

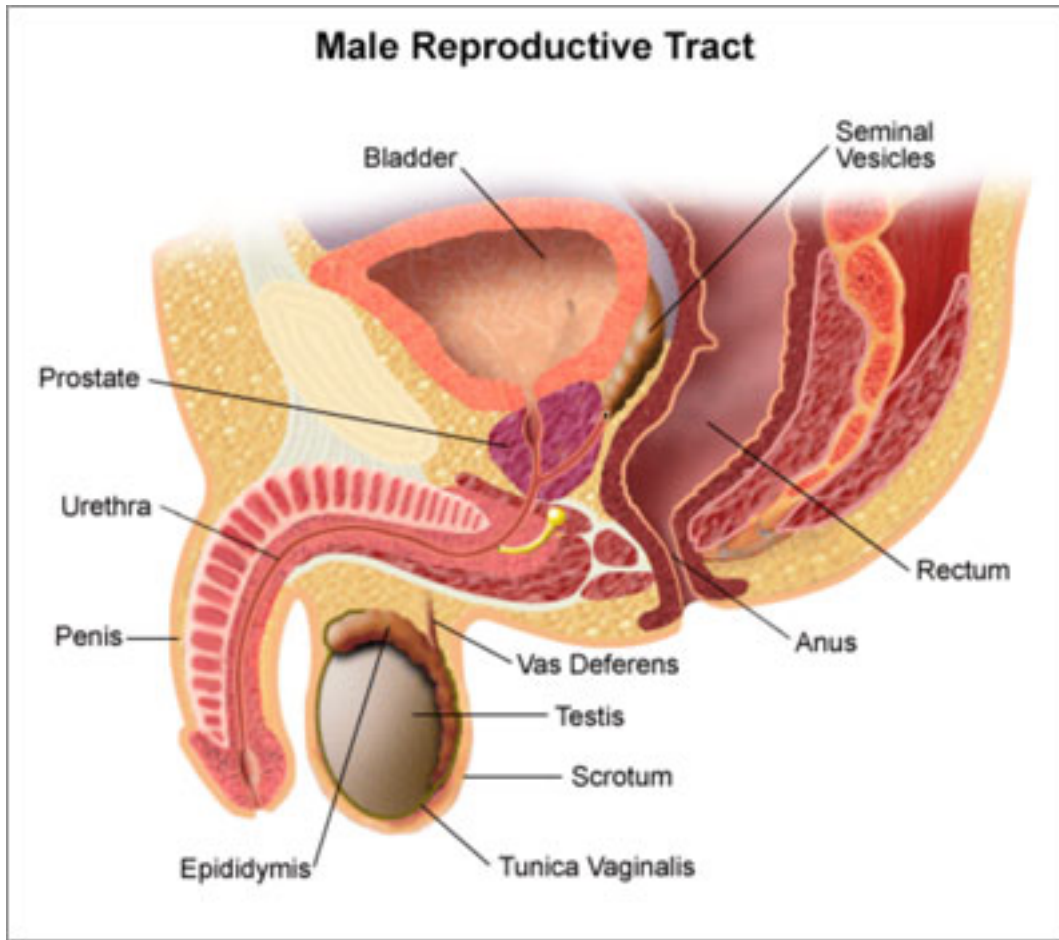


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522 W Newton St. #300, Greensburg, PA 15601 – (724) 838-7500

Patient Information for Robotic-Assisted Laparoscopic Prostatectomy

The robotic-assisted laparoscopic radical prostatectomy was first reported in 2000. Since that time, robotic prostatectomy has become one of the preferred methods for radical or total removal of the cancerous prostate. *Urology Specialists, P.C.* is one of only a few practices in the region that utilizes this technology using the da Vinci™ Surgical System from Intuitive Surgical, Inc.® Here is how the procedure is completed:

Laparoscopy is performed by filling the belly with carbon dioxide gas so that a working space can be created. Small incisions are created through which instruments are passed. For prostate removal, 6 small incisions between $\frac{1}{4}$ and $\frac{1}{2}$ inch are used. For the robotic prostatectomy, the robot holds 3 instruments and the camera. Once the surgeon and his assistant properly set the robot, he then sits down at a robotic console from where the robotic arms are controlled using hand and foot controls. A table side assistant surgeon helps by passing instruments and aiding in the dissection.



This diagram illustrates the normal anatomy of the male reproductive system. The prostate and seminal vesicles normally function to produce the fluid that is expelled during ejaculation. In order to remove the prostate entirely, the prostate must be separated from the bladder above and the urethra below. The seminal vesicles are removed along with the prostate. The bladder is then sewn to the urethra and a catheter is left in the bladder to aid in healing of the sewn area.

Robotic Versus Open Prostatectomy

The benefits of robotic prostatectomy are several-fold:

- The average blood loss for patients undergoing a robotic-assisted prostatectomy is approximately 200 ml. Several series for open radical prostatectomy report an average blood loss between 200 and 1500 ml.
- Hospital stay is usually overnight for the robotic procedure compared to 2 to 3 days for the open procedure.



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- Catheter time is usually 1 week.
- Most people can return to work in 2-3 weeks after the robotic procedure while 4 to 6 weeks is usually required after an open approach.
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What to Expect

The usual course experienced by patients undergoing robotic prostatectomy is as follows: The patient arrives in the hospital the day of the procedure. The procedure is then performed and typically takes between 2 and 4 hours depending on the size of the prostate and the difficulty of dissection. The patient then spends the first night in the hospital with a small abdominal drain, is given a regular diet and is encouraged to walk the night of the procedure. Discharge is planned for the next morning after the drain is removed and instructions are given for general postoperative and catheter care.

The patient is sent home with a prescription for a light narcotic oral medication. Many patients do not require this and use only Tylenol® or Ibuprofen®. Patients should walk as much as possible immediately. Stair climbing is acceptable. Patients should refrain from lifting more than 15 pounds for 3 weeks. Some patients do experience some constipation which can be remedied by Milk of Magnesia® or taking Colace® pills.

The Foley catheter is typically removed in the office one week after surgery. Pathology results are often available and can be discussed at this visit. Patients are allowed to drive after their catheter is removed if they are no longer taking any narcotic medications. Patients may then return to work within 2 to 3 weeks and then can go back to unrestricted activity in 4 weeks.

Side Effects

The two dominant concerns that men have regarding radical prostatectomy are incontinence (leaking of urine), and impotence (loss of erections).

The typical incontinence that men experience early on after prostatectomy is called stress urinary incontinence. This type of leakage is typically experienced with coughing, sneezing, standing up from a sitting position, or with other vigorous activity.

Why are men incontinent after radical prostatectomy? It is likely the prostate plays a very important role in keeping men dry. Once the prostate is removed, only the external sphincter or pelvic floor muscles are left for maintaining continence. Although this is the muscle that women rely upon solely for continence, in many



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men this is not well developed. As time goes on after surgery, this external sphincter will continue to gain strength even up to one year after the surgery.

Early on most men will require pads to keep their garments dry. No more than 5 – 10% of men will require pads at the one year point and less than 1% overall require extra surgical help to restore continence. These outcomes are similar to the open prostatectomy outcomes at 12 months; however, it appears that the rate of return to continence may be much more rapid in the robotic-assisted series with often 50% of men being out of pads at 3 months and 80% by 6 months. This is believed to be due to the ability of the surgical platform (with magnification and wristed instruments) to significantly preserve functional urethral length important in the recovery of continence in these patients.

Regarding impotence, nearly every man after radical prostatectomy will completely lose his erections temporarily. After prostatectomy, men have normal sensation in the penis and can experience orgasm. However, during orgasm no fluid will be expelled. The remaining question is whether the erections will return. With time, erections typically return over the following 6-12 months. However, some men will require 18 -24 months before erections return. Return of erectile function is dependent on patient age, preoperative erectile function, and the extent of preservation of the nerves to the penis during the prostate dissection.

During the operation, sparing of the nerves that supply the penis necessary for erections may be possible. The nerves that help the penis achieve erection rest on the back surface of the prostate. Sparing these nerves aids in the long term recovery of erections. Nerve sparing can be performed if there is a small amount of cancer present on the biopsy and if the prostate cancer has a low grade or low probability of spreading beyond the prostate.

Data collection for potency results after robotic-assisted radical prostatectomy is ongoing, but most centers report equal or slightly improved postoperative potency rates with reported potency ranging from 38% to as high as 87.5% in young men (< 60 years of age) with normal erections preoperatively.

Resources

Please do not hesitate to call us with any questions to our office.

Websites that can help you discover more about robotic surgery and prostate cancer:

- Intuitive Surgical:
www.intuitivesurgical.com
- da Vinci Surgery:
www.davincisurgery.com



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www.davinciprostatectomy.com

www.davincistories.com

- National Cancer Institute:
www.nci.nih.gov
- American Cancer Society:
www.cancer.org
- Prostate Cancer Foundation:
www.prostatecancerfoundation.org
- Prostate Cancer Research Institute:
www.prostateinfo.com