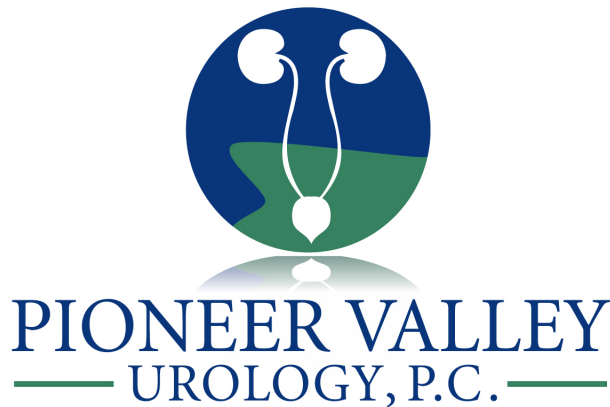


Pioneer Valley Urology Penile Rehabilitation following Robotic Prostatectomy Surgery

Regaining penile erectile function following prostate surgery takes time. Dr Berry at Pioneer Valley Urology has designed this penile rehabilitation program to give you the best chance of regaining erectile function. The three components work together to help penile nerve tissue tolerate surgery and recover from inflammation. A copy of this document is available at Dr Berry's web site - www.alexanderberrymd.com



Background

Penile nerves, even when spared, may take 12-18 months to regain maximum performance after prostate surgery. Surgery creates inflammation and scarring that delays the return of erectile function beyond the recovery of other functions such as continence. Recovery is dependent on a number of factors including age (patients less than 65yr recover better), how rigid the erections were before surgery, whether there was any component of erectile dysfunction before surgery, and the degree of nerve sparing performed.

We think of surgery as an injury that occurs to your erections. Like any athlete who has suffered an injury it takes time to heal. Rehabilitation of penile potency is similar to sports injury recovery. It is important to remain patient and remember this is an ongoing program that will last for 6-12 months. Dr Berry created this program to improve your chances of reaching your desired outcome. While we hope this program may potentially speed recovery of erectile function it is important to realize some men never regain

the ability to have spontaneous erections after surgery but other treatment options may be available.

Our Three Part Rehabilitation Program

Dr Berry's erectile rehabilitation program consists of three components; (1) preoperative and postoperative use of oral erectile medications, (2) Use of directly administered penile stimulating agents (3) use of a vacuum erection device (VED). The combination of these therapies is designed to give protection from inflammation during surgery, maximise recovery from inflammation after surgery and minimise shortening from scarring.

Preoperative/Immediate Postoperative Medications

Animal studies have suggested use of these medications prior to surgery may reduce the degree of inflammation that occurs to penile nerves. Either Viagra, Cialis or Levitra will be prescribed. They should be taken on the following dosing schedule starting the week before surgery. Any history of heart conditions should be mentioned to the doctor. If you are taking nitroglycerin you should not take these medications.

A) Viagra 25mg 3 times a week, a minimum of 24 hours apart at bedtime on an empty stomach

B) Cialis 5mg 2 times a week, a minimum of 48 hours apart at bedtime on an empty stomach - ie. Monday and Thursday

C) Levitra 5mg 3 times a week, a minimum of 24 hours apart at bedtime on an empty stomach.

Postoperative use of medications for 6-12 months

By 4-6 weeks after surgery enough healing will have occurred to attempt intercourse. You may experience little to no effects from the medication. Do not despair. The medication will continue to stimulate your nerves to provide oxygenated blood to your penis.

Insurance companies typically cover 4-6 pills per month with co-pays. We will provide additional pills to ensure you have the appropriate number.

It is important to remember you may be able to experience orgasm without an erection and that when you reach climax there will not be an ejaculation (release of fluid). The reason for this is that the nerves controlling orgasm are different from those nerves controlling erection. Secondly there is no ejaculation because the prostate and the seminal vesicles that store the fluid for ejaculation were removed during surgery. In addition, the vas deferens that carries sperm from the testicles have been cut during surgery so you will no longer be able to father any children by intercourse.

You will still feel sensual stimulation and climax without erections. The sensation of orgasm is independent from erections and is often experienced

before erectile activity has started to return. It is important to discuss with your partner how each of you feel with the change in function you experience. A change in your sex life is a change for both you and your partner.

Use of directly administered penile stimulating agents

At your 6 week followup appointment we will discuss the use of directly administered penile stimulating agents. These take 2 forms. A penile suppository which places a small dissolvable pill directly into the tip of the penis and penile injections which are placed using a small diabetic needle into the side of your penis.

Both these medications work through the release of pharmaceutical agents that increase blood flow into the penis. They are more effective than oral medications since they are applied directly onto the penis. We encourage the use of these agents since they act as the 'bridge' between the postoperative state and the return of natural, spontaneous erections. Recent data suggest the use of penile injections reduces the time for return of natural erections by up to 50%.

MUSE is the product placed into the tip of the penis. It contains an agent that dilates the blood vessels promoting an erection. At the six week visit we start our patients on a course of MUSE 250 mcg suppositories to be taken 2x per week till week 12. You may notice a tingling sensation during the first few applications. This is normal and reduces with time. Do not be surprised if there is only a partial response to the medication. It is intended to exercise your penis and not to provide an erection rigid enough for intercourse.

Injectable therapy using the same vasoactive medication is substituted at your 12 week visit. Available either under the trade name **Caverject** (Pharmacia Corporation), or as a generic mix that must be refrigerated injectable therapy is the most potent stimulant available. It effectively produces erections in approximately 80% of men and may work in men where oral medications do not. It does reliably give a rigid and functional erection and studies have shown men who use this after radical prostatectomy have an earlier return of potency. The therapy may be substituted for MUSE if there has been minimal effect and should be use 2x per week until spontaneous erections have returned. An initial test dose is given at your 12 week visit and a subsequent teaching appointment arranged with one of the physician assistants in Dr Berry's office.

Use of a Vacuum Erection Device (VED) - " Penile Pushups"

This device has been shown to prevent penile shrinkage that can occur after prostate cancer therapy. Length and girth can be maintained during the healing process and the recovery of your own spontaneous erections during the 6-12 months after surgery. You are encouraged to use the device every morning before you shower to pump oxygenated blood into your erectile tissues. The device has a vacuum mechanism that fills your erectile tissue with blood to stretch your penis and help minimize shrinkage. At your first followup appointment after surgery you will be offered a packet that includes product information, a DVD on the device and how to order through a company representative. The VED company should be contacted regarding insurance coverage. Medicare coverage (Part B) is up to 80% on the manual vacuum device. Please contact your insurance company for reimbursement details (mention CPT code L7900 - out of network benefits).

You do not need the constriction ring for therapy. You will need a water-soluble lubricant on the edge of the penis and over the head and shaft as directed by the manual and the DVD. You must pump slowly and allow time for the penis to fill with blood.

Pump slowly and pause, count to 5, then pump 3 more easy times and pause counting to 5. Repeat until the penis is full. It is normal to experience some pressure and tightness, but you should never pump to cause pain. When you have reached a penile erection, count for 10 seconds and release the pressure button. After the penis has decreased in fullness pump again and repeat the above process a total of 3-4 times. Never use Vaseline or petroleum based lubricants. Always use a water-soluble lubricant such as KY jelly or Surgilube that can be purchased at any pharmacy.

Remember

It is your choice to play an active role in the recovery of your erectile function. Recent clinical studies suggest a penile rehabilitation consisting of a mix of medication and 'penile pushups' can significantly impact the recovery process of erectile function after prostate surgery. Many men notice changes in penile length and girth after prostate cancer treatment - both surgery and radiation. Our hope is that this program minimizes these issues in the long run.