GETTING AN ARTIFICIAL SPHINCTER

(The following information is based on the general experiences of many prostate cancer patients.

Your experience may be different.)
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What is an Artificial Sphincter?

An artificial sphincter is a medical device that takes the place of your own urinary sphincter. An artificial sphincter is used when your urinary sphincter stops working. This might happen after you have prostate cancer surgery. The urinary sphincter is a group of muscles around the bladder neck that keeps you from leaking urine. The bladder neck is where your bladder connects to your urethra. Your urine goes from your bladder through your bladder neck and into your urethra. The urethra carries your urine out through your penis. When you feel like urinating (peeing) your sphincter relaxes which lets your urine flow. When you have prostate cancer surgery, the nerves that tell your sphincter muscles to squeeze together to stop urine leaking or to relax to let you urinate (pee) may be damaged. This may cause you to leak urine.

Male Urinary System
The artificial sphincter is made up of three parts: a cuff, a balloon, and a pump. The cuff is shaped like a donut and fits around your urethra below the bladder neck. The cuff is filled with fluid. It puts just enough pressure on the urethra to allow your bladder to hold your urine. The balloon (also called a reservoir) holds the fluid that fills the cuff. The balloon is about the size of a ping-pong ball and is placed in your body behind your pubic bone. The pump is implanted in your scrotum. You squeeze it to empty the fluid from the cuff into the balloon. This allows the urethra to open so you can urinate (pee).
**Why Would I Need an Artificial Sphincter?**

One of the side effects or unwanted changes that may happen in your body because of prostate cancer surgery is incontinence. Incontinence is when you leak or pass urine when you don’t want to. It is normal to have some urine leakage after your surgery. You may leak urine for several days, weeks or months after your prostate surgery. During this time, there are many ways you can manage your incontinence such as doing Kegel Exercises to make your pelvic floor muscles stronger or using medications to decrease incontinence. If your incontinence lasts for a year or more after your prostate cancer surgery and cannot be managed, your doctor may suggest that you get an artificial sphincter to help control your urine leakage. An artificial sphincter does make your urine control better, but it may not stop all urine leakage.
How Does the Artificial Sphincter Work?

To picture how an artificial sphincter works, think about how the brakes of a car work. When you step on the brake pedal, brake fluid causes pressure that makes your car stop. When you take your foot off of the brake pedal the pressure is taken away and your car can move again. An artificial sphincter works like a brake.

When the cuff is filled, there is pressure on your urethra. This keeps your urine from leaking. When you press on the pump, the fluid in the cuff moves to the balloon. This takes away the pressure on your urethra letting you urinate (pee). The cuff fills again by itself in 3 to 5 minutes.
How is the Artificial Sphincter Put in My Body?

The artificial sphincter is put in your body during an operation in a hospital.

What Should I Do Before I Go To The Hospital?

Your doctor will tell you what time to be at the hospital. Even though your doctor will make sure you are ready to leave the hospital after your surgery, it is a good idea to make plans for a family member or friend to help you when you go home. Make sure to tell your doctor if you are taking any medications, aspirin, vitamins, or herbs before your surgery. If you are allergic to iodine, make sure to tell your doctor. An allergy is when you have an unwanted change in your body such as hives or shortness of breath when you take a medication. Iodine is often used to fill the balloon in the artificial sphincter. If you have an allergy to iodine, your doctor can use a different fluid to fill the balloon. Make sure to tell your doctor about any other allergies you may have to medications. Also, you should make sure that you carefully clean your genital area with an antibacterial soap like Lever 2000 or Dial antibacterial soap for two to three days before you go to the hospital. This will help lower your chance of getting an infection.
It may help you to get ready for the operation by thinking about the things that you went through when you had your prostate taken out. Think about your feelings, what you saw when you were in the hospital, and what you went through.

- Do you remember having an IV? This was the small needle in your arm that was connected to a tube that went to a bag of fluid for your prostate cancer operation. You will have an IV during this operation as well.

- Do you remember having anesthesia? This is the medicine that was given to you to help you sleep during that operation. You will have anesthesia for this operation too.

Thinking about how well you were able to manage your prostate cancer operation will help you now.
What Will Happen the Day I Have My Operation?

When You Get To The Hospital

1. When you get to the hospital, a member of the hospital staff will check you in.

2. If a family member or friend is with you, the staff will show them where to wait.

3. Ask about anything that you do not understand or that worries you.
Before Your Operation

1. A hospital staff member will get you ready for your operation. An anesthesiologist will talk to you. An anesthesiologist is the doctor who puts you to sleep and carefully watches you during the operation. The anesthesiologist may give you a spinal or general anesthesia. A spinal is medicine that numbs your body from the waist down so that you do not feel the operation. General anesthesia is when you are given medicine to make you sleep during your operation. Your doctor will recommend the best anesthesia for you. You will not feel anything during your surgery with either type of anesthesia.

2. Ask the anesthesiologist about anything that you do not understand or that worries you.
During Your Operation

1. Your doctor will make two small incisions. One in your perineum (the area between your anus and the base of your scrotum, the sack that holds your testicles) and one in the right side of your groin (the area from your lower abdomen to your upper thigh).

2. The artificial sphincter will be put in your body.

3. Your doctor will then sew up your incisions.

Artificial Sphincter in the Body

[Diagram of the artificial sphincter in the body with labels for Balloon, Cuff, Urethra, and Pump]
After Your Operation

1. After your operation is over you will go to the recovery room. You will stay there until you are totally awake. This may take a few hours. The recovery room nurses will watch you very closely until you wake up.

2. After you leave the recovery room, you will move to the outpatient day unit.
What You Will See When The Operation is Over

1. When you wake up, you may find a tube coming out of your penis. This tube is called a catheter. The catheter is connected to a plastic drainage bag. The catheter drains urine from your bladder into the bag. It helps you heal from your operation. You may remember having a catheter after your prostate cancer operation.

2. Your surgical wound (incision) will be held together with stitches until it heals. The stitches will stay in when you go home. Most likely, you will have stitches that will dissolve or go away on their own. If not, you will be told when to see your doctor to have them taken out.

3. You will have a plastic tube going into a vein in your arm. It is connected to a plastic bag of liquid. This is your I.V. The I.V. gives you any fluids you need. You may also be given medicine in your I.V. Your I.V. will be taken out when you can drink and eat without problems.
What Can I Expect After The Surgery?

You may have some soreness in your perineum (the area between your anus and the base of your scrotum, the sack that holds your testicles). It should not be very painful. Your doctor will tell you what medication you should take to help get rid of the soreness. If you are sore, take the medication when the pain starts so that you can control it. If the soreness does not get better in 2 to 3 days or gets worse, call your doctor or Nurse Case Manager. If the soreness gets worse call your doctor.

You should keep the incision made for the operation clean and dry. If your doctor gives you an ointment or cream to put on the incision, be sure to use it as you were told. Call your Nurse Case Manager if you have any questions about taking care of your incision after the surgery.

You should not lift anything heavy for 2 weeks after your surgery. Anything that weighs more 10 pounds is too heavy. Ten pounds is about the weight of two large bags of flour or sugar.

Except for a slight feeling of heaviness in your scrotum area, you will probably not even be aware that the artificial sphincter is in your body. So, if anything feels
uncomfortable or different where you have the artificial sphincter, tell your doctor and Nurse Case Manager.

**Call your doctor or Nurse Case Manager right away if you:**

- See increasing redness around the incision.
- Have increasing pain around the incision or perineum (the area between your anus and the base of your scrotum, the sack that holds your testicles). There should be only a small amount of pain at the incision after your operation, and it should get better each day.
- See any yellowish drainage that looks like pus coming from the incision.
- Start to have a temperature or fever more than 101°F.
- Have any questions or concerns about how you are healing.

If you start to have any of the following problems several months or years after your surgery, you should call your doctor:

1. soreness in your perineum (the area between your anus and the base of your scrotum, the sack that holds your testicles
2. blood in your urine
3. leaking large amounts of urine (more than you have been leaking after having your artificial sphincter put in).
When Can I Start Using My Artificial Sphincter?

Your artificial sphincter will not be inflated until 6 to 8 weeks after your operation. This gives the area where you had your operation time to heal. You will need to keep using incontinence pads during this time. When you go back to your doctor for your check-up, you will be shown how to use your artificial sphincter. The cuff will be filled with fluid, which puts pressure on your urethra. This keeps your urine from leaking. You will have less of a problem with incontinence once you can use the artificial sphincter. It is common to still have some urine leakage, but it will be much less than before your surgery. You may still want to wear a pad, or you may not need to wear one at all. If you have any questions, ask your doctor or your Nurse Case Manager.
Is There Anything Special That I Should Do Now That I Have An Artificial Sphincter?

You should wear a Medic-Alert bracelet. If you are hurt or sick, it is important for anyone who may need to take care of you to know that you have an artificial sphincter. Caregivers can get this information if you wear a Medic-Alert bracelet. For example, if you cannot urinate (pee) and need a catheter, the doctor will need to turn your artificial sphincter off. This will allow the cuff to empty so the doctor can place a catheter in your bladder to drain your urine. Your Nurse Case Manager can tell you how you can get a Medic-Alert bracelet.

Since the pump will be in your scrotum, you may need to change the way you do things that puts pressure on that area. For example, if you ride a bicycle, you may want to get a split seat so you are not pressing on the pump when you are riding.

You may be worried that if you accidentally put pressure on the pump that your urine will be let out of your bladder. This will not happen. You need to squeeze the pump several times in order for the cuff to empty so that urine can be let out of your bladder.
**Will the Artificial Sphincter Change How My Body Looks?**

No. It is all inside your body. It will not show on the outside other than a small bump in the scrotum where the pump is. Except for a slight feeling of heaviness, you will probably not even be aware that the artificial sphincter is in your body.
Will the Artificial Sphincter Change How I Have Sex?

Your artificial sphincter should not get in the way of your ability to have sex. If you had difficulty getting erections before having the artificial sphincter, this will not get better. You may want to use positions that do not put pressure on the pump in your scrotum.
Are There Things I Need To Remember about Having An Artificial Sphincter?

Yes, there are.

- To urinate (pee) you need to squeeze on the pump located in your scrotum a few times.
- The cuff will fill back up by itself once you are done urinating (peeing).
- Accidental pressure on the pump will not cause urine to be let out of your bladder.
- Wear a Medic-Alert bracelet.
- If you start to have any of the following problems several months or years after your surgery, you should call your doctor:
  1. soreness in your perineum (the area between your anus and the base of your scrotum, the sack that holds your testicles).
  2. blood in your urine
  3. leaking large amounts of urine.
- It may be helpful for you to talk to other men who have an artificial sphincter. Your Nurse Case Manager can tell you about prostate cancer support groups in your area.
Key Words

**Allergy:** an unwanted change in your body that happens after you take a medication.

**Anesthesia:** the medicine the doctor gives you to put you to sleep so that you may have surgery.

**Anesthesiologist:** a doctor who puts you to sleep and carefully watches you during an operation.

**Balloon (also called a reservoir):** Part of the artificial sphincter about the size of a ping-pong ball that holds the fluid that fills the cuff.

**Bladder Neck:** the place where your bladder empties into the urethra.

**Bladder:** the organ in your body that holds the urine.

**Catheter:** the rubber tube placed in your body to drain urine from your bladder out through your penis.

**Cuff:** Part of the artificial sphincter, shaped like a donut that fits around the urethra below the bladder neck. The cuff, when filled with fluid, puts pressure on the urethra and keeps urine in your bladder.

**General anesthesia:** medicine, which makes you sleep during the operation.

**Groin:** the area between your lower abdomen and the upper part of your leg.

**I.V.:** a plastic tube going into a vein in your arm which gives you any fluids or medicine you might need before, during and after an operation.

**Incontinence:** the unwanted leaking of urine.
**Iodine:** a fluid used to fill the balloon in the artificial sphincter.

**Medic-Alert bracelet:** a piece of jewelry that tells emergency care staff such as firemen or paramedics about your medical history.

**Perineum:** the area of the body between the scrotum and the anus.

**Pump:** Part of the artificial sphincter, which is used to empty the cuff so you can urinate (pee).

**Reservoir (also called a balloon):** Part of the artificial sphincter about the size of a ping-pong ball that holds the fluid that fills the cuff.

**Scrotum:** the muscular sac, which contains the testicles (balls).

**Side Effects:** unwanted changes that may occur in your body after prostate cancer treatment.

**Spinal:** medicine that numbs your body from the waist down so that you do not feel an operation.

**Urethra:** the tube in the body that carries urine from the bladder out through the penis.

**Urinary Sphincter:** the muscular ring that closes the urethra and stops urine from leaving your bladder.