

Prostate Cancer

- Introduction 1
- Who gets Prostate Cancer? 1
- How do we detect prostate cancer? 2
- How do we diagnose prostate cancer? 2
- How do we stage prostate cancer? 2
- How do we grade prostate cancer?..... 2
- Choosing the best treatment..... 2
- What is active surveillance and watchful waiting?..... 3
- What are treatment options?..... 3
- Treating Metastatic Prostate Cancer..... 3

Introduction

You are not alone. Prostate cancer is the most common non-skin cancer in America; 1 in 8 men will be diagnosed with prostate cancer. More than 161,000 men in the United States will be diagnosed with prostate cancer this year.

Each man’s prostate cancer journey is unique. Every man diagnosed with prostate cancer will make very personal and individualized decisions about treatment according to his unique case and experience.

This packet of information is intended to help you make these decisions.

Who gets Prostate Cancer?

1 in 8 men will be diagnosed with it at some point in their lives.

The older you are, the more likely you are to be diagnosed with prostate cancer. 60% of all prostate cancers are diagnosed in men over the age of 65.

African American men are 73% more likely to develop prostate cancer compared with Caucasian men and are 2.4 times as likely to die from the disease.

Men with a relative with a history of prostate cancer are twice as likely to develop the disease, while those with two or more relatives are 4 times as likely to be diagnosed. The risk is even higher if the affected family members were diagnosed at an early age.

Although genetics might play a leading role in deciding why one man might be at higher risk than another, social and environmental factors, particularly diet and lifestyle, also effect risk. Obesity can have a negative effect on outcomes.

How do we detect prostate cancer?

The PSA blood test and Digital Rectal Exam (DRE) are the tools to detect prostate cancer when no symptoms are present. They can help catch the disease at an early stage when treatment is thought to be more effective and potentially has fewer side effects.

During a DRE, the physician inserts a gloved, lubricated finger into the rectum and examines the prostate for any irregularities in size, shape, and texture.

During a PSA test, a small amount of blood is drawn from the arm, and the level of PSA, a protein produced by the prostate, is measured. In prostate cancer the PSA is usually elevated above a normal level for a man's age. The PSA is not cancer specific and can be elevated for non-cancerous reasons.

In some men, changes in urinary or sexual function prompt a full evaluation, and, if prostate cancer is suspected, a biopsy will be performed

How do we diagnose prostate cancer?

Prostate Cancer is detected only by doing a biopsy of tissue with a review of the biopsy by a pathologist. During a biopsy, needles are inserted into the prostate to take small samples of tissue. The most common way to do a prostate biopsy is trans-rectal, inserting the ultrasound probe into the rectum and taking the biopsies through the rectal wall.

How do we stage prostate cancer?

Prostate cancer can be divided into cancers that are still within the prostate and those cancers that have advanced beyond. Localized prostate cancer means that the cancer is confined within the prostate. Localized prostate cancers are Stage 1 and 2 prostate cancers. Locally advanced prostate cancer means that most of the cancer is confined within the prostate, but some have started to escape to the immediate surrounding tissues. Locally advanced prostate cancer is stage 3. In metastatic disease, prostate cancer has grown beyond the prostate and its immediate environs, into the lymph nodes, and to more distant organs. Metastatic prostate cancer is stage 4.

How do we grade prostate cancer?

Prostate cancer is found when looking at the biopsied tissue under the microscope, the pathologist assigns a Gleason score or a Grade Group to the cancer cells depending on how aggressive the cells appear. A Gleason score ranges from 6 to 10 and correlates with the Grade Group, with ranges from 1 to 5.

Choosing the best treatment.

Treatment options for prostate cancer is based on the man's age, the stage and grade of the cancer, the man's general health and life expectancy, PSA, MRI findings, voiding status/AUA symptom score, Sexual Function, National Comprehensive Cancer Network Risk Category, and the man's evaluation of the risks and benefits of each therapy option.

A man diagnosed with localized or locally advanced prostate cancer has three major treatment options: active surveillance, surgery, and radiation.

A man with metastatic disease will be treated with hormone therapy, chemotherapy, and radiation.

What is active surveillance and watchful waiting?

During active surveillance, the cancer is carefully watched for signs of progression. A PSA blood test and DRE are usually administered every six months along with a yearly biopsy of the prostate. If symptoms develop, or if tests show that the cancer is growing, treatment might be warranted

What are treatment options?

Radiation therapy. We discussed that this may be given in various methods but is also typically given in conjunction with a course of androgen deprivation therapy. The goal of radiation is to treat the cancer in the prostate and avoid radiation risk to surrounding structures. We discussed the risks of radiation therapy including radiation cystitis and proctitis, secondary malignancy risk, erectile dysfunction, irritative voiding symptoms or hematuria, and delayed complications from radiation treatments.

Radical Prostatectomy or surgical removal of the prostate, seminal vesicles, and lymph node dissection. The goal is to remove the prostate and seminal vesicles and all the cancer. The risks of the procedure include bleeding, infection, lymphocele formation, injury to surrounding structures (large vessels, small and large bowel, the rectum, and surrounding nerves), anesthetic risks, postoperative erectile dysfunction, and postoperative urinary incontinence. The expected postoperative course includes an overnight hospital stay, the need for an indwelling catheter for typically about 1 week after surgery and about 3-4 weeks after surgery of limiting activity.

Alternative options discussed include HIFU, cryotherapy and treatment with focal treatments. I will not detail those treatment options here.

Treating Metastatic Prostate Cancer.

If prostate cancer is diagnosed after it has spread beyond the prostate and its immediate environs or if the cancer returns after surgery or radiation, treatment with hormone therapy to lower testosterone levels is typically started. Because prostate cancer growth is fueled by testosterone, these therapies—such as drugs that stop the production or effects of testosterone—can make prostate cancer shrink or grow more slowly. If the cancer has spread widely beyond the prostate area and/or if the PSA continues to rise despite hormone therapy, chemotherapy is often used to kill the circulating cancer cells. In selective cases radiation or even surgery can be used to mitigate symptoms from metastatic disease.

Good luck on your journey,

Dr Todd Brandt