INSERTION OF AN ARTIFICIAL URINARY SPHINCTER IN MEN

What does the procedure involve?

This procedure involves insertion of an artificial valve to control the passage of urine from the bladder. The artificial sphincter consists of three components:

- The main part is a circular cuff that is placed around the water pipe (urethra) and compresses the urethra to prevent urine leakage;
- The cuff is connected to a small pump in the scrotum; this is the mechanism for activation/deactivation of the artificial sphincter and
- The pump is connected to a small, fluid-filled balloon reservoir which is situated in the abdomen.

What are the alternatives to this procedure?

Alternatives to this procedure include incontinence into a pad, penile sheath or urinary catheter and, depending on the underlying abnormality, a male sling (see separate information leaflet for this procedure).

What should I expect before the procedure?

You will usually be admitted to hospital on the same day as your surgery. If you regularly take aspirin or clopidogrel, you must discuss this with your urologist because these drugs can cause increased bleeding after surgery. Stopping them may reduced the risk of bleeding but this can result in increased clotting, which may also carry a risk to your health.

You will need to discuss the risks and benefits of the treatment with your GP or your urologist. You may also be given an injection of a drug (Clexane) under your skin that, along with the help of elasticated
stockings, will help to prevent thrombosis (clots) in your veins. If you are admitted on the day before surgery, you will normally be given antibiotics into a vein to prevent any infection.

**Please tell your surgeon** (before your surgery) if you have any of the following:

- An artificial heart valve
- A coronary artery stent
- A heart pacemaker or defibrillator
- An artificial joint
- An artificial blood-vessel graft
- A neurosurgical shunt
- Any other implanted foreign body
- A regular prescription for a blood thinning agent such as warfarin, aspirin, clopidogrel (Plavix®), rivaroxaban, prasugrel or dabigatran
- A previous or current MRSA infection
- A high risk of variant-CJD (if you have had a corneal transplant, a neurosurgical dural transplant or injections of human-derived growth hormone).

When you are admitted to hospital, you will be asked to sign the second part of your operation consent form giving permission for your operation to take place, showing you understand what is to be done and confirming that you want to go ahead. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

**What happens immediately after the procedure?**

You should be told how the procedure went and you should:

- Ask the surgeon if it went as planned;
- Let the medical staff know if you are in any discomfort;
- Ask what you can and cannot do;
- Feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team; and
- Make sure that you are clear about what has been done and what happens next. You will be given fluids to drink immediately after the operation.

You will be encouraged to mobilise as soon as you are comfortable to prevent blood clots forming in your legs. You will also be given intravenous antibiotics.

The average length of stay is 1-3 days.

**Are there any side-effects?**

Most procedures have possible side-effects. But, although the complications listed below are well-recognised, most patients do not suffer any problems.

**Common** (greater than 1 in 10)

- Blood in the urine & temporary burning when you urinate.
- Mechanical failure of the device (in the long term).
- Infection of the device requiring removal (in the long term).
- Temporary insertion of a bladder catheter.
Occasional (between 1 in 10 and 1 in 50)
- Urine infection.
- Wound infection.
- Later failure of the device due to loosening of the cuff around the urethra (urethral atrophy).

Rare (less than 1 in 50)
- Injury to the urethra (this would require stopping the procedure and rescheduling after the injury has healed)
- Late erosion of the device through the urethra.

Hospital-acquired infection
- Colonisation with MRSA (0.9% - 1 in 110).
- Clostridium difficile bowel infection (0.01% - 1 in 10,000).
- MRSA bloodstream infection (0.02% - 1 in 5000).

Please note: The rates for hospital-acquired infection may be greater in “high-risk” patients. This group includes, for example, patients with long-term drainage tubes, patients who have had a long stay in hospital or patients who have been admitted to hospital many times.

What should I expect when I get home?

When you are discharged from hospital, you should:

- Be given advice about your recovery at home;
- Ask when you can begin normal activities again, such as work, exercise, driving, housework and sex;
- Ask for a contact number if you have any concerns once you return home;
- Ask when your follow-up will be and who will do this (the hospital or your GP); and
- Be sure that you know when you get the results of any tests done on tissues or organs which have been removed.

When you leave hospital, you will be given a “draft” discharge summary. This contains important information about your stay in hospital and your operation. If you need to call your GP or if you need to go to another hospital, please take this summary with you so the staff can see the details of your treatment. This is important if you need to consult another doctor within a few days of being discharged.

Your discomfort should disappear gradually although you will continue to feel tired for at least 10 - 14 days.

What else should I look out for?

If you develop a fever, severe pain on passing urine, inability to pass urine of worsening bleeding, you should contact your GP immediately.
Are there any other important points?

The device will not be activated immediately after the procedure. You will normally be reviewed in the outpatient clinic after 6 weeks. The device will then be activated by pressing a button on the pump within the scrotum to inflate the cuff. At this stage, you will also be given full training in sphincter activation / deactivation. If the consultant feels it is necessary.

Driving after surgery

It is your responsibility to make sure you are fit to drive following your surgery.