Male Stress Incontinence

Surgical Treatment Of Male Stress Incontinence.

Stress incontinence in men is usually caused by surgery on the prostate gland which leads lead to direct damage to the urinary sphincter itself and also the small nerve fibres that supply the sphincter. It is often called post prostatectomy incontinence (PPI). Incontinence after radical prostatectomy is common and tends to improve with time however at 12 months post surgery between 1-40% of men will still experience some degree of incontinence. First line treatment is with conservative therapy including supervised pelvic floor muscle training however if this fails and the incontinence remains bothersome at 12 months the next step is to consider surgery. In a recent UK study it was found that 2.5% of men who underwent a radical prostatectomy had incontinence surgery within the following 3 years. The surgical treatment options for post prostatectomy incontinence include the artificial urinary sphincter and the male sling.

Artificial Urinary Sphincter

What's involved

The artificial urinary sphincter AMS 800 (AUS) is a 3 part slicone prosthetic device which has been the gold standard treatment for male stress incontinence for over 40 years. The device is a hydraulic system consisting of a cuff placed around the urethra, a pressure regulating balloon placed underneath the abdominal wall and a control pump implanted into the scrotum. When active the cuff is filled with fluid which compresses the urethra preventing leakage. When you want to pass urine you will need to open the cuff by pressing the control pump in the scrotum. After you have passed urine the cuff will automatically refill and close over around 2 -3 minutes.

Surgery to insert an artificial urinary sphincter involves 2 small incisions, one behind the scrotum and one on left or right side of the lower abdomen. Prior to admission for surgery you will be provided with antibacterial skin wash to use for 3 days prior to your operation. You will be in hospital for 1 night and a catheter will be left overnight after the surgery which is removed the following morning. The sphincter is initially deactivated after it is inserted so you will still be incontinent when you leave hospital. After around 6 weeks you will be seen and the sphincter will be activated. You should avoid any strenuous activity or lifting for at least 6 weeks.

How effective is it?

The AUS is very effective but is not perfect. Although most men see a significant improvement in leakage, complete dryness is not guaranteed. Patient satisfaction rates are consistently reported as around 90% or higher. On average we would expect the device to last around 10 years or more.

What are the risks?

- Mild pain, swelling and bruising of the scrotum is expected.
- Wound infection can occur in around 10%.
- Infection of the device requiring removal can occur in 2-10%.
- Erosion of the cuff through the urethral wall can occur in 2-10% this will require device removal.
- Failure to control your incontinence can occur in 2-10%.

- Mechanical failure of the device leading to recurrent incontinence can occur in 2-10%
- Urethral shrinkage (atrophy) leading to recurrent incontinence can occur in 2-10%.

Synthetic Male Sling

What's involved?

The male sling is a polypropylene mesh which is placed underneath the urethra and repositions the urethra to allow the residual sphincter function to work more effectively and is thought also to provide some urethral compression during straining which improves leakage. The sling is placed through an incision behind the scrotum and 2 small incisions in each groin. The procedure usually involves an overnight stay in hospital with a catheter left overnight after the surgery to be removed the following morning.

How effective is it?

Although a recent UK trial demonstrated the male sling to be non inferior to an artificial urinary sphincter, it is probably less effective for more severe leakage. Patient satisfaction rates are around 70%.

What are the risks?

In 2018 the use of polypropylene mesh vaginal slings for female stress incontinence was paused in the UK due to safety concerns. Although the same problems have not been reported in men, you should be aware that there is limited long term outcome data available for the use of synthetic male slings and discuss this with your consultant. If removal of mesh in males becomes necessary it is a complex procedure which may not be technically possible.

- Mild pain and swelling in the perineum or groins is to be expected.
- Temporary burning and stinging on passing urine can occur in up to 50%.
- Failure to significantly improve your leakage can occur in up to around 40%.
- Difficulty passing urine requiring catherization, usually temporary in 2-10%.
- Wound infection can occur in 2-10%.
- New onset urinary frequency or urgency can occur in 2-10%.
- Damage to the urethra or bladder requiring a prolonged period of catheterisation can occur in %.
- Discomfort or pain in the groin or perineum lasting months can occur in %
- Movement of the sling into the urethra (erosion) occurring months or years after surgery %.