergone bladder function tests, specifically a urodynamic evaluation which a urologist will perform.
6. Received a normal cystoscopy, which involves a visual examination of the bladder using a camera by a urologist.

What are the advantages of the male sling procedure?

The male sling procedure is considered a minimally invasive surgery. One of its advantages is that it involves only a small incision in the perineum, which is the area between the base of the scrotum and the anus. This small incision leads to a shorter recovery time. Typically, patients have a catheter in place for one day and are discharged the following day after the catheter is removed and a successful trial of void is conducted.

This trial involves measuring your urine output and performing a scan of your abdomen to ensure there is no residual urine. Once the sling is in position, it immediately begins to function, requiring no further action or intervention by the patient.

Procedure

During the male sling procedure, a surgical incision is made in the perineal tissue, which is the region between the scrotum and the anus. Through this incision, the surgeon exposes the urethra and utilizes a supportive sling made of mesh-like surgical tape. The sling is placed around a specific portion of the urethral bulb, covering the upper part of the urethra near its entry into the region of the urethral sphincter. By encircling the urethral bulb, the sling gently repositions the urethra, creating increased resistance in that area. This provides support to the bladder neck.

What happens after the male sling procedure?

After your surgery, it is possible that you will have a temporary catheter inserted through the urethra. This catheter is necessary to facilitate bladder emptying as there might be swelling post-surgery, which can make urination difficult. As the swelling subsides, you will gradually regain the ability to urinate on your own and empty your bladder effectively. However, it may take a few weeks for your normal urination pattern to fully return.

You can resume your regular diet after the surgery. It is common to experience some discomfort in the inner thigh muscles for a few days and mild pain at the scrotal wound site for 1-2 days.

Instructions for Discharge/Post-Operative Care (0-6 weeks):

- You can shower 24 hours after the procedure but avoid taking baths, using spa/hot tub or swimming pools.
- It is advisable to avoid lifting heavy objects for the first 3 weeks, and gradually increase the weight lifted to 3kg in the subsequent 3 weeks.
- Refrain from activities such as bending, squatting, climbing (including getting onto high vehicles), spreading your legs too wide, bike riding, weightlifting, jogging, breaststroke swimming, vacuuming, or sweeping. It is advisable to go for short walks daily.
- If you need to pick up objects from the floor, it is recommended to have someone assist you. Alternatively, you can consider purchasing a mechanical device to aid in picking up objects while you continue to heal.
- The perineal wound will be closed using dissolving stitches, and a dressing of glue will be applied. The sutures will take approximately 4 weeks to dissolve, while the glue will gradually peel off.
- You may resume pelvic floor exercises after 6 weeks, or as instructed by your surgeon.
- Intercourse should be avoided. Please consult your surgeon for further guidance in this regard.

Urinary and bowel elimination

- It is not unusual to experience constipation after the procedure, especially if you are taking opioid medication. To prevent straining during bowel movements, consider using stool softener medication.
- Ensure that you stay adequately hydrated throughout the day by consuming 1.5-2 litres of water.
- Maintain a diet that includes an adequate amount of fibre.
- Consider avoiding liquids after around 7pm and make sure to empty your bladder before going to bed. This will help reduce pressure in the bladder overnight.

Some of our patients have told us that they have experienced the things below following sling insertion (remember this is personal experience only, many patients report none of the below and only say it is great as they have improved continence):

- *Some short sharp pain if getting up quickly from a sitting position.*
- *Getting out of bed in the morning with a full bladder producing pain or discomfort.*
- *Production of only a small volume of urine after waking in the morning; should return to normal after a short time that day. If experiencing persistent retention of urine, contact your urologist.*
- *In some cases, internal bleeding (haematoma) due to contact with blood vessel.*
- *A small leakage of urine if leaving it too long before using to the toilet.*
- *Flatulence with quick leg movements.*

2. Artificial Urinary Sphincter (AUS) procedure

An artificial urinary sphincter (AUS) is a medical device used to treat severe urinary incontinence. It is primarily utilized when other conservative treatments have been unsuccessful (as discussed before) in controlling urinary leakage or the leakage is far more profound for a male sling to correct.

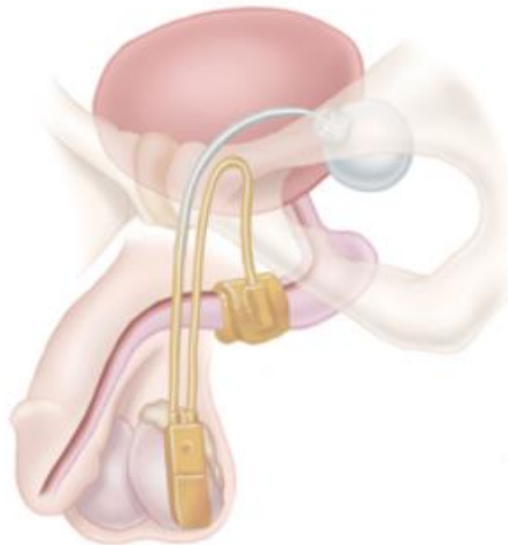
The AUS consists of three main components:

1. **Cuff:** A fluid-filled cuff that is placed around the urethra to provide compression and prevent urine leakage. The cuff is usually made of silicone or other biocompatible materials.
2. **Pump:** A small pump, typically located in the scrotum for men or the labia for women, is used to inflate and deflate the cuff. By activating the pump, the cuff is pressurized, effectively closing off the urethra and preventing urine leakage. To allow urination, the cuff is deflated by releasing the pressure using the pump.
3. **Reservoir:** A fluid reservoir is implanted in the abdomen to store the fluid used to inflate and deflate the cuff. The reservoir is connected to the cuff and pump through small tubes.

****The device is completely concealed with no visible external parts**

The AUS mimics the function of the natural urinary sphincter, which controls the flow of urine from the bladder. When the person feels the urge to urinate, they use the pump to release the pressure on the cuff, allowing urine to pass through the urethra. After urination, the cuff is reinflated to prevent urine leakage.

Implanting an artificial urinary sphincter is a surgical procedure that requires careful evaluation and consultation with a urologist. It can significantly improve urinary control and quality of life for individuals experiencing urinary incontinence.



How is the procedure done?

The procedure is conducted with the patient under general anaesthesia, ensuring complete unconsciousness during the operation.

An incision is made in the perineum, the area between the scrotum and the anus. The urethra is located, and the cuff is positioned around it.

Another small incision is made in the groin. Through this incision, the fluid reservoir is placed in the abdomen, and the pump is positioned in the scrotum.

All three components of the device are connected together. The entire device is filled with water and tested to confirm its proper functioning. At the end of the procedure, the device is left deactivated to allow for healing of the surrounding tissues.

The incisions are closed using dissolvable stitches.

A catheter is inserted through the urethra into the bladder to drain urine for the initial 24hrs following the procedure.

The device will be activated four to six weeks after the surgery. Until the device is activated, you will continue to experience urine incontinence.

What does recovery look like?

- **Hospital Stay:** Typically, you will remain in the hospital for one to two nights after the procedure.
- **Catheter Removal:** The catheter will be removed on the first day after the procedure. In some cases, if swelling in the urethra makes it difficult to pass urine, the catheter may need to be replaced temporarily.
- **Swelling and Bruising:** It is common to experience minor swelling and bruising in the scrotum and perineum. This swelling and bruising may take several weeks to fully resolve.
- **Driving:** Generally, this needs to be discussed with your surgeon.
- **Return to Work:** Returning to work is possible after one to two weeks, although you may need to engage in light duties for four to six weeks. It is important to avoid strenuous activities, including heavy lifting and vigorous exercise, during this recovery period. Please talk to your surgeon on advice around this.
- **Device Activation:** The AUS device will be activated four to six weeks after the surgery. Until the device is activated, you will continue to experience urine incontinence.