SURGERY: RADICAL PROSTATECTOMY

CONTACT NUMBERS: Dr. Fulgham's Office 214-691-1902

- Katie (Dr. Fulgham's surgery scheduler) 214-691-1902 ext 2131
- Angela (prostate cancer support group coordinator) 214-345-5030
- Texas Health Presbyterian Hospital Billing office 1-800-890-6034

Surgery to remove the prostate is called a radical prostatectomy. There are two surgical methods for removing the prostate include open radical retropubic prostatectomy (RRP) and robot-assisted laparoscopic prostatectomy (RALP). Your age, overall health, size of your prostate, stage of cancer may all be considered when determined the type of procedure to be performed. You will discuss these with your urologist. The advantages of prostatectomy to treat prostate cancer are that it provides more detailed information about the stage of the cancer and whether it is contained within the prostate or may have penetrated the capsule of the prostate increasing the risk for spread to other tissues. If the cancer has extended beyond the prostate then other treatments including radiation therapy are still available. If radiation therapy is chosen as the first line of treatment then the pathology information that is available about the extent of the prostate cancer is not available and surgery would not be an option later.

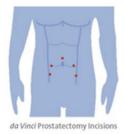
OPEN RADICAL RETROPUBIC PROSTATECTOMY (RRP)

In open surgery, the surgeon makes an incision to reach the prostate gland. An incision is made in the lower abdomen.



ROBOT-ASSISTED LAPAROSCOPIC PROSTATECTOMY (RALP)





Robotic-assisted laparoscopic radical prostatectomy is done through multiple small incisions in the abdomen where instruments are placed using robotic arms. The surgeon sits at a console and the motions of his hands are translated to the instruments providing the ability for precise movement of the instruments.

PREPARING FOR SURGERY

PRE-OP CLEARANCE TWO TO THREE WEEKS PRIOR TO SURGERY:

Schedule an appointment with your primary care physician for a physical exam, lab work, chest xray and EKG for preoperative clearance. You should see your physician at least two weeks prior to surgery to allow time for pre-op testing. Pre-op clearance reports MUST be received in our office at least one week prior to surgery.

TWO WEEKS PRIOR TO SURGERY:

If you are on blood thinners, talk to your physician about when to quit taking them. Quit taking all vitamins and supplements 2 weeks prior to surgery. Some of the ingredients in these products may interact with the anesthesia or may put you at risk for excessive bleeding. This includes vitamin E and anti-inflammatory drugs such as aspirin and NSAIDS (Aleve, Ibuprofen, etc.). If you are unsure about some vitamins supplements consult with your physician.

Make sure you are performing Kegel exercises as prescribed.

DAY PRIOR TO SURGERY:

Bowel Prep: You will need to completely clean out your bowels at home the evening before surgery by drinking NuLYTLELY or whatever bowel prep your physician prescribes. You need to pick up this prescription two days prior so it has time to be refrigerated. It isn't necessary to be refrigerated, it just makes it more tolerable to the taste. Many of the anesthetics and narcotics administered during surgery tend to slow down the intestinal tract so starting off with empty bowels may help reduce the feeling of being bloated or constipated in the days following your procedure. Begin drinking the NuLYTELY at 6 p.m. the evening before surgery. Follow the instructions.

Food and drink: You should have no solid foods after 4:00 p.m. You may drink clear liquids such as water, clear broth, popsicles, ginger ale, etc. until 12:00 midnight. After that you should not drink anything.

WHAT TO BRING TO HOSPITAL:

Bring an up-to-date, legible list of all medications and supplements with their dosages. The hospital admission office will ask for this list.

Basic toiletries (hairbrush, toothbrush, toothpaste, shampoo, soap, razor, shaving cream, lotion, lip moisturizer)

Roomy pants with an elastic waistband (knit or sweatpants) for when you are discharged home.

Slip on shoes with a rubber non-slip sole for walking around the hospital ward.

Pajamas (with elastic waistband). You may feel more comfortable wearing your own pajamas which you should be allowed to do on the first post-operative day.

Any assistive devices you normally use or wear such as glasses, hearing aids, cane, prostheses, dentures, etc.

WHAT **NOT** TO BRING TO HOSPITAL:

Items of value such as money or credit cards, watch or other jewelry CD player, MP3 player, laptop, etc, (these items cannot be secured and the hospital won't accept responsibility for a lost or stolen item)

COSTS AND BILLING:

Presbyterian Hospital of Dallas may call you prior to your scheduled surgery to obtain health insurance information and request a deposit prior to the procedure. During your hospital stay several healthcare providers will provide care. They will submit their charges to your insurance company and you may receive a separate bill from them. These include your surgeon, Dr. Pat Fulgham, the pathologist; the anesthesiologist.

DAY OF SURGERY

You will need to present to the hospital admitting department 1 ½ hours prior to surgery. (yellow star below).

To speed up the admissions process pre-register online at https://www.texashealth.org/dallas/patients-and-visitors/patients/pre-register-online-at-texas-health-dallas

Even if you pre-register there will still be a few forms to sign the day of surgery but it should shorten the admissions process.



DAY OF SURGERY - PREOPERATIVE

After you have completed signing paperwork in the admitting department you will be taken to a room where:

- You will be asked to remove dentures, hearing aids, glasses, or contact lenses.
- A nurse will insert an intravenous drip (IV) for fluids into your arm.
- Blood will be drawn for laboratory studies
- You will be transported in your hospital bed to the OR holding area

A few family members may be with you in your room while you await surgery in the pre-op holding area. You will meet your anesthesiologist in the holding area. Your urologist will visit with you before surgery in the holding area.

IMMEDIATE POSTOPERATIVE RECOVERY

After the urologist has completed your surgery he will go to the waiting area and speak with your family to tell them how the surgery went. Please have a family member provide a cell phone to the staff where they may be reached if they leave the waiting area.

You will be taken the post anesthesia care unit (PACU) until you have recovered from the anesthesia. Waking up from the anesthesia takes 1 to 3 hours during which time you will experience moments of semi-consciousness followed by periods of deep sleep; however, most people do not remember much of their PACU experience.

Many patients awaken with a sense of needing to void. This is because there is a catheter in the bladder. It is a normal sensation to experience on awakening. You will be returned to your hospital room. Your nurse will take vital signs and watch you closely.

AFTER SURGERY - IN THE HOSPITAL

INCISIONAL PAIN: Pain in the area of the incision is usually mild after prostatectomy. You may have a PCA pump which allows you to control your pain medication. This is called patient-controlled analgesia. If you feel excessive pain you may push a button and receive medication. The medication is released into your IV line. The PCA pump has a lock-out so you won't overdose yourself. If you press the pump during the "lock-out" time, you won't receive medicine. Once you press the button it should take 5 to 10 minutes to work. Try to keep your pain under control. If you are in too much pain, you may recover more slowly, so don't try to be brave or "tough it out."

- DO press the button when you start to feel pain.
- DO use the pump before you move or turn, do breathing and coughing exercises, or do anything that causes you pain. If you have pressed the button and waited the 10minutes but are still not receiving pain relief notify your nurse.
- DO NOT wait until your pain is bad before using the pump
- DO NOT let others press the button on your pump
- DO NOT use the PCA for gas pain or bladder spasms
- DO NOT press the button when you are comfortable and sleepy
- If you become nauseous or itchy or experience a bladder spasm let your nurse know.

BLADDER SPASMS: Bladder spasms respond best to a medicine administered as a suppository (B&O suppository). Tell the nurse if you experience bladder spasms. A bladder spasm is a feeling of intense pain in the rectum or intense need to void that lasts 10-30 seconds. Occasionally blood or urine will pass out of the urethral opening around the catheter, this is no cause for concern.

CONSTIPATION/GAS CRAMPS: You may experience sluggish bowels for several days following surgery as a result of the anesthesia. Suppositories and stool softeners are usually given to help with this problem. Narcotic pain can also cause constipation and therefore patients are encouraged to discontinue any narcotic drugs as soon after surgery as tolerated.

THIRST: You will be NPO (nothing by mouth) for the first 12 hours until your bowels have returned to normal. You will only be allowed ice chips. If you drink liquids before your bowels have recovered from the anesthesia you may become bloated or nauseated. Your throat may be sore from the anesthesia. Ice chips may help relieve the soreness.

EXERCISES IN THE HOSPITAL

BREATHING EXERCISES: It is important to breathe deeply and cough up to 10 times every hour. These exercises expand your lungs and decrease the change of fluid building up and the risk of pneumonia. This will be uncomfortable. Holding a pillow to your abdomen when you cough may help absorb some of the strain.

IN-BED EXERCISES: Wiggle your toes, pump each foot up and down (like braking a car), bend and straighten your legs. These will help improve your circulation and reduce the risk of blood clots.

WALKING: In the evening the day of surgery you will be asked to get out of bed and take a short walk or walk to a chair and sit. You will feel dizzy and weak. Slowly as you get more rest, you will begin to feel stronger and walking will become easier. Walking helps to reduce the risk of blood clots and will improve the return of intestinal function. Anesthesia causes the intestines to slow down.

DAY AFTER SURGERY

<u>DIET:</u> After your bowels have started working you will be started on a liquid diet which consists of items such as yogurt, pudding, custard, pudding, soup, jello, broth, ginger ale. Once you tolerate the liquid diet without a lot of gas pain you may be started on a regular diet.

WALKING: Continue to walk as much as you can tolerate.

DAYS 2 AND DISCHARGE HOME

Your hospital stay may last about two days depending on how you progress. Each patient responds to surgery differently. The JP Drain will usually be removed prior to discharge. Most patients will not need a surgical dressing after discharge. You will be taught how to manage your urinary catheter and drainage bag prior to discharge.

Your physician will see you the morning of discharge. He will review any additional instructions or answer further questions you may have.

You will need to call the office to schedule an appointment with the urologist to have the catheter removed. The catheter is usually removed about 10-14 days after the surgery depending on how you are progressing.

Someone will need to drive you home from the hospital. The hospital staff will take you to the front entrance of the hospital in a wheelchair where you should have arranged for someone to pick you up.

ACTIVITIES OF DAILY LIVING

Driving should be avoided for at least 2 weeks after surgery. Absolutely NO heavy lifting (greater than 10 lbs) or exercising for 6 weeks or until instructed by your doctor. Most patients return to full activity an average of 3-4 weeks after surgery.

PATHOLOGY

A pathologist will examine the prostate gland and all of the tissue removed during surgery to determine whether the prostate cancer was confined to the prostate cancer. It usually takes at least 7 days to complete the pathology report. Please wait to call the office for pathology results 7 days after discharge from the hospital.

URINARY CATHETER CARE

Call your physician if the catheter comes out. This is a rare occurrence but requires immediate attention.

The catheter in your bladder uses gravity to drain the urine into the bag; therefore, make sure the bag is lower than the bladder in the vertical plane. The bags come in two types, a leg bag and a night time bag.

Leg bag: This is attached securely to your upper thigh and is worn during the day. It allows for you to be active and move around and fits under your pants. You can shower with the bag in place. Do not make the band surrounding the leg too tight.

Night time bag: This will lie beside your bed when you sleep at night. Make sure the bag is lower than your bladder.

Clean Bags: Clean new bags with warm water and a few drops of liquid soap or vinegar before using them and let them drip dry. Wash your hands before handling the bags or catheter.

It is important to make sure that urine is able to drain through the catheter into the bag. Keep an eye out for kinks in the tubing, which can prevent your urine from flowing freely.

Clean the urethral meatus twice daily: Check the urethral meatus (the opening where the catheter is inserted into your penis). Some urine or blood will pass or leak around the catheter when you sneeze, cough or have bowel movements. This is normal. To prevent possible infection and irritation to the skin strict hygiene of the area is essential. Wash your hands and then gently cleanse the foreskin, the glans, the meatus and the catheter with antiseptic cleaning solution or soapy water at least TWICE DAILY. Pat dry. Use a disposable cloth. DO NOT use the same cloth, wipe or towel more than once. After cleansing, an antiseptic cream may be applied to the urethral meatus area as an additional precaution. Wash your hands again after cleaning the meatal area.

If you are not circumcised, make sure the foreskin isn't retracted behind the glans for a long period of time because this can restrict blood flow and cause your foreskin to swell painfully.

Drink 2 to 3 liters of fluid a day (about 60 oz) to flush out your bladder. Water, tea and juice are best. Your urine should be clear or yellow. It may turn pinkish after too much activity, a bowel movement, or occasional bladder spasms. This is minor bleeding. If a lot of blood fills the catheter or bag call your physician.

FIRST OFFICE VISIT (10-14 DAYS POST SURGERY)

Your first office visit will be to remove the catheter. This is generally done 2 weeks after surgery. If you left the hospital with staples or a JP drain you may have an additional visit a few days or a week prior to the visit for catheter removal. You need schedule your office visit for catheter removal in the morning. This will allow you time to go home to make sure you void normally during the day. If you have trouble voiding call the office. They may ask you to return before the office closes to have the catheter replaced. This is an uncommon occurrence but needs to be dealt with promptly if it occurs. Usually men are able to void after the catheter has been removed. Bring an incontinence pad with you to this visit. After the catheter is removed you may renew a program of light exercise, walking, etc. gradually working up to your regular routine of exercise.

URINARY INCONTINENCE AFTER CATHETER REMOVAL

You may experience incontinence with sneezing, coughing or bowel movements (stress incontinence). You may experience incontinence when you bend over. Most men (90%) will regain full bladder control in 6 to 12 weeks. About 10% of men may have persistent incontinence, involving mild dribbling with physical activity. Less than 1% of men have such severe incontinence that a surgical solution such as an artificial sphincter is needed. You may need to wear an absorbent pad until the urinary dribbling has stopped. You may need to change the pad a few times a day depending on how much incontinence you experience. There are guard pads made especially male urinary incontinence. These stick on the inside front portion of your underwear. The following are a few of the available male guards that may be found at your local pharmacy or grocery store: Attends, Depend, Tena, Prevail. Visit http://nationalincontinence.com/s/best-mens-products for a description of these various products.

Kegel exercises help strengthen the pelvic floor muscles surrounding the urethra.

Biofeedback: Sometimes more formal training of the continence muscles is needed. This is called biofeedback training and can be performed in the office. If you are not making satisfactory progress in controlling your urination discuss this with your doctor.

WOUND CARE

To reduce the risk of infection it is important to keep the wound clean. You may shower and wash the wound regularly. Make sure your hands are clean before touching the wound area. If the wound area becomes reddened and painful call your physician. These may be signs of an infection.

You may shower at home. Your wound sites can get wet, but must be patted dry. Tub baths can soak your incisions and therefore are not recommended in the first 2 weeks after surgery.

EXERCISE POST SURGERY

Try to move around the house frequently and walk as you feel comfortable. You will feel fatigued but gradually increasing your exercise will enhance your recovery. Taking daily walks is strongly advised. Prolonged sitting or lying in bed should be avoided and can increase your risk of forming blood clots and developing pneumonia. Climbing stairs is possible but should be limited. Absolutely no heavy lifting or vigorous exercise for 6 weeks, or until instructed by your doctor. As soon as the catheter is removed (10-14 days) you may begin a program of light exercise, walking, etc

RETURN TO WORK

Generally you may return to work after surgery at 6 weeks. You will need to see the physician at 6 weeks for a PSA blood test and for him to clear you to return to work.

DIET AFTER SURGERY

You may return to your normal diet upon discharge. However, adhering to foods such as rice, soup, noodles and avoiding high fiber meals (e.g. vegetables such as celery) is advised as your intestines may take up to a week to recover from the surgery and anesthesia.

Alcohol, spicy foods and drinks with caffeine may cause some irritation or sense of the need to void despite the fact that the catheter is emptying the bladder. If these foods don't bother you, you can consume in moderation.

More importantly is to keep your urine flowing freely, drink plenty of fluids during the day (8-10 glasses). The type of fluid (except alcohol) is not as important as amount. Water is best but juices, tea and soda are all acceptable.

BLADDER NECK CONTRACTURE

A bladder neck contracture is a constriction of the opening between the bladder and the urethra. This may be caused by excessive scar tissue that builds up in the urethra or bladder neck and occurs in about 2 to 10% of prostatectomy patients. A bladder neck contracture may make it difficult or impossible for the patient to urinate. Call the office at 214-691-1902 if you have trouble urinating. You will need to come to the office to be evaluated. If the office is closed you may need to go to the emergency room.

If appropriate in your case, the surgeon will attempt to spare the two nerve pathways that control the blood vessels in the penis. These nerves are situated in a narrow channel between the prostate and the rectum. They act as "gatekeepers" that open the arteries in the penis so blood can fill its chambers.

FOLLOW UP WITH THE UROLOGIST

It is important for you to be followed closely by your urologist. Frequent follow up visits to have your PSA checked are important to find out if your cancer has recurred. The prostate gland (or prostate cells) make a substance known as PSA (prostate-specific antigen). Once the prostate gland has been removed you should have an undetectable PSA value (<0.05 ng/ml or < 1.0 ng/ml), depending on the machine used to analyze the blood). If you have a detectable PSA this doesn't necessarily mean your prostate cancer has spread but you should discuss this with your physician. If the PSA continues to rise you may need additional diagnostic tests or treatment. It is best to have the PSA drawn in the same lab each time as the value may vary slightly from lab to lab.

Your physician may want to see you at the following intervals to check the PSA unless you have other issues that you need to discuss: 3 months, 9 months, 12 months, 18 months, 24 months after the radical retropubic prostatectomy. If you do have a PSA drawn by another physician please make sure they forward a copy of the PSA results to your urologist so it may be entered in your medical record.

PROBLEMS YOU SHOULD REPORT TO THE UROLOGIST - CALL 214-691-1902

- Fevers over 101 degrees Fahrenheit as this may be a sign of infection
- Heavy bleeding or clots in the urine
- Calf or thigh pain or swelling as this may be a sign of a blood clot
- Difficulty breathing or chest pain as this may be a sign of a pulmonary embolus or heart attack
- Skin rash or hives as this may be signs of potential medication reactions
- Nausea, vomiting, diarrhea which may be a sign of infectious diarrhea
- **Call immediately** if your catheter stops draining completely or falls out

FREQUENTLY ASKED QUESTIONS ABOUT SURGERY

How much pain will I have after surgery? Patients often require small amounts of intravenous and/or oral narcotic pain medication during their hospital stay but often use only extra strength Tylenol once discharged from the hospital.

How long is the hospitalization? The usual stay is 1-2 days and patients are able to walk the following day under their own power.

How long will I have the urinary catheter? Removal of the catheter will be dependent on the surgeon's particular preference. In general it will be removed approximately 2 weeks following surgery.

When can I return to normal activities? Most patients return to full activities by 3-4 weeks after surgery. However, urinary control and sexual function may take months and even up to a year to improve significantly.

What is my chance of urinary incontinence? Most men experience at least some degree of stress incontinence (e.g. when sneezing or coughing). This generally improves with time and vigilance in performing Kegal exercises.

What is my chance of erectile dysfunction? This is perhaps the most difficult outcome measure to predict. Many factors are involved in the return to sexual function following surgery including age, having an active partner, whether one or both nerve bundles were spared, and time since surgery. Once the nerves have healed, it is important to stretch the penis through an erection to prevent shortening that may occur from a lack of use.

REHABILITATION OF SEXUAL FUNCTION AFTER RADICAL PROSTATECTOMY

Return of sexual function depends on several factors:

- Patient age
- Medical illnesses
- Medications
- Sexual function prior to surgery

During the postop period it is important to use devices, pills or injectons to cause the penis to become erect to prevent shortening of the penis.

You should refrain from sexual activity for the first 6 weeks postop. Two weeks after surgery when you return to have your catheter removed you will have a discussion with Dr. Fulgham regarding options for sexual rehabilitation. When possible Dr. Fulgham will attempt to spare the penile nerves at the time of surgery (called nervesparing). Even if one or both nerves are spared it may take a year to 18 months for erectile function to return. The reason for this is that the nerves, even if preserved, may be traumatized, and nerves heal very slowly.

The successful return of sexual function depends on several factors such as patient age, other medical illnesses and medications they may be taking, and whether or not they had good sexual function prior to surgery. Sexual function naturally declines with age in most patients and many patients who have not had a prostatectomy require devices or drugs to help with erectile function.

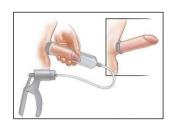
During the time while you wait for the nerves to heal it is important to use devices, pills or injections to cause the penis to become erect, even if you aren't able to successfully carry out intercourse. It is important to stretch the penis through an erection to prevent shortening that may occur from a lack of use. The penis may become shorter and never return to its previous length if no attempt is made to increase blood flow during the rehabilitation period.

VACUUM ERECTION DEVICE (VED):

A plastic cylinder is placed over the penis. Using a small hand pump, air is pumped out of the cylinder causing a partial vacuum which draws blood into the penis and creates the erection. Once the erection is obtained, a tension ring is applied to the base of the penis. This acts like a tourniquet to keep the blood in the penis and to maintain the erection. After sex, the ring is removed and the blood flows out. Even though the penis is filled with blood it will feel cool to the touch. Some patients have difficulty operating the VED. There are educational materials that can be very helpful in learning how to use the device.

ORAL MEDICATIONS:

Phosphodiesterase inhibitors (PDE5) are oral medications that cause blood to flow into the spongy tissue of the penis upon sexual stimulation. These medications include sildenafil (Viagra), tadalafil (Cialis), and vardenafil (Levitra). Patients that take nitrates (e.g. nitroglycerin) or alpha blockers (e.g. Flomax) may not be able to take these drugs. None of these drugs work automatically – they all require sexual stimulation. Each of them works a little differently, have side effects, and need to be used according to instructions in order to work properly. A daily low dose of Cialis may be prescribed. However, Cialis is expensive and insurance may not cover it. If, so then sildenafil (Viagra) 100 mg taken twice a week for the 3 months following surgery, then on-demand is a less expensive option. **Side effects:** All of the drugs may cause headaches, muscle aches, nasal stuffiness and/or a blue tinted vision. **Alert:** Some studies have reported that PDE5 drugs may be associated with increased risk of developing melanoma. However, these are only observational studies. As a precaution be sure to have an annual check-up with your dermatologist and alert your dermatologist or primary care doctor of any suspicious skin lesions.



Warning: The use of PDE5 drugs can be dangerous if taken with nitrates (nitroglycerin) or alpha blockers (i.e. Flomax).