

Information for Patients

Artificial Urinary Sphincter

What is an artificial urinary sphincter (AUS)?

An AUS is a device for men who have urinary incontinence. It takes the place of the damaged sphincter to restore control of the flow of urine. It is a fluid-filled device that opens and closes the urethra (water pipe) to give you control of your bladder.

The device consists of a cuff, a pump and a reservoir balloon. The cuff is placed around the urethra. The pump is put in the scrotum. The reservoir balloon is placed in the lower abdomen and is filled with a sterile saline solution.

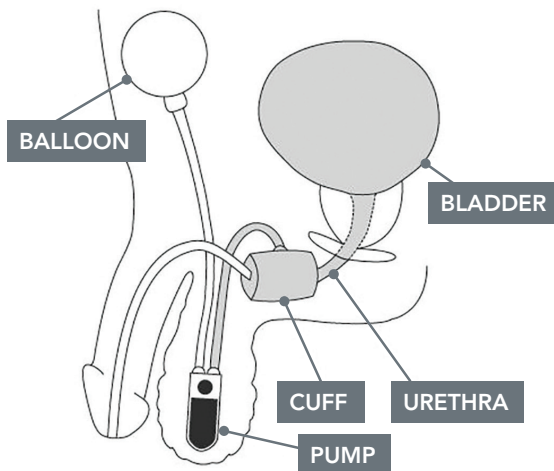
The pump is the part the patient squeezes in order to pass urine. This inflates the cuff, preventing urine from flowing and deflates the cuff allowing the urine to flow.



Why do I need an artificial urinary sphincter?

A sphincter is a muscle structure which controls the flow of bodily fluids such as urine. A normal sphincter prevents urine from leaking, however sometimes the sphincter fails and urine leaks out making you incontinent.

It is quite common to become temporarily incontinent after undergoing prostate surgery. Usually incontinence stops within a few months after your body has recovered from surgery. However if your incontinence persists, you may be offered an AUS.



What happens before my operation?

The operation and outcomes will be explained to you by your urologist.

A blood test will need to be performed and a urine sample may need to be taken 4-5 days prior to surgery. If you are over 60, or have other medical problems, you will have an electrocardiogram (ECG) to check the health of your heart prior to surgery.

It is important to avoid constipation. Try to establish and maintain a regular, soft bowel habit leading up to your operation. Identify the foods that can help you maintain a regular bowel habit for your post-op period.

What happens on the day of my operation?

You will be advised when to come to hospital: this is usually on the day of surgery.

You should bring all your own medications with you to hospital.

You will be encouraged to commence deep breathing and coughing exercises pre-operatively. This prevents any breathing complications or chest infection occurring following the surgery and anaesthetic.

The groin will be shaved in the operating theatre and you will have protective stockings fitted. This operation is performed under general anaesthesia. The anaesthetist will discuss this with you prior to the operation. Just prior to surgery you may be given a tablet to help you relax.

What happens during my operation?

A small incision is made in the area between the scrotum and the anus (perineum) and the cuff will be placed around the urethra. A separate incision will be made in the groin. Through this second wound, the pump will be placed in the scrotum and the reservoir balloon placed in the abdomen.

What to expect after my operation

You will be discharged the following day.

When the operation is completed, you will go to the recovery room for a short while where you will be cared for until you are ready to be transferred to your room.

Pain Control

You will be given oral pain relief to manage your pain.

Wound

Your wounds will be in your lower abdomen and under the scrotum. The sutures are dissolvable and do not need removing.

Your catheter will be removed before you leave hospital.

You will continue to leak urine for 6 weeks until your sphincter is activated by your urologist. This is to allow it time to heal.

After discharge

You will have a follow-up appointment with your urologist 6 weeks after the operation. This is when the artificial urinary sphincter will be activated.

Heavy lifting, straining, or strenuous activity should be avoided for 4-6 weeks after surgery. You can gradually return to light activities over 6 weeks then full activities after 3 months.

You may also feel more tired during your recovery period and perhaps a bit low, but as you start to recover you should find this improves.

Generally when you feel that you could perform an emergency stop without being concerned about abdominal pain (at about 4 weeks), then you can resume driving.

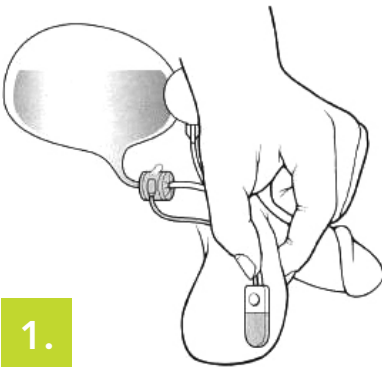
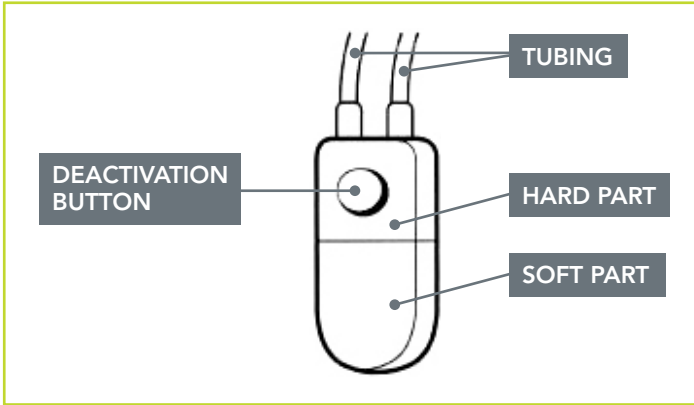
Outcome

We expect 90% of men to be totally continent, requiring only a "security pad".

About 10-15% of men will get improvement but with some persistent bothersome leakage. On rare occasions, the device may not be successful and further treatment may be recommended.

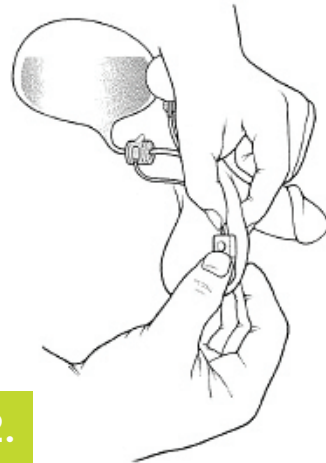
Using your artificial urinary sphincter

While the cuff is closed, urine stays in your bladder. To urinate, open the cuff as follows:



1.

Feel for the control pump in your scrotum. Stabilise the pump by holding the tubing. Usually it is easier to use your non-dominant hand for this.

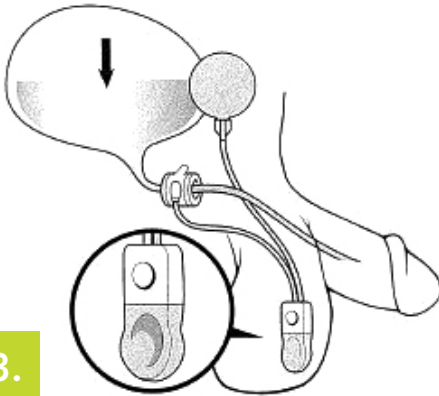


2.

Use your other hand to squeeze and release the lower part of the pump (soft part). Do this several times until the control pump is flat. Usually it is easier to use your dominant hand to squeeze the pump.

A slow and firm squeeze works best.

Using your artificial urinary sphincter (continued)



3.

When the lower part of the control pump is flat, it indicates that the cuff is deflated. The urethra opens and you can urinate. The cuff will automatically refill over the next couple of minutes, allowing you to pass urine.

If you feel that you did not empty your bladder completely before the cuff refilled, give the soft part of the control pump a few more slow, firm squeezes to re-open the urethra.

You should expect to get normal signals from your body letting you know when to empty your bladder. Initially you may want to empty your bladder on a regular basis such as every 2 hours. This interval usually increases over the first 6 months.

It is important to let someone else know how to operate the device to assist you if needed.

It is also important to advise any medical service that you may attend in the future that you have an artificial urinary sphincter: no one should ever place a catheter into your bladder without first deactivating the sphincter. After your surgery you will be given a card to keep in your wallet that you can show to doctors in the future.

Be careful not to touch the deactivation button. This is for your Urologist to deactivate the device. Accidentally pushing this button will turn the device off and cause leakage.

Possible complications

Wound

Contact the Urology Associates nurse if you have any concerns about your wound. It is normal to have bruising in your abdomen and groin.

Infection

This happens in less than 1% of patients and requires removal of the AUS device. Careful measures are taken to avoid infection at the time of surgery.

Malfunction

If malfunction occurs it leads to recurrent incontinence. Surgery is usually required to fix it. As the device is mechanical, there is a 25% chance of needing some form of revision surgery within the first 10 years.

Persistent leakage

About 10% of men need to wear more than 1 pad/day.

Retention of urine

Retention (inability to pass urine) is very uncommon.

Pain

Post-op pain is expected and usually settles within a week. If you have significant pain that you are having difficulty managing at home please contact Urology Associates.



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