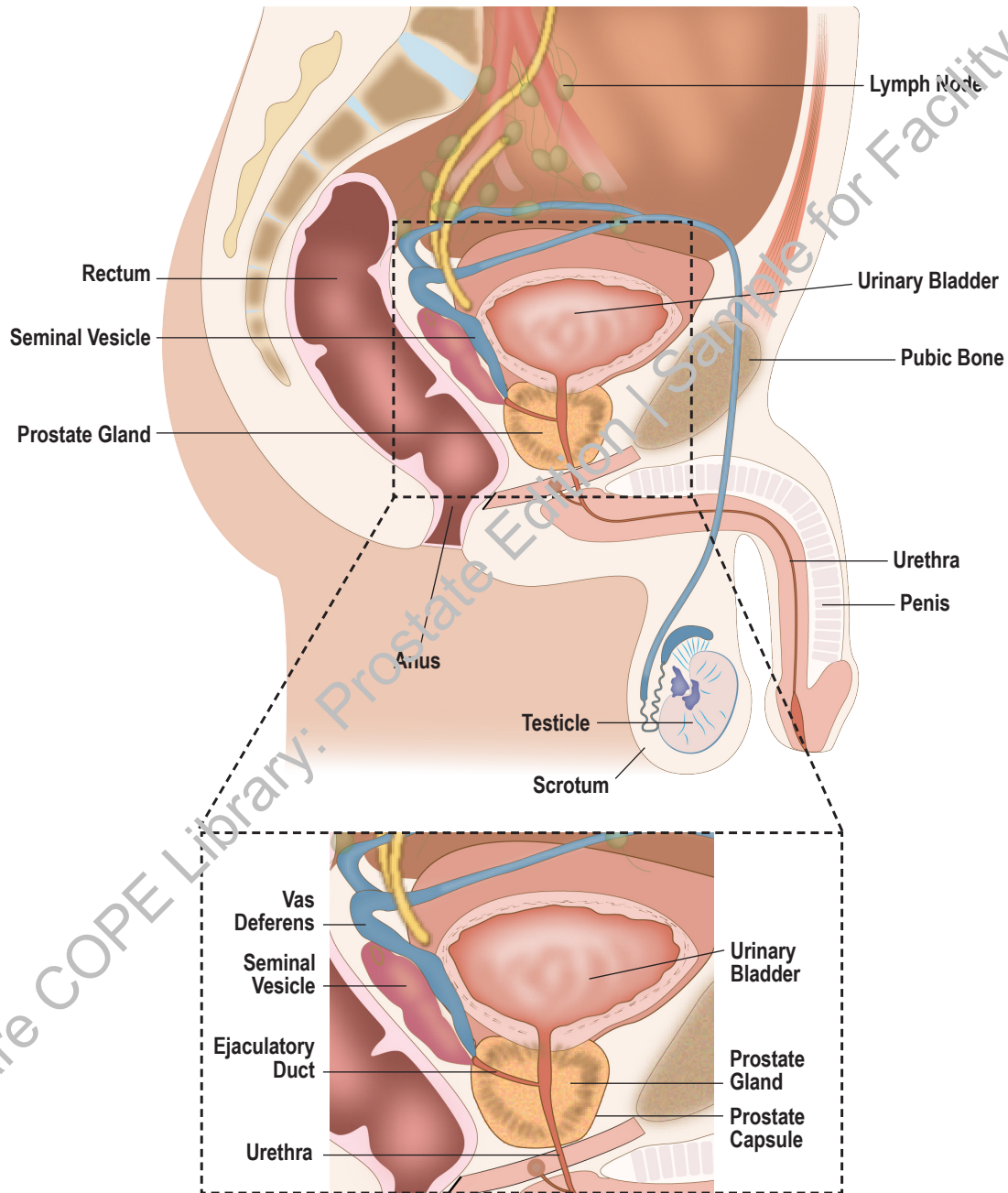
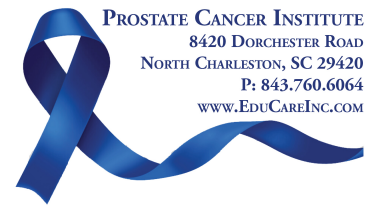


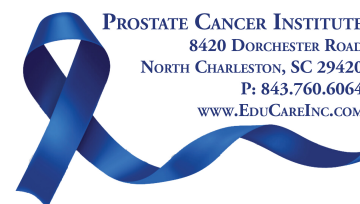
Prostate Gland

SAMPLE CUSTOMIZATION:



Causes of Urinary Incontinence

SAMPLE CUSTOMIZATION:



Urinary leakage or incontinence is common to many men. However, it can be a source of embarrassment and disruption to your social life. It is important to remember that there are numerous options available to manage or eliminate these symptoms. If you are experiencing these issues, it is highly recommended to seek an evaluation from a urologist. The urologist can identify the underlying cause and provide suitable treatment options to help you manage or regain control of your bladder.

What Causes Urinary Problems?

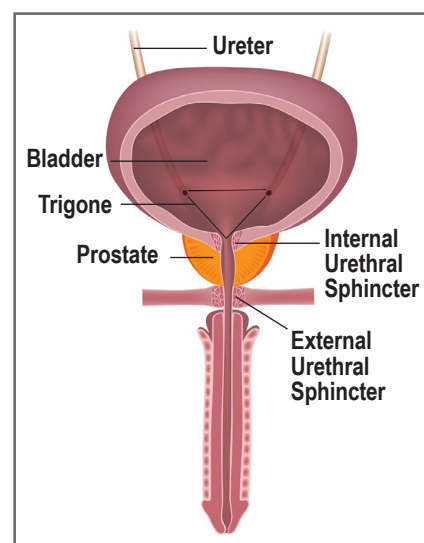
Incontinence, short-term or long-term, is caused when different physical conditions directly impact the bladder, prostate gland, or urinary sphincters.

Understanding The Role of Urinary Sphincters

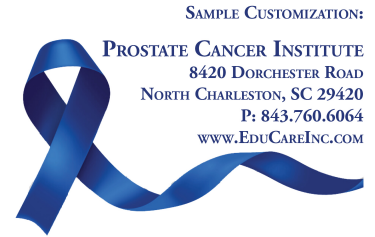
Urinary sphincters are the primary control valves that regulate urine flow. There are two sphincters, an internal sphincter and an external sphincter, that control the release of urine from the bladder.

The internal sphincter, made of smooth muscle, is under involuntary control, meaning it operates unconsciously. The external sphincter, on the other hand, is under voluntary control, meaning it operates consciously. When both sphincters are relaxed, urine passes from the body through the urethra. When the urinary sphincter muscles contract, the flow of urine stops or slows. Dysfunction in these muscles, caused by nerve or muscle damage, can lead to urinary leakage or complete incontinence.

Inside the bladder is an area called the trigone, a triangle-shaped area of smooth tissue that acts as a sensor to detect the amount of bladder filling. As the bladder fills with urine, the trigone stretches and sends signals to the brain when you need to urinate. The internal sphincter relaxes automatically when the bladder is full. The external sphincter control is under conscious control and must be relaxed voluntarily to allow urine to pass. The urinary sphincters remain relaxed for only a short time (only a few seconds) to allow urine to pass before they close automatically. This creates a problem if the bladder has not completely emptied during this time of relaxation causing the need to urinate frequently. This condition is evidenced by having a weak urinary stream during urination. It is suggested that when urinary frequency is a problem, you wait several seconds after urinating and consciously send the message to the external sphincter to relax again. This is called double voiding and reduces the amount of urine in the bladder and increases the time before needing to urinate again.



Causes of Urinary Incontinence

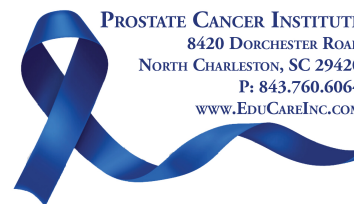


Physical Conditions Causing Urinary Leakage or Incontinence:

- **Benign Prostatic Hyperplasia (BPH):** When the prostate gland enlarges, it compresses the urethra and makes it difficult for the bladder to completely empty. This is evidenced by a weak urinary stream, a sudden strong urge to urinate, and a need for frequent urination. The tube carrying the urine from the bladder is similar to a pinched garden hose.
- **Prostate Cancer Surgery and Cancer Treatments:** A prostatectomy to remove the prostate gland damages the nerves and muscles that control the urinary sphincters and causes either short-term or long-term incontinence. Cancer treatments such as radiation therapy and ablative therapies (internal therapies to destroy cancer in the prostate only) cause damage to the nerves and sphincters that alter urinary flow, either short-term or long-term.
- **Diabetes:** Impacts the nerves controlling bladder function and can cause urine leaking and lead to complete incontinence.
- **Normal Aging:** As men age, the muscles of the urinary sphincters weaken and the ability to control urine flow decreases. Older men often develop an enlarged prostate, which compounds the problem of urine control because of pressure on the urethra, which narrows the urinary tube.
- **Obesity and Lifestyle Factors:** Excess weight puts additional pressure on the bladder and pelvic floor muscles, increasing the risk of urine leakage. Smoking and alcohol consumption also increase the risk.
- **Urinary Tract Infections and Bladder Stones:** Urinary tract infections irritate the bladder and lead to temporary incontinence. Similarly, bladder stones can obstruct urine flow and cause incontinence until the stones are removed.

If you have urinary leakage or urinary incontinence, a urologist will thoroughly evaluate your urinary function and physical health to determine the cause and prescribe medication or treatments to reduce or eliminate the cause.

Additional Information



Benign Prostatic Hyperplasia (BPH) Medication

After a diagnosis of benign prostatic hyperplasia (BPH), medications are available to relieve discomfort by shrinking the prostate and/or improving urine flow.

When the prostate enlarges, it compresses the urethra (urinary tube) and causes urinary symptoms. These include urgency, frequency, difficulty starting the urinary stream, a slow stream, and a feeling that your bladder is not empty after urination.

Alpha-blocker medications improve urinary flow. Medications include alfuzosin (Uroxatral®), terazosin (Hytrin®), doxazosin (Cardura®), silodosin (Rapaflo®) and tamsulosin (Flomax®). 5-Alpha-reductase inhibitors reduce the prostate size and include finasteride (Proscar®) and dutasteride (Avodart®). A combination of drugs may be needed to alleviate the discomfort of BPH.

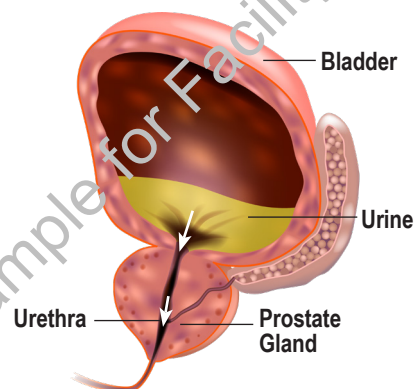
Drug Therapy Potential Side Effects:

- Potential dizziness or lightheadedness
- Fatigue
- Ejaculation difficulty
- Reduced sex drive
- Inability to have an erection
- Drop in blood pressure when moving from sitting or lying down to standing

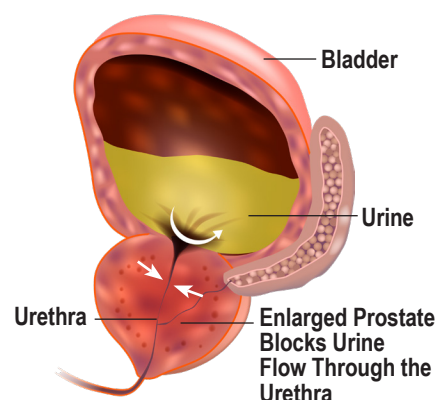
Your doctor will monitor the effectiveness of the medications to determine if your symptoms decrease. An evaluation will be made as to whether you consider your symptoms acceptable, or if additional treatment should be considered.

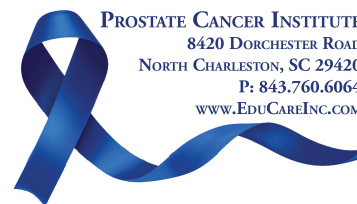
Additional Information:

Normal Prostate



Benign Prostatic Hyperplasia (BPH)



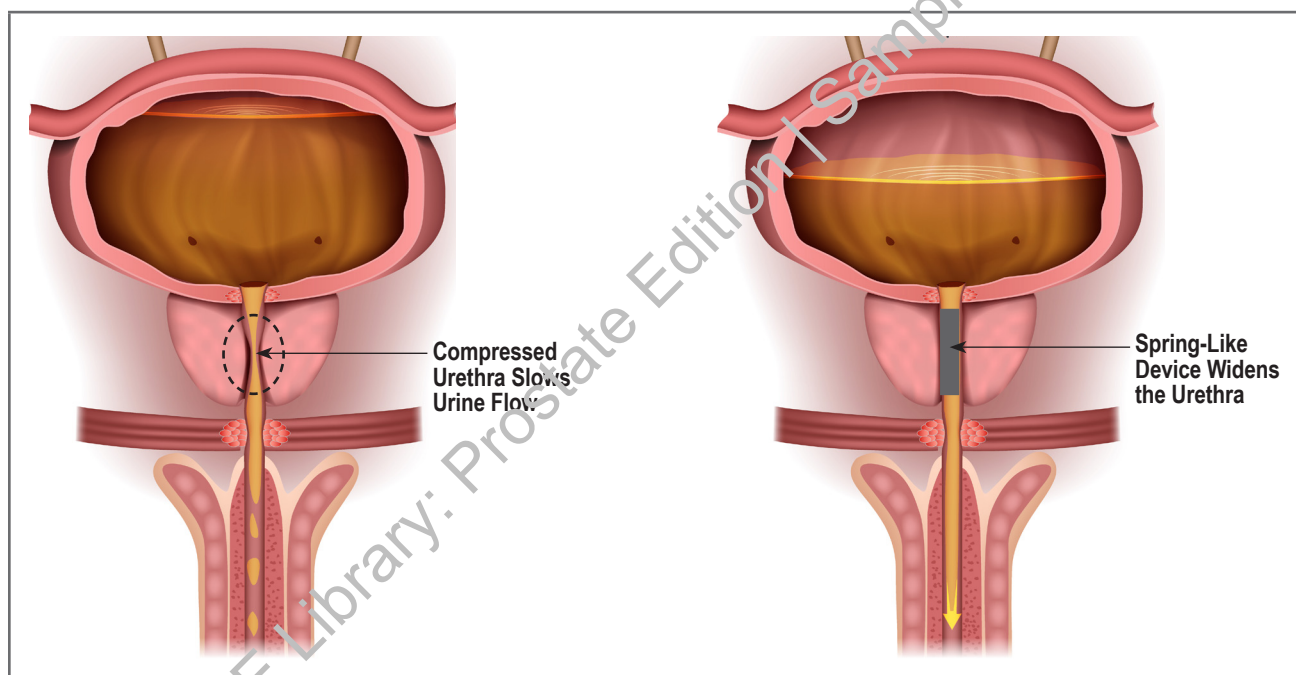


Prostatic Stent

A prostatic stent is a device to either permanently or temporarily open the male urethra to increase urine flow.

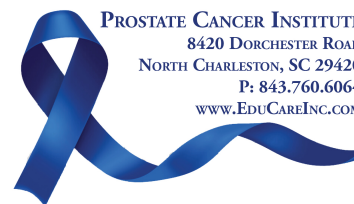
Prostatic stents are most often used for patients with medical problems that prohibit medication or surgery.

A prostatic stent is a tiny, spring-like device inserted into the urethra to open it up. When expanded in the urinary tube, it pushes back the surrounding tissue and widens the urethra, allowing urine to flow freely.



Procedure:

- A prostatic stent procedure is performed by a urologist in the urologist's office.
- A local numbing medication is passed into the urethra before the procedure begins.
- A cystoscope instrument is inserted through the penis to examine the bladder and urethra. The cystoscope identifies the area and extent of urethra compression.
- An appropriate length stent is placed into the urethra to allow urine to pass freely.
- The cystoscope instrument is withdrawn leaving the stent in place.
- Before you are allowed to go home, you will be assessed for your ability to both pass urine freely and hold urine in your bladder.



Prostatic Stent

After the Procedure:

- You may see a small amount of blood in your urine for several days.
- You will have some discomfort and soreness after the procedure. You can take Tylenol® or medications prescribed by your doctor to relieve pain.
- You can resume nonstrenuous normal activities the same day.

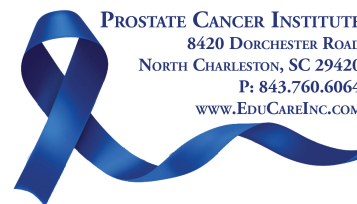
Report to Healthcare Provider Immediately or Seek Emergency Care If:

- There is bright red blood in your urine
- You are unable to pass urine (urinary retention)
- You are unable to control your urine (incontinence)
- You have signs of infection: fever over 100.4° F; chills; burning or painful urination

Warning:

After a prostate stent is placed, you will be given a medical device card with the stent details. It is important to keep this card with you in case of an emergency. If you need to have a catheter inserted, you can give it to the doctor to provide details of your stent. Only a small catheter can be passed through the stent.

Additional Information



Prostate Digital Rectal Exam

A **digital rectal exam (DRE)** is a brief physical exam that allows your healthcare provider to feel the prostate gland through the wall of the rectum. It is often performed along with a PSA blood test as part of prostate cancer screening.

Reasons for a DRE:

- Routine prostate cancer screening
- Evaluation of urinary symptoms, such as difficulty urinating or frequent urination
- Follow-up on an elevated PSA level
- Monitoring the prostate after treatment for prostate cancer or BPH

Before the Exam:

- No special preparation is needed.
- Tell your healthcare provider if you have hemorrhoids, anal fissures, or significant rectal pain, as this may affect the exam.

What to Expect During the Exam:

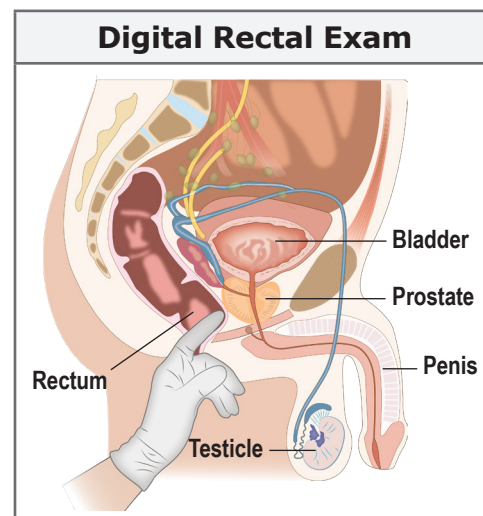
- You will be asked to bend forward over an exam table, or lie on your side with your knees drawn up, or lie on your back with your feet in stirrups.
- Your healthcare provider will insert a lubricated, gloved finger a short distance into your rectum.
- Your provider will feel the surface of the prostate for its size, shape, and texture, checking for any hard areas, lumps, or asymmetry.
- The exam typically takes less than a minute. You may feel brief pressure or an urge to urinate, but it should not be painful.

After the Exam:

- You may return to your normal activities immediately.
- Mild rectal discomfort or a small amount of blood on toilet tissue after the exam is normal and should resolve quickly.
- A DRE performed shortly before a PSA test may cause a temporary, mild rise in PSA.

What the Results Mean:

- A normal DRE does not rule out prostate cancer, since early cancer or cancer in certain areas of the prostate may not be felt during the exam.
- If your provider feels a lump, hard area, or irregular texture, additional testing such as a PSA test, prostate MRI, or biopsy may be recommended.



Multiparametric MRI (mpMRI) of the Prostate

A **Multiparametric Magnetic Resonance Imaging (mpMRI)** scan of the prostate is an advanced imaging study that combines multiple MRI techniques to create highly detailed pictures of the prostate gland. The test helps healthcare providers identify suspicious areas that may contain prostate cancer and determine whether the cancer may have extended beyond the prostate gland into nearby tissue.

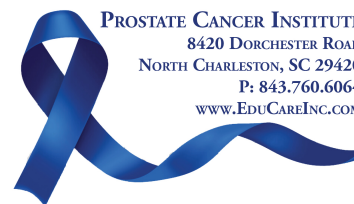
An mpMRI is often performed before a prostate biopsy, after an abnormal PSA test or digital rectal exam (DRE), or to monitor men on active surveillance for prostate cancer.

Preparing for the mpMRI:

- Wear comfortable clothing without metal fasteners.
- You may be asked to avoid eating for several hours before the exam.
- Some facilities recommend using a mild enema before the procedure to reduce motion from the bowel.
- Avoid sexual activity and ejaculation for at least 3 days (72 hours) before your exam, as recent ejaculation can cause changes that interfere with image interpretation.
- If you have recently had a prostate biopsy, your provider may schedule your mpMRI 6 – 8 weeks afterward, since biopsy-related bleeding can interfere with image interpretation.
- Inform your healthcare provider if you have:
 - A pacemaker
 - An implanted defibrillator
 - Metal clips, plates, screws, or implants
 - A history of kidney disease
- Claustrophobia (fear of enclosed spaces)
- A previous allergic reaction to MRI contrast (gadolinium)

During the mpMRI:

- You will lie on a padded table that slides into the MRI scanner.
- The scan uses radio waves and a strong magnetic field to create images. No radiation is used.
- A contrast agent (gadolinium) may be injected through an IV during the examination to improve visualization of blood flow and suspicious tissues.
- You will hear loud tapping or knocking sounds during the scan. Earplugs or headphones may be provided.
- You must remain as still as possible throughout the examination.
- The study typically takes 30 – 60 minutes.



Multiparametric MRI (mpMRI) of the Prostate

After the mpMRI:

- You may resume normal activities immediately unless sedation was administered.
- A radiologist will analyze the images and assign any suspicious findings a PI-RADS score, which estimates the likelihood that clinically significant prostate cancer is present.
- Drink plenty of fluids following the exam to help your body clear the contrast agent, unless your healthcare provider has instructed you to limit your fluid intake.

Potential Risks:

- Allergic reaction to the contrast agent (gadolinium)
- Rare risk of nephrogenic systemic fibrosis in patients with severe kidney disease who receive gadolinium contrast
- Bruising or discomfort at the IV site
- Anxiety or discomfort related to the enclosed scanner environment

Seek Emergency Care or Call 911 Immediately If You Experience:

- Difficulty breathing
- Swelling of the face, lips, or throat

Notify Your Healthcare Provider If You Experience:

- Rash, itching, or hives
- Persistent pain, redness, or swelling at the IV site

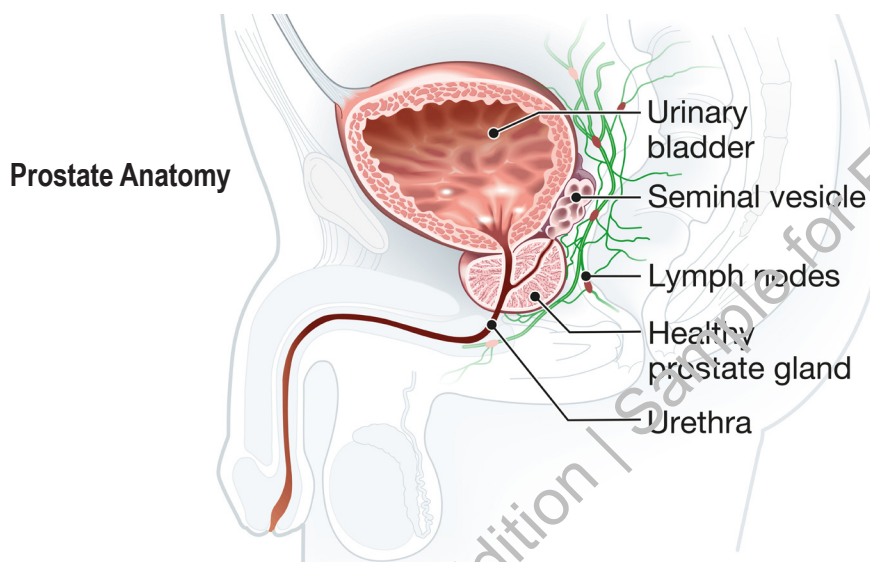
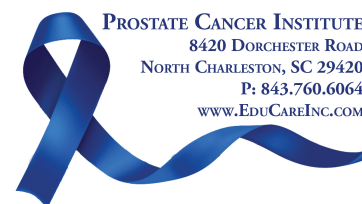
Results

A radiologist will analyze the images and assign any suspicious findings a PI-RADS score, ranging from 1 (very low likelihood) to 5 (very high likelihood), which estimates the likelihood that clinically significant prostate cancer is present. The results will be sent to your healthcare provider, who will discuss the findings and any recommendations for additional testing or biopsy.

Additional Information:

Prostate Cancer: Stage I

SAMPLE CUSTOMIZATION:



Understanding Cancer Staging

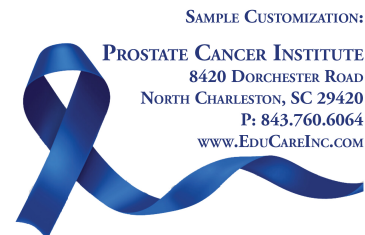
This cancer staging sheet is based on the American Joint Committee on Cancer (AJCC) 8th Edition. AJCCN uses TNM (**T**umor, **N**odes, **M**etastasis) criteria for determining the stage of a cancer. Stages range from I – IV. A stage number may further be subdivided with letters (a, b or c) when needed. *Example Stage IA.* Stage I is the least aggressive stage; Stage IV is the most aggressive stage.

Before the stage number, you may see the letter “c” or “p,” which indicates the information source for staging. The letter “c” indicates clinical staging based on the digital rectal exam, PSA, Gleason score and any imaging tests. The letter “p” indicates pathologic staging based on information confirmed by a pathologist after surgical removal of the prostate. *Examples: cT1a or pT3.*

This sheet also contains the Prognostic Stage Group information about your tumor. This stage group combines all the information known about a cancer into one of five categories. The Prognostic Stage Group combines information from the Gleason score, the prostate-specific antigen (PSA) level at diagnosis and the TNM staging information to determine the score. The Stage Group ranges from 1 – 5 and indicates the level of tumor aggressiveness. A Prognostic Stage Group of 1 is the least aggressive; a Prognostic Stage Group of 5 is the most aggressive. As a rule, the higher the number or letter in staging, the more aggressive the characteristics of a cancer.

Staging and Prognostic Stage groups allow healthcare providers to communicate complex information in a shorthand manner to accurately understand and expedite treatment discussions and decisions. This information is provided to help you understand the meaning of your staging information.

Prostate Cancer: Stage I

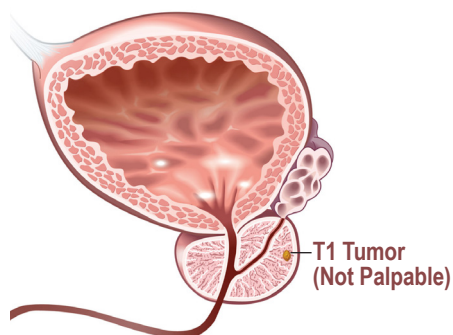


Stage I Prostate Cancer

Ask your healthcare provider to mark the box that describes your Stage I cancer below.

☐

Grade Group 1



Tumor: T1

- Tumor is not palpable (cannot be felt) during a digital rectal exam
- Tumor cannot be seen during an imaging exam
- Tumor diagnosed by:
 - Needle biopsy for elevated PSA level
 - OR
 - Incidental finding on another procedure such as TURP (transurethral resection of the prostate)
- Tumor characteristics:
 - ☐ **T1a:** Cancer found in less than 5% of tissue resected during biopsy
 - ☐ **T1b:** Cancer found in more than 5% of tissue resected during biopsy
 - ☐ **T1c:** Tumor found in one or both sides of prostate
- Gleason Score ≤ 6
- PSA < 10

Nodes (N0)

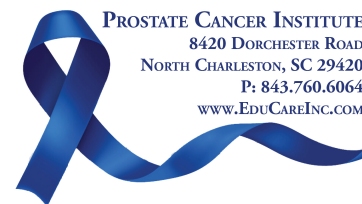
- Cancer has not spread to nearby lymph nodes

Metastasis (M0)

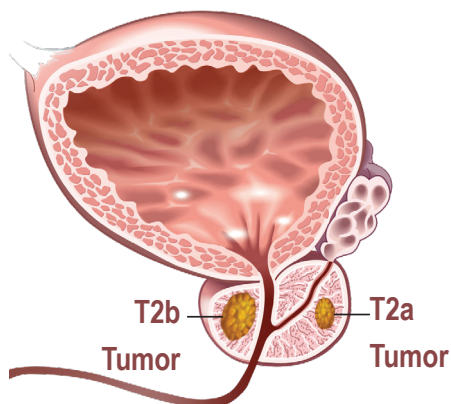
- Cancer has not spread outside the prostate

Prostate Cancer: Stage I

SAMPLE CUSTOMIZATION:



Grade Group 1



Tumor: T2

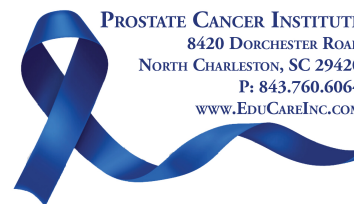
- Tumor can be felt during a digital rectal exam
- Tumor may be seen during an imaging exam
- Tumor diagnosed by:
 - Needle biopsy for elevated PSA level
 - OR
 - Incidental finding on another procedure such as TURP (transurethral resection of the prostate)
- Tumor characteristics:
 - ☐ **T2a:** involves one-half of one side or less
 - ☐ **T2b:** involves more than one-half of one side but not both sides
- Gleason Score ≤ 6
- PSA < 10

Nodes (N0)

- Cancer has not spread to nearby lymph nodes

Metastasis (M0)

- Cancer has not spread outside the prostate



Hormonal Therapy for Prostate Cancer

Treatment for prostate cancer includes medication that alters or stops the impact of naturally occurring hormones in the body. Male hormones are called androgens, with testosterone being the most abundant hormone in males. Because testosterone may help some cancers grow, a therapy called androgen deprivation therapy (ADT) can stop or block your cancer cells from using testosterone.

When testosterone is blocked by hormonal medications that cause a drastic reduction in testosterone levels, you may hear the term "castration," which means your testosterone is temporarily blocked. When or if the medication is stopped, the production of testosterone returns.

Surgical removal of the testicles, which are the major source of testosterone production in the male body, reduces testosterone to a very low level. The procedure is called orchiectomy and cannot be reversed.

Other medications that alter testosterone production in prostate cancer treatment are luteinizing hormone-releasing hormone (LHRH) agonists, which causes the testicles to stop making testosterone. These LHRH medications may be given monthly or 2, 3, or 4 times a year as an injection or by tablets taken 1 – 3 times daily depending on the medication.

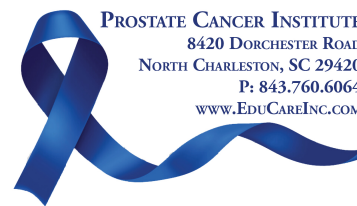
The side effects of hormone therapy depend on your age, your health before treatment, how long you take the medication and how often you take the medication.

Hormone Therapy Side Effects Include:

- Bone density loss that could lead to osteoporosis
- Bone fractures
- Weight gain
- Loss of muscle mass
- Increased potential to develop diabetes
- Increase in heart disease
- Fatigue
- Mood swings
- Breast enlargement
- Decreased sex drive
- Erectile dysfunction that does not respond to medication such as Viagra® and Cialis®
- Loss of body hair

Hormone Therapy Medications Commonly Used in Prostate Cancer Treatment:

- LHRH Agonist: Eligard® (leuprolide), Lupron Depot® (leuprolide), Trelstar® (triptorelin), Zoladex® (goserelin)
- LHRH Antagonist: Firmagon® (degarelix), Orgovyx® (relugolix)
- Anti Androgens: Casodex® (bicalutamide), Eulexin® (flutamide), Nilandron® (nilutamide)
- Corticosteroids: methylprednisolone, prednisone
- Androgen Synthesis Inhibitors: Zytiga® (abiraterone)



Urinary Incontinence After Prostate Surgery

Urinary incontinence, the unintentional leakage of urine, is a common and expected part of recovery after radical prostatectomy. It happens because the surgery affects the muscles and tissues that normally help control urine flow. For most men, this improves significantly over time, though the pace and degree of recovery vary from person to person.

Types of Incontinence After Prostatectomy:

- **Stress incontinence:** by far the most common type, this involves leakage during activities that increase pressure on the bladder, such as coughing, laughing, sneezing, lifting, or exercising
- **Urge incontinence:** a sudden, strong need to urinate that may result in leakage before reaching the bathroom; it is less common after prostatectomy than stress incontinence

What to Expect Over Time

Most men experience some leakage immediately after the urinary catheter is removed. This typically improves gradually over the following weeks and months, with continued improvements often seen for up to a year or two after surgery. Some men experience longer-term stress incontinence that requires ongoing management.

Management Strategies:

- Pelvic floor (Kegel) exercises, ideally started as directed by your healthcare provider, strengthen the muscles that support bladder control
- Absorbent pads or protective undergarments designed for men can provide confidence and comfort while your body recovers
- Timed voiding, or urinating on a regular schedule rather than waiting until you feel a strong urge, can help some men
- Limiting bladder irritants such as excess caffeine and carbonated beverages may reduce urgency and leakage
- Maintaining a healthy weight can reduce pressure on the pelvic floor

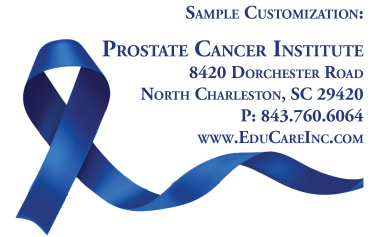
A Note on Fluids

It can be tempting to drink less fluid to reduce leakage, but this is not recommended; concentrated urine can irritate the bladder and worsen symptoms. Stay well hydrated unless your provider has told you otherwise.

If Incontinence Persists

If stress incontinence continues to significantly affect your quality of life after about a year, several additional options exist, including medications, urethral bulking injections, a male sling procedure, or an artificial urinary sphincter. Your urologist can help determine which option, if any, is right for you.

Urinary Incontinence After Prostate Surgery



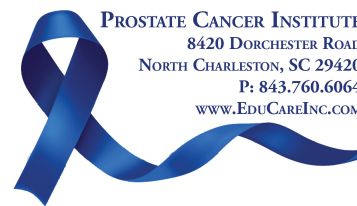
Contact Your Healthcare Provider If:

- You see little to no improvement after several months of consistent pelvic floor exercises
- Your symptoms suddenly worsen
- You have difficulty urinating at all, which could suggest a different problem, such as urinary retention

Questions to Ask Your Doctor:

- How much improvement should I expect, and by when?
- Would a referral to pelvic floor physical therapy be helpful for me?
- What are my options if leakage continues beyond a year?

Additional Information:



Low Sexual Desire (Libido) After Prostate Cancer

Low sexual desire, or reduced interest in sex, is different from erectile dysfunction. A man can lose interest in sex even if his ability to have an erection is unaffected, and conversely, some men retain sexual desire despite significant erectile dysfunction. Understanding which issue, or combination of issues, you are experiencing helps guide the right conversation with your healthcare provider.

Common Causes After Prostate Cancer Treatment

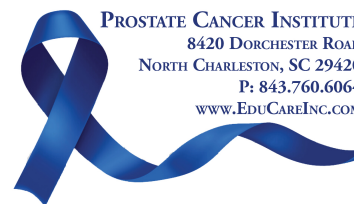
- **Reduced testosterone:** Androgen deprivation therapy (hormone therapy) and orchiectomy lower testosterone, which is a major driver of sexual desire, thoughts, and fantasies. Desire commonly decreases within weeks of starting these treatments.
- **Emotional factors:** Anxiety about cancer recurrence, changes in body image, depression, and the stress of diagnosis and treatment can all reduce interest in sex, independent of hormone levels.
- **Fatigue:** Treatment side effects such as tiredness, especially during or shortly after radiation or hormone therapy, can lower interest in sexual activity.
- **Relationship strain:** Changes in roles, caregiving dynamics, or unspoken frustration about sexual changes can reduce desire on either partner's part.

What May Help

- Talk with your healthcare provider about whether hormone therapy timing or duration can be adjusted; this decision must balance cancer control with quality of life and should not be changed without medical guidance.
- Ask about screening and treatment for depression or anxiety, which are common and treatable, and which can independently affect desire.
- Consider a referral to a counselor or sex therapist who works with cancer survivors and their partners.
- Shift the goal of intimacy away from erection or intercourse alone; some men and couples find that desire returns as pressure around performance decreases.
- Give the relationship time; desire often returns gradually as energy improves and emotional adjustment continues.

Questions to Ask Your Doctor:

- Could my current medications or hormone therapy be lowering my desire?
- Would it help to be screened for depression or anxiety?
- Can you refer me to a counselor or sex therapist experienced with cancer survivors?



Leuprolide (Leuprolide Acetate)

Brand Names:

Lupron Depot®, Eligard®, Camcevi®

Leuprolide is a gonadotropin-releasing hormone (GnRH) agonist that lowers testosterone levels, helping slow or stop the growth of prostate cancer cells.

Method Administered:

- Injection given by a healthcare provider into a muscle (I.M.) or under the skin (subcutaneous), depending on the formulation.
- Given on a schedule of every 1, 3, 4, or 6 months, or annually, depending on the formulation prescribed.

Testosterone “Flare” — Important to Know:

- During the first 1 to 3 weeks after starting leuprolide, testosterone levels can briefly rise before dropping to low levels. This is called a “flare” and can temporarily worsen bone pain or urinary symptoms in men with prostate cancer. Your healthcare provider may prescribe an anti-androgen during the first few weeks to help prevent or reduce this flare.

Side Effects:

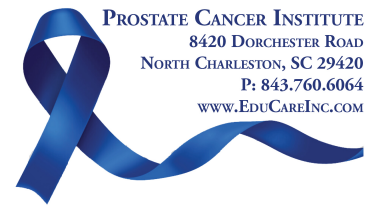
- Swelling of hands or feet
- Hot flashes
- Blurred vision
- Headache
- Nausea or vomiting
- Trouble sleeping
- Weight gain
- Bleeding; bruising
- Decreased libido
- Erectile dysfunction
- Pain, redness, burning, or itching at the injection site
- Fatigue
- Loss of muscle mass or decreased muscle strength
- Bone thinning (osteoporosis) with long-term use
- Increased blood sugar

After Administration, Notify Your Healthcare Provider of These Side Effects:

- Fast or irregular heartbeat
- Trouble breathing
- Dizziness, fainting, or severe weakness
- Swelling of the face, lips, tongue, or around the eyes
- Rash, hives or itching
- Numbness or tingling in hands or feet
- Anxiety
- Depression
- Mood changes
- New or worsening bone pain during the first few weeks of treatment

Zytiga® (abiraterone acetate)

SAMPLE CUSTOMIZATION:



Zytiga® (abiraterone acetate) is a drug for men whose cancer has not responded to medical or surgical treatment that lowered the hormone testosterone (called castration-resistant prostate cancer) and have received chemotherapy with docetaxel. Zytiga® can also delay disease progression in men who have not had chemotherapy.

Method Administered:

Medication is given as a pill by mouth and is combined with oral prednisone.

Medication Instructions:

- Take Zytiga® and prednisone exactly as your healthcare provider tells you.
- Do **not** stop taking your prescribed dose of Zytiga® or prednisone without talking with your healthcare provider first.
- Take Zytiga® on an empty stomach. Do not take with food. Taking with food may cause more of the medicine to be absorbed by the body than is needed, which may cause side effects.
- Do not eat anything 2 hours before or 1 hour after taking medication.
- Regular blood tests are needed to check for side effects.
- Men who are sexually active with a pregnant woman must use a condom during, and for one week after, treatment with Zytiga®.

Side Effects:

- | | | |
|--------------------------|---------------------------|----------------------|
| ■ High blood pressure | ■ Hot flashes | ■ Heartburn |
| ■ Low potassium | ■ Urinary tract infection | ■ Fluid retention |
| ■ Joint swelling or pain | ■ Cough | ■ Cold-like symptoms |
| ■ Liver problems | ■ Irregular heartbeats | |
| ■ Muscle aches | ■ Frequent urination | |

Additional Information:
