

Urologic Surgical Associates of Delaware

Specializing in Robotic Surgery

Perioperative Instructions - Robotic Prostatectomy

There are several options for [treating prostate cancer](#), and for a full discussion of those options, please see our [informational brief](#) on treating prostate cancer. The [da Vinci Robotic Radical Prostatectomy](#) is a minimally invasive form of surgically removing the prostate gland to treat prostate cancer.

Robotically-assisted laparoscopy radical prostatectomy is performed through 6 small port holes instead of an incision. This technology greatly minimizes blood loss so that there is virtually no risk of blood transfusion and it decreases possible injury to the urinary sphincter so the urinary catheter can be removed in one week (instead of 3 weeks with open surgery). The time required to regain urinary control is also reduced compared to open surgery. Healing and return to your regular activities is greatly accelerated by the robotic approach.

The risk of erectile dysfunction is also greatly reduced using the da Vinci robot when compared to open radical prostatectomy and external beam radiotherapy. In fact, the erectile dysfunction rate with da Vinci robotic radical prostatectomy is about 30% which is very similar to the rate experienced with seed implantation (or brachy therapy) and less than half the rate of erectile dysfunction when compared to that of open radical prostatectomy. For a full review of the risks associated with treating [prostate cancer](#) please see our informational brief on treating prostate cancer.

For the da Vinci Robotic Radical Prostatectomy you will be admitted to the hospital the day of surgery and can expect to go home the next day with a catheter through the penis to drain your bladder. This catheter will be removed in the office one week following the surgery. Some men are dry after the catheter is removed but most experience significant leakage after the catheter is removed. You should expect to be very wet after the catheter is removed. You should take measures to manage this leakage by wearing adult diapers and protecting your bed. This urinary leakage will improve rapidly for most patients but very slowly for some others. The first improvement will be experiencing longer time periods between leakage events. This can typically occur at about 1-2 weeks after the catheter is removed. After that you can expect to be dry at night while sleeping. Then you should have intermittent stress leakage (leakage with coughing and sneezing and movement) that becomes progressively easier to control. Finally, there should be a return of complete urinary control. However, some men (10-20%) will have continued, long term stress incontinence following this surgery. For those who do have complete urinary control it may happen very quickly (in several weeks or less) or very slowly (several months or more).

What follows is the most commonly experienced pathway for men after robotic prostatectomy in terms of regaining urinary control. Most men will have significant leakage day and night for two weeks after the catheter is out and then they will begin to get dry at night. During this time most men will also experience increasing ability to hold

For informational purposes only. Please consult your physician with any questions. USA Delaware 302-836-5500.

their urine during the day. When they return to the office for follow-up at six weeks after surgery, many men are dry at night but very frustrated at still leaking during the day. Then, at eight weeks after surgery, most men are completely dry and at 3 months they are 100% dry. Some men will not fare as well with this experience (10-20% will have permanent stress incontinence) and some men will fare exceedingly well (10-20% are totally dry when the catheter comes out). For men with continued urinary incontinence, pelvic floor retraining or male slings are options for treatment.

Blood clots and even pulmonary embolism are a risk of pelvic surgery so you will be started on a blood thinner, Lovenox, the day before or the day after surgery. This medication is delivered subcutaneously with a needle just below the skin. You will remain on this medication while in the hospital and then you should begin taking an aspirin a day to thin the blood for 3 months.

Following the removal of the catheter you can slowly begin to resume your activities. You may experience some aching and discomfort at the 6 port sites on your abdomen or down in the perineum (where you sit on a bicycle seat) which is where the prostate was removed. These aches and pains will slowly resolve over weeks or months. Activity may increase these pains but will not injure the healing process. Resume your usual activities in a gradual fashion (try walking before you try running, hit golf balls at the driving range before you try to play nine holes of golf, etc).

Erectile function returns very slowly for some patients following this surgery while others can sometimes experience erectile rigidity adequate for intercourse within one to three months of surgery. You should probably not expect any significant erectile activity in the first month. Most men who do recover erectile activity will experience only some early sense of stirring as if they were going to have an erection but nothing resembling an erection actually occurs. This may occur periodically through the first few months. After a few months of healing some erectile activity may begin to occur and this may improve over the first 12-14 months following surgery. For men under the age of 65 with normal pre-operative erections, about 30% will experience a significant long term decrease in erectile activity following this surgery, while 30% will experience a mild decrease in erectile activity. Some men will experience no decrease in activity once healed. About 10% of men under age 65 with normal pre-op erections will experience severe erectile dysfunction. For men over age 65 or men with pre-op erectile dysfunction or in men whom the nerves are re-sected due to cancer, the risk of erectile dysfunction will be significantly higher. To a large degree your outcome for erectile activity will be better if your pre-operative erectile status (younger age, no cigarette smoking, diabetes, heart disease, preexisting erectile disease, etc) is better.

Men recovering from robotic prostatectomy may want to engage in sexual/penile rehabilitation once the catheter is out. Data on the effectiveness of sexual/penile rehabilitation is mixed. There are a few small studies suggesting it may improve erections long term and a few small studies that show that it doesn't work. For this reason we feel sexual/penile rehabilitation is elective. One model for this therapy is to use an oral phosphodiesterase (Viagra, cialis, or Levidra) at low dose 2-3 times a week along with a Vacuum Erection Device (VED) 2-3 times a week once the foley catheter is out. The concept is to cycle blood into the penis and to stimulate nerve transmission in the penis to

For informational purposes only. Please consult your physician with any questions. USA Delaware 302-836-5500.

keep the erectile apparatus health, and working while your nerves recover from the surgery.

Bowel movements may be difficult after the surgery during the first week or two during your recovery. We recommend that you use increased fruit and fruit juices or over the counter products such as Colace or Dulcolax or magnesium citrate or milk of magnesia to ease your return to normal bowel activity. You will be started on milk of magnesia in the hospital on the day after surgery and you may want to continue on that over the counter product twice a day at home until your bowel movements are smooth and soft. We also recommend that you continue on a liquid diet the first few days at home (soups and jell-o are fine) until you have your first bowel movement. If you decide to enjoy some solid food during this time you should do so in small quantities.

The six port sites on your abdomen have been closed with an absorbable suture so there are no sutures to be removed. These port sites are also covered with small bandaids that should stay in place until one week after the surgery. These bandaids have, in turn, been covered with a gauze sponge and a transparent tegaderm dressing. This tegaderm and gauze should be removed two days after the surgery to let the port sites be exposed to the air. At this point, two days after the surgery, you may shower but not bathe or swim. Be sure to dry off the port sites and your catheter after showering.

While the catheter is in place you should not drive. Instead, have someone give you a ride. You may walk for short distances and climb stairs with the catheter, but refrain from heavy lifting, strenuous activity or running. Once the catheter is out, you can drive and begin increasing your activities. In the first two weeks after surgery, you should not engage in heavy lifting or contact sports or very vigorous activity. After two weeks from the surgery, you can slowly increase the intensity of your physical activity. It may be uncomfortable to sit on hard or firm surfaces (such as a bicycle or tractor seat) for several months. You may wish to obtain a foam donut from a medical equipment store for sitting.

Treating Sexual Dysfunction and Andropause

Overview

The treatments for sexual dysfunction are largely empiric therapies. That is, there is an algorithm for treatments that can be initiated based solely on a history and physical. There is testing that is commonly used with sexual dysfunction such as blood tests including a serum testosterone or a serum testosterone panel and perhaps even a prolactin level, but oftentimes therapy can be initiated without any testing whatsoever. There is also radiologic testing that can be performed on the phallus to evaluate male sexual dysfunction. This would include ultrasonography studies directed at evaluating the arterial blood flow into the penis and the ability of the penis to trap blood to create a good firm erection. However, with the advent of oral agents such as Viagra, Cialis, and Levitra, the management of erectile dysfunction is not appreciably altered by radiographic studies such as the duplex Doppler ultrasound of the penis. Therefore, these radiologic studies are not very often used in the management of erectile dysfunction. Testosterone sampling and prolactin sampling can be useful in the evaluation of erectile dysfunction depending on the age and history of the patient. Despite the widely accepted practice of goal-oriented therapy some men insist on detailed testing of the sexual

For informational purposes only. Please consult your physician with any questions. USA Delaware 302-836-5500.

dysfunction and this can be accomplished by referral to a university center urologist (Arthur Barnett in Baltimore or Iru Hirsch in Philadelphia).

Andropause is the naturally occurring decrease in testosterone that occurs in the aging male. Decreasing testosterone levels in the aging male can result in a decrease in energy levels, a decrease in sexual interest and/or sexual performance, and a decrease in lean muscle mass and possibly an increase in water and fat weight. Andropause can be effectively managed with testosterone replacement therapy.

As regards to the history of the patient the risk factors for erectile dysfunction include advanced age, cigarette smoking, diabetes, elevated lipid levels, hypertension, elevated cholesterol levels, poor physical conditioning, obesity, and essentially any risk factor for cardiac disease. That is, the vascular health of the penis and the vascular health of the heart are closely related. That is because good quality erections are dependent on healthy arterial blood supply similar to the arterial blood supply in the heart. These are small arteries that are affected by such things as high cholesterol levels, cigarette smoking, and diabetes. Also, neurologic deficits such as can occur with diabetes and pelvic surgery and radiation can impair erectile performance. Surprisingly, patients with none of these risk factors can have erectile dysfunction even at a rather young age. Approximately 40% to 70% of men over the age of 40 will have a decrease in the quality and frequency of their erections and this can include men with none of the above risk factors.

Another possible cause of erectile dysfunction is stress. The sympathetic nervous system is responsible for the flight or fight response when we feel threatened. The sympathetic nervous system, in response to any threat or stress, will increase the heart rate, increase blood pressure, and redirect blood flow to the legs and arms to deal with the perceived threat. The sympathetic nervous system, in response to a perceived threat, will also shut down the functions that are not helpful in dealing with the perceived threat such as the ability to empty your bladder and the ability to have good quality erections. The sympathetic nervous system does not differentiate between a stress from a true physical threat or other types of stress such as marital or relationship discord or work-related stress. Therefore, discord in your relationship including past difficulties with sexual function can lead to stress that further inhibits sexual performance thus creating a cycle of sexual failure.

After a history and physical, and perhaps serum testosterone sampling, therapy may be initiated for your erectile dysfunction. You should also complete and submit to us a SHIM score (Sexual Health Inventory For Men, attached). The standard first line of treatment for erectile dysfunction is oral phosphodiesterase inhibitors such as Viagra, Levitra, and Cialis. These medications all work in a similar fashion by decreasing the body's physiologic attempt to terminate an erection. By "turning off the off switch" these oral agents can provide greater rigidity and duration of your erection. These oral agents do not create an erection without some native ability to obtain an erection. Therefore, the use of these agents is best applied to patients with partial erectile function and these agents are best used in a setting that maximizes your own native ability to create an erection. These agents can also be supplemented with other therapies such as testosterone replacement or the use of vacuum erection devices. The duration of action of these agents is variable. Viagra generally has an 8 hour duration while Levitra has a

For informational purposes only. Please consult your physician with any questions. USA Delaware 302-836-5500.

12 hour duration and Cialis has a 36 hour duration. These agents are contraindicated in patients who need nitroglycerin for chest pain. The use of nitroglycerin and these oral agents together can lead to a precipitous drop in cardiac blood pressure and initiate a cardiac event such as a heart attack. These agents can also create an increased risk when used in combination with alpha blockers such as Hytrin, Cardura, Flomax and Uroxatrol. These alpha blockers are sometimes used in the treatment of hypertension and are sometimes used in the treatment of male voiding dysfunction.

For patients who cannot use these oral phosphodiesterase inhibitors or in whom these agents do not work, the next line of therapy is usually intracavernosal prostaglandin injections. Intracavernosal prostaglandin therapies (Caverject and Edex) can stimulate erections in more profound cases of erectile dysfunction and in the absence of other stimulation for erections. These agents are injected with a small needle directly into the penis. These agents can cause some dizziness or lightheadedness. These agents are best used initially in our office so that issues regarding safety and the correct administration can be reviewed. This is usually accomplished by a first-time demonstration injection in our office. These agents include a 1% to 2% risk of priapism. Priapism is an unwanted, painful erection that lasts over two hours. Priapism in the face of a prostaglandin injection is essentially an overdose of the medication. If your body has a very vigorous response to caverject and the erection is maintained beyond two hours the blood in the penis is not returning to the heart. Therefore, a lack of oxygen supply can lead to pain and even damage to the penis. Priapism needs to be treated rapidly to reverse the erectile process. This can be done in our office or in the emergency room. If you experience priapism you should immediately report to our office or the emergency room for prompt therapy. If priapism remains untreated for six hours it can cause permanent damage to the penis and further decrease your erectile performance.

Another treatment option for erectile dysfunction includes a vacuum erection device with a penile occlusive device. A vacuum erection device or penile pump can draw more blood into the penis for erection. After more blood is drawn into the penis with this vacuum erection device a penile occlusive device is placed at the base of the penis trapping this blood into the penis for a good solid erection. A penile occlusive device can also be used alone or in combination with most other therapies for the treatment of erectile dysfunction.

Testosterone replacement can also be used effectively for the treatment of erectile dysfunction and/or Andropause. Testosterone replacement is generally used in patients who have demonstrated a low total testosterone or a low free testosterone on testosterone serum sampling. Testosterone replacement can result in improved sexual desire, improved erections, and improved vigor for daily activities. Some patients will feel more overall energy level while on testosterone. Testosterone therapy must be used in caution for men who have risk factors for prostate cancer and should not be used in men who have been diagnosed with prostate cancer. In theory, testosterone replacement could promote a formation of prostate cancer. This has never been confirmed on studies. However, removal of testosterone by either castration or hormonal ablative therapies is commonly used as a strategy for treating prostate cancer.

For informational purposes only. Please consult your physician with any questions. USA Delaware 302-836-5500.

Another avenue for treatment of erectile dysfunction is behavioral therapy with a psychologist. When stress is a possible causative factor in erectile dysfunction a behavioral therapist can use cognitive therapies to work through relationship or stress issues with men who have erectile dysfunction. These treatment modalities may be best used by the couple jointly working together with a behavioral therapist.

For patients who fail all of the above therapies surgical implantation of an inflatable penile prosthesis can be considered. This is a dramatic choice to make and generally is to be considered an option of last resort. A surgically implantable inflatable penile prosthesis has the capability of providing erections at any time to even the most profound cases of erectile dysfunction. However, these devices require surgical implantation which might be associated with significant postoperative discomfort. Many patients who undergo implantation of an inflatable penile prosthesis are quite satisfied with their outcome and happy that they underwent such treatment. In fact, studies show patient satisfaction rates in excess of 80% for this treatment. However, once a patient elects this treatment modality the other available treatment modalities (with the exception of sexual therapy with a psychologist) are unlikely be effective. This, in effect, creates a permanent change in erectile tissues in the penis and so it should be considered as the treatment of last resort.

For informational purposes only. Please consult your physician with any questions. USA Delaware 302-836-5500.