

Artificial Urinary Sphincter

The Artificial Urinary Sphincter (AUS) is a device used to control urinary leakage. It is generally used in those who have more severe degrees of sphincter damage.

It consists of an inflatable silicone cuff which encircles the urethra, a reservoir balloon, and a pump which resides in the scrotum. The separate components are linked with silicone tubing.

Procedure

The device is implanted under general anaesthetic. It is important that you have had a urine test confirming that there is no urinary infection within a week of the procedure.

A perineal shave and thorough antibiotic scrub is carried out when you are asleep. An incision is made in the perineum and the urethra is carefully mobilised. An appropriately sized cuff is placed, the other components are connected and the device is checked to make sure it is working properly. In some cases a separate incision is required in the lower abdomen, often the entire procedure can be completed via the one perineal wound. The pump is then deactivated. The wound is closed using dissolvable sutures. No catheter is required.

Post-Operatively

This is not a particularly painful procedure although the location of the wound can be a little awkward. Most patients will spend only a single night in hospital. There will be very little, if any, change to your leakage until the device is activated at about 6 weeks postoperatively. This delay in activation is to decrease the risk of infection and to allow inflammation to settle down. You will be given a prescription for 2 weeks of antibiotics, it is vital that you take the full course. Activation of the device takes place at the rooms and involves a firm squeeze of the pump. You should have normal continence immediately the device is activated.

Risks and Complications

The risks specific to the procedure are:

- 1. Infection** - if the device gets infected then it will need to be removed and you will need to wait 3 months before another can be implanted. Everything possible is done to avoid this risk and in practice it is a rare event.
- 2. Erosion** - This is where the cuff erodes into the lumen of the urethra. The risk is increased in those who have had previous radiotherapy but again it is a rare event. If you do have an erosion, then by definition the device is infected and will need to be removed.
- 3. Atrophy** - With time the urethra can become narrowed at the site of the cuff and it doesn't work as well. The risk of this is around 50% at 10 years. If this happens then a smaller cuff, or a second cuff, connected to the existing tubing, can be placed.
- 4. Device failure** - This is now very uncommon, it is due to a leak in the system somewhere. We have never yet seen a case.



CITY SPECIALIST CENTRE, Suite A, 120 Hamilton Street, Tauranga 3110
P. O. Box 13271, Tauranga 3141 · P (07) 571 2288 · F (07) 571 2286
E info@bayurology.co.nz · W www.bayurology.co.nz · Healthlink: bayurolo

BAYUROLOGY

André Westenberg B.Sc. M.B.Ch.B F.R.A.C.S.
CONSULTANT UROLOGIST

Liam Wilson M.B.Ch.B F.R.A.C.S.
CONSULTANT UROLOGIST

Jim Duthie M.B.Ch.B F.R.A.C.S.
CONSULTANT UROLOGIST