

# Radical Prostatectomy

SUNA Postoperative Care Task Force

## Overview

Radical prostatectomy is the primary surgical treatment for prostate cancer. A radical prostatectomy is the surgical removal of the prostate gland and surrounding tissue. Your surgeon may also possibly remove some lymph nodes in the surrounding area to see if the cancer has spread.

There are different techniques for performing a radical prostatectomy, involving different types of incisions. One frequently used technique involves making several small incisions in the abdomen (belly) and using robotic arms to help perform surgery through these small incisions (robotic-assisted radical prostatectomy). Another common technique involves making one larger incision along the lower abdomen (open retropubic radical prostatectomy).

Long-term side effects and the ability to control and treat prostate cancer are the same regardless of which technique is chosen. The decision of which technique to use is a decision you and your surgeon will make together.

## Indications

Many factors will contribute to helping you choose a treatment for your prostate cancer. Prostate cancer treatments are individualized to each patient, and your urologist may potentially offer you several treatment options to consider.

Important factors when deciding if radical prostatectomy may be a possible treatment option for your prostate cancer include the grade (aggressiveness) and stage (location) of your prostate cancer, any other medical conditions you have, any medications you take, any prior surgeries you have had in the past, and your overall health and ability to undergo surgery.

Most frequently, radical prostatectomy may be indicated for patients with prostate cancer that has not spread outside of the prostate gland. These patients include those who are 65 to 70 years of age or younger, and patients who are healthy enough to tolerate surgery well. However, there are many other situations where a radical prostatectomy may be indicated, so your urology care team will discuss your individual treatment options with you.

## Possible Risks

Intraoperative risks are relatively rare, but some risks that could occur during a radical prostatectomy include loss of blood, injury to the rectum, injury to the ureter (the tubes that connect the bladder to the kidneys), nerve injury, or injury to other surrounding organs.

Some of the most common risks immediately after a radical prostatectomy include (but are not limited to):

- Postoperative pain.
- Bruising.
- Scrotal swelling.
- Constipation.
- Hematoma (collection of blood under the skin).
- Seroma (collection of body fluid under the skin).
- Urinary tract infection.
- Bloodstream infection (sepsis).
- Wound/incision site infection.
- Wound/incision site opening.
- Urine leak from the bladder at the surgical site.
- Lymphocele (collection of lymph fluid after removal of a lymph node).
- Hernia.
- Postoperative ileus (a slowing down of stool in the intestines).

There are also risks of having any surgery and undergoing anesthesia, including a blood clot in the legs (deep-vein thrombosis) or a blood clot in the lungs (pulmonary embolism), among others.

The two most common long-term risks of a radical prostatectomy are urinary incontinence (specifically stress urinary incontinence with coughing, laughing, sneezing), and erectile dysfunction. Your urology care team will work with you before surgery to help prepare for these risks and after surgery to work to improve them.

### Acknowledgment

We would like to especially thank the following SUNA members for their valuable contributions to these special focus issues. They either acted as a peer reviewer, author of the educational handouts, or both.

Michele Boyd, MSN, RN, NPD-BC  
Lynn Huck, ANP  
Christopher T. Tucci, MS, RN, BC, CURN, NE-BC, FAUNA  
Gwendolyn Hooper, PhD, APRN, CUNP  
Anthony R. Lutz, MSN, NP-C, CUNP  
Margaret (Amy) Hull, DNP WHNP-BC  
Annemarie Dowling-Castronovo, PhD, RN, GNP-BC, ACHPN  
Lais Heideman, RN, CURN  
Susanne A. Quallich, PhD, ANP-BC, NP-C, CUNP, FAUNA, FAANP  
Michelle J. Lajiness, FNP-BC, FAUNA  
Marc M. Crisenbery, MSN, APRN, FNP-BC

*We hope you and all your family members may benefit from these handouts.*

## Preoperative Instructions

- Diet: The day before surgery, you should only eat and drink clear liquids (a clear liquid diet). You should not eat or drink anything after midnight the night before surgery.
- Bowel preparation: The day before surgery, you should drink one bottle of magnesium citrate in the late morning. This is available over the counter at your pharmacy or can be prescribed if needed. The evening before your surgery, you should perform one Fleet enema.
- You will receive a call from the hospital the afternoon/evening before surgery with the exact arrival time for the morning of surgery.
- The morning of surgery, take your normal morning medications unless advised otherwise by your primary care provider during your medical clearance.
- Plan to wear loose-fitting, comfortable clothing to the hospital.
- Do not bring any jewelry or valuables with you to the hospital.
- You must have someone bring you to the hospital the morning of surgery, and you must plan for someone to pick you up and accompany you home when you are discharged after your hospital stay.

## What to Expect After Your Radical Prostatectomy

- You will stay overnight in the hospital for at least one night, and possibly for several nights.
- You must have someone pick you up and drive you home when you are discharged from the hospital.
- When you wake up from anesthesia, there will be a catheter in your penis that will automatically drain the urine from your bladder. This catheter will remain in place for 7 to 10 days after surgery to allow for the surgical area to heal. **DO NOT** try to remove this catheter. You will be taught how to manage the catheter before you are discharged from the hospital.
- You will be scheduled for a visit with your urology care team to remove your catheter 7 to 12 days after surgery.
- At the postoperative visit where the catheter is removed, your urology care team will also review how to do Kegel exercises to work to improve incontinence and will start to discuss erectile function rehab protocols. The plan for future visits and prostate-specific antigen (PSA) testing to monitor for postoperative cancer control will also be discussed at this visit.
- You will likely feel more tired for 3 to 6 months after surgery. This is normal as your body is healing, and will gradually improve with time as you regain strength and activity.
- You will likely feel bloated and sore in your abdomen, which may feel uncomfortable until you have your first bowel movement after surgery. It can

take several days to have your first bowel movement. This is normal. Walking helps to improve these gas-related pains more quickly.

- Stitches in the incision site(s) are dissolving stitches, so there are no stitches to remove after the surgery. The incision site(s) will likely be covered with a surgical glue that will flake off on its own over a couple of weeks.
- You may notice bruising of your lower abdomen, and possibly of your penis and scrotum. You also may notice scrotal swelling temporarily. This is normal and will improve with time.
- You may notice a small amount of discharge around the catheter or a small amount of leakage of urine around the catheter (especially when having a bowel movement), and occasional small amounts of blood in your urine. This is normal and will stop.
- You may notice bladder spasms with the catheter in place, which feels like strong sudden urges to urinate with pain over the bladder area that usually go away on their own. This is normal, but please contact your urology care team if these are bothersome.
- You will be discharged with prescriptions for stool softeners/bowel regimen, potentially pain medication, and potentially an antibiotic to take just prior to the removal of your catheter.
- Do not drive with a catheter in place, and do not drive if you are taking narcotic pain medication.
- Once you are home, you should be on a relatively bland diet at first, then gradually advance your diet as tolerated.
- Once you are home, you may shower. It is okay for water to run over the incisions and the catheter. Do not scrub the incisions. Do not take a bath or submerge in a pool until 4 weeks after surgery.
- Once you are home, you may walk short distances every day as light activity.
- It is very important that you avoid heavy lifting (more than 10 lbs) for 4 weeks after surgery. After the 4-week postoperative milestone, you can start to gradually increase activity level.
- It is important to monitor for signs of infection like fever or chills. Please contact your urology care team right away if you experience these symptoms or any other symptoms that concern you.
- Return to work: Most patients who work in office jobs or jobs without strenuous physical work can likely return to work 2 to 4 weeks after surgery. If your job involves heavy lifting/activity, please wait at least 4 weeks after surgery before going back to work.

## When to Call the Clinic

- Fever higher than 101 degrees F (38.3 degrees C).
- Chills.
- Nausea or vomiting.
- Severe pain that is not controlled by pain medication.

- Bleeding, oozing, redness, or worsening pain from the incision sites.
- Any issues with the catheter, especially if the catheter does not seem to be draining, or if the catheter becomes dislodged.
- Dark red blood in the urine with or without blood clots.
- If you have any questions.

\*\*If you are unable to reach the office and are in need of immediate assistance, please proceed to the nearest Emergency Department.

### Resources

- American Cancer Society (ACS). (2021). *Prostate cancer*. <https://www.cancer.org/cancer/prostate-cancer.html>
- Haese, A., Knipper, S., Isbarn, H., Heinzer, H., Tilki, D., Salomon, G., Michl, U., Steuber, T., Budäus, L., Maurer, T., Tennstedt, P., Huland, H., & Graefen, M. (2019). A comparative study of robot-assisted and open radical prostatectomy in 10 790 men treated by highly trained surgeons for both procedures. *BJU International*, *123*(1), 1031-1040. <https://doi.org/10.1111/bju.14760>
- Sanda, M.G., Chen, R.C., Crispino, T., Freedland, S., Greene, K., Klotz, L.H., Makarov, D.V., Nelson, J.B., Reston, J., Rodrigues, G., Sandler, H.M., Taplin, M.E., & Cadeddu, J.A. (2017). *Clinically localized prostate cancer: AUA/ASTRO/SUO guideline (2017)*. American Urological Association. <https://www.auanet.org/guidelines/guidelines/prostate-cancer-clinically-localized-guideline>
- Watson, B., Jones, P., & Hafron, J. (2020). Diagnosis and management of localized prostate cancer. In S.A. Quallich, & M.J. Lajiness (Eds.), *The nurse practitioner in urology* (2nd ed., pp. 345-359). Springer.

This material is for educational purposes only and should in no way be taken to be the practice or provision of medical, nursing or professional healthcare advice or services. The information should not be used in place of a visit, call, consultation or advice of your physician, nurse or other health care provider. The information obtained herein is not exhaustive and does not cover all aspects of the specific disease, ailment, physical condition or their treatments. Should you have any health care related questions, please call or see your physician, nurse or other health care provider promptly.

The Society of Urologic Nurses and Associates, Inc. is a professional organization committed to excellence in patient care standards and a continuum of quality care, clinical practice, and research through education of its members, patients, family, and community.