

# **Robotic Radical Prostatectomy & Pelvic Lymph Node Dissection**

## **What is it?**

Removal of the prostate gland and small organs attached to the back of the prostate gland called the seminal vesicles. Depending on certain features of the cancer, some patients should have a sampling of the pelvic lymph nodes. These are small glands that exist in many places in the body that cancer can sometimes travel to. The urinary channel or urethra runs through the middle of the prostate and will be removed as a part of the procedure. Because of this, the bladder will need to be reconnected to the urethra as a part of this procedure. A robotic device, sometimes called DaVinci, can be used by your surgeon to assist with the removal of the prostate gland, the pelvic lymph nodes, and to reconnect the bladder to the urethra.

## **What are the advantages of robotic surgery?**

Patients with robotic surgery clearly have less bleeding than with more traditional techniques. The magnification of the cameras allows substantially enhanced vision and coupled with the decrease in bleeding allow for precise dissection. The use of the robot also allows for a more water-tight connection of the bladder and the urethra. This helps avoid the use of extra plastic tubes called drains and may enhance healing. In my experience, patients have a shorter hospital stay and nearly all can expect to leave the hospital the day following surgery.

## **What are the disadvantages of robotic surgery?**

There is a slightly higher risk of injury to the intestines (about 1 in 100). The machine used for the procedure is expensive to buy and maintain. This cost is to some extent passed on to insurance companies which indirectly increases the cost of healthcare. In patients with very advanced cancers who decide to have surgery for prostate removal, I find the sense of touch to be helpful and I recommend that these patients have surgery done through more traditional larger incisions.

## **What are common misconceptions about robotic surgery?**

1. The robot does not act independently. The operating surgeon is in control of the movements of the device and performs the surgery.
2. Superior results in terms of return of penile erections and urinary control are debatable. The most important determinant of these outcomes is having an experienced surgeon perform your surgery either with traditional incisions or with a robotic device.
3. Inferior results in terms of cancer control are debatable. The most important determinant of this outcome is having an experienced surgeon perform your surgery either with traditional incisions or with a robotic device.

## **What is the average experience after the operation?**

Patients will wake up from surgery with a catheter in the penis called a foley catheter. There will be prescribed medications for pain control and bladder spasms. Nearly all patients are able to leave the hospital the day following their surgery. About 1 in 10 patients will either return to the clinic or the emergency room for an unscheduled visit with a minor complaint. Roughly a week following the surgery, an X-ray study of the bladder will be performed to see if the foley catheter can be removed. The catheter removal is mildly uncomfortable and short. Most patients will have difficulty controlling the flow of urine for a period of time after the surgery that can range up to several months. I see patients at 1-week, 6-week (with a PSA check), and 3-month appointments after surgery. The return of penile erections can take several months to two years to return. Patients are frequently started on other treatments in the meantime to help achieve penile erections.

## **What are complications of robotic prostate surgery?**

For the most part, they are the same complications as traditional prostate operations: post-operative pain; bladder, kidney, or wound infections; bleeding requiring transfusion; injury to the intestines, rectum, or urinary system; blood clot in the legs or a pulmonary embolus; return of the cancer; failure to cure the cancer; about 1 in 20 men will experience long-term bothersome uncontrollable urinary leakage; about 1 in 2 men will experience long-term difficulty in having satisfactory penile erections with or without medication.