

FAQs: Prostate Cancer Treatment

WHAT ARE THE TREATMENT OPTIONS FOR PROSTATE CANCER?

There are five main types of options for treating prostate cancer.

- **Watchful Waiting or Active Surveillance**

Those patients who choose not to treat their cancer can be actively followed with the hope that their cancer may not progress.

Surveillance usually consists of PSA monitoring and periodic biopsies every one to two years or so. This option is more appropriate for older men, men with less than a 10-year life expectancy, men with medical problems making treatment unsafe and men with less aggressive cancers that are less likely to progress. Some men may pass away from other medical conditions before their prostate cancer needs treatment, and most cancers that progress and become more aggressive can still be cured, as long as the cancer has not yet spread.

- **Surgery**

This treatment option involves removal of the prostate, which Dr. Abaza performs in a minimally invasive procedure using robotic surgery. Only with surgery can the prostate and cancer be removed from the body entirely. Because prostate cancer is usually multifocal, and biopsies can miss small areas of cancer, the entire prostate is always removed to ensure that no cancer is left behind. The function of the prostate is to make a portion of the fluid in semen for reproduction, so men who are not planning to have more children do not need the prostate, and no hormone replacement is needed after the prostate is removed, as it does not make hormones. After removal of the prostate, there is no fluid expressed at orgasm (ejaculation).

- **Radiation**

This is performed by a radiation oncologist. Radiation can be delivered to the prostate using external beam radiation on a daily

basis for six to eight weeks or by surgically placing radioactive seeds in the prostate (brachytherapy) that give off radiation over weeks to months.

- **Hormonal Therapy**

This treatment is not curative but instead typically puts prostate cancer into remission for some period of time. It is commonly used in men who have prostate cancer that has already spread to other parts of the body and cannot be cured by surgery or radiation. It is also reserved for those who do not want any of the curative treatments.

- **Experimental Therapies**

There are treatments for prostate cancer that have yet to be proven, such as high-intensity focused ultrasound (HIFU), cryotherapy (freezing) and proton therapy. Patients interested in these options can be referred to other physicians who offer such options or who offer therapies on clinical trials.

WHAT FACTORS COULD I CONSIDER WHEN DECIDING TO CHOOSE BETWEEN RADIATION AND SURGERY?

Both surgery and radiation are reasonable options for most men, and for many, the decision is more personal than medical.

Medical considerations include:

- Brachytherapy is not an option for some of the more severe cancers. Some prostates are too large for any type of radiation, while this is not a limitation for surgery.
- Some men have urinary symptoms due to an enlarged prostate, which can make surgery a better option, as radiation will temporarily make urinary symptoms worse and rarely can even lead some men to be unable to urinate. Removal of the prostate in men with enlargement of the prostate will often relieve some but not all urinary symptoms.

- Some men have too many medical problems to be able to safely undergo surgery. There is no age limit for surgery, as this depends more on health than chronological age.
- Many men ask what options they have if surgery or radiation should fail. Both treatments will fail if patients have cancer that has already spread to somewhere else in the body, in which case they would have the option of hormonal therapy as a common first therapy.
- If radiation fails locally (not all the cancer in the prostate is destroyed), more radiation cannot be given, and the surgery to remove the prostate is rarely performed, due to the severe complications and side effects from scarring around the prostate after radiation. While younger men are usually more concerned about this possibility of radiation failure from a few cancer cells surviving and growing during the next 20 years of their lives, this should not be a major consideration for most men, as most cancers seem to respond to radiation with a low rate of recurrence at 10 to 15 years post therapy.
- If surgery fails locally (microscopic cancer comes back where the prostate used to be), radiation can still be given. Many men feel more comfortable choosing surgery as primary therapy, knowing after surgery they can still receive radiation if they need it, as opposed to the more difficult problem of radiation failure when it occurs, but again, most cancers will not need secondary treatment (radiation after surgery or surgery after radiation) unless they are more aggressive or advanced cancers.

Personal considerations include:

- Some men do not like idea of surgery and prefer radiation to avoid general anesthesia (going to sleep), although this is still a part of brachytherapy (seeds).
- Some men do not like the idea of surgery because of the scars and pain involved, even though this is typically mild with robotic surgery.

- Some men feel better knowing that the cancer has been physically removed from the body, which can only be done with surgery.
- Also, the lymph nodes are removed with surgery to detect microscopic spread of cancer, as the lymph nodes are typically the first place that prostate cancer spreads.
- Some men prefer to know this after surgery, since the lymph nodes cannot be removed and analyzed microscopically with radiation.
- Some men prefer to have all the side effects of treatment up front, so that they know they will just get better from there, while others prefer the side effects come slowly, so they can adjust with them. The side effects of surgery are immediate after surgery, while with radiation they tend to come weeks to months later, with varying severity and duration from person to person.
- Some men want a treatment where they will have more immediate feedback on the success of the therapy. While radiation may take a year or longer before success can be determined, due to the slow way radiation works on the prostate, the PSA should be undetectable by three months after surgery, and the prostate and lymph nodes will be reviewed microscopically as well.
- Some men are more comfortable with bowel side effects, and some are more comfortable with bladder side effects. There is more risk of bowel side effects with radiation (see below), whereas with surgery most men will experience at least temporary incontinence (leakage of urine).

WHAT ARE THE POSSIBLE SIDE EFFECTS OF RADIATION?

To effectively radiate the entire prostate and kill all cancer cells, some dose of radiation will reach the tissues and organs around the prostate. This includes the nerves that allow erections for sexual function, such that impotence occurs after radiation with approximately the same frequency as surgery. Also included are the organs closest to the prostate, which are the bladder and rectum.

Side effects from radiation to the bladder and rectum can include urgency of urination, burning with urination, blood in the urine, diarrhea, painful bowel movements or blood in the stool. The severity and duration of side effects

depend on the radiation delivery technique and sensitivity of the individual patient to radiation. Some patients have mild side effects for a couple weeks, while rarely some can develop severe inflammation and scarring that can last months to years or require surgical intervention.

WHAT ARE THE POSSIBLE SIDE EFFECTS OF SURGERY?

The two major possible side effects are:

- Impotence due to the effect on the same nerves affected by radiation that allow erections
 - The difficulty with erections for sexual function typically lasts six to 12 months and is permanent in some men, as with radiation.
- Incontinence or leakage of urine.
 - The leakage of urine is typically dribbling between urinations, especially with coughing or sneezing similar to what many women experience after having children. Most men will wear a pad in their underpants to catch any urine that leaks until they regain complete control. This typically takes one to three months but can take longer or can be immediate in some men. Kegel exercises are recommended and will speed recovery of control if done as recommended.

WHAT IS "NERVE-SPARING," AND WHAT AFFECT DOES IT HAVE ON SEXUAL FUNCTION?

"Nerve sparing" refers to the nerves that travel along the prostate to the penis and are necessary for erections. If the nerves are spared, men will undergo erectile rehabilitation starting the week after surgery to maximize return of function of these nerves, although it will typically take several months for erections to be good enough for sexual activity. Even with nerve-sparing, some men will not regain erections that are as good as before surgery, or may need Viagra, but most men will achieve erections adequate for sex. Younger men and men with good erectile function before surgery typically have better results after surgery, while men already needing Viagra before surgery typically have a lower chance of regaining erections they can use.

Some men will choose not to have a nerve-sparing surgery. Because the nerves responsible for erections course very closely to the capsule or edge of the

prostate, saving the nerves involves a "close shave" on the edge of the prostate that risks leaving microscopic cancer behind if the cancer is close to the edge or growing through the capsule or "peel" of the prostate. Men who are already impotent typically choose non-nerve sparing surgery, as this allows for a wider resection of tissue around the prostate and improves the chances of getting all of the cancer out. Men who have severe cancers will typically choose not to spare the nerves, unless they are willing to take more risk of not being cured by the surgery to maintain sexual function. For example, a man with a favorable risk cancer and only a 10% risk of having invasive cancer might be comfortable choosing nerve-sparing, while a man with a more severe cancer and 50% risk of invasive disease might decide not to take the risk and choose non-nerve-sparing.

Those who choose not to save the nerves will not be able to have natural erections, but sensation to the penis and ability to have orgasms will not be affected as a separate set of nerves are responsible for this. There are other treatments available to these men to resume sexual activity, even if natural erections cannot be achieved (Viagra will not work, but injections or a vacuum pump can be used, for example).

WHAT IS THE TYPICAL COURSE FOR A MAN HAVING ROBOTIC SURGERY?

Men choosing robotic surgery will come to the hospital on the day of surgery. The surgery lasts about two hours but can take longer in overweight men or those with scarring from previous surgery. Most men can go home the same day as surgery while if there are any unforeseen issues, they will be able to stay overnight in the hospital. They will be walking the day of surgery and start drinking liquids followed by regular food when they feel ready, as some men will still feel the effects of the anesthesia drugs until the next morning. A catheter is left in the bladder to drain the urine until the bladder heals from the removal of the prostate; it will be removed the week after surgery, and an X-ray may be done before removing the catheter in some patients to confirm healing.

Activity at home is not limited in terms of walking or using stairs, but men should not be involved in any strenuous activity for six weeks after surgery to allow healing, which includes lifting anything over 10 lbs. Many men may want to stay home during the first week, while they have a catheter, but they don't necessarily have to do so, as they will have a leg bag that can be worn under pants and is undetectable. Men with sedentary jobs (desk job) can work from home right away or go back to work after the first week, if feeling able, but men with physically challenging jobs, such as construction, landscaping or factory work, are asked to

take six weeks off. If you have questions about going back to work part-time or on light duty sooner, please ask Dr. Abaza.

IF I CHOOSE SURGERY, WHAT WILL HAPPEN AFTER MY OFFICE VISIT WITH DR. ABAZA?

If you decide to proceed with surgery after your visit with Dr. Abaza, the office staff will promptly schedule your surgery. If possible, you may also be able to complete your preoperative testing the same day, including blood work, EKG and meeting with the anesthesia staff to make sure you are safe to have surgery. Once you complete this testing, you will not need to return until the day of surgery.

WHAT WILL MY FOLLOW-UP VISITS BE LIKE AFTER SURGERY?

Typical follow-up visits include the following:

- About 1 week after surgery, the catheter is removed.
- Three weeks later, you'll visit with Dr. Abaza or have a virtual visit to review the pathology report from surgery.
- Three months later, you'll visit with Dr. Abaza to review your recovery and first PSA blood test.
- Six months later and beyond, you'll have a PSA blood test every three months for the first year after surgery and then less frequently, but you will not need to see Dr. Abaza indefinitely. In most cases, when patients are doing well with cancer control, urine control and sexual function, they will be released to follow up with their local urologist after the three-month visit with Dr. Abaza. Dr. Abaza works closely with your local urologist, and our main goal is to get you back to your urologist as quickly as possible. Dr. Abaza will be available, if needed, any time afterward. For patients traveling by plane for their surgery, coordination with your local urologist will be arranged for follow-up, so you will likely not need to return to Ohio after the catheter is removed at one week.

HOW MANY ROBOTIC SURGERIES HAS DR. ABAZA PERFORMED?

Dr. Abaza's practice is limited to only robotic surgery. He has performed robotic surgery since 2006 and exclusively since 2008. He has performed more than

6,000 robotic procedures and performs approximately 500 annually. Although Dr. Abaza is fully trained in open prostatectomy, he has never had to convert a robotic procedure to open surgery due to inability to complete the procedure or for complications. Many men who have been denied robotic surgery elsewhere have successfully undergone robotic surgery with Dr. Abaza, so even men who have been told they cannot have robotic surgery should discuss this with Dr. Abaza before making a treatment decision.

WHO IS ON DR. ABAZA'S SURGERY TEAM?

Dr. Abaza works with a team of nurses and other surgical assistants who he has trained to assist him in robotic surgery. These team members specialize in robotic surgery, just as Dr. Abaza does.