Prostate Problems

The prostate is a gland found in men, about the size of a walnut. It is located below the bladder and wraps around the urethra, a tube that carries urine out of the bladder. The main function of the prostate is to produce a fluid, which is part of the semen that nourishes the sperm cells. As a man ages, the prostate changes and can cause problems. This often happens after the age of 50. The 3 most common prostate problems are: Prostatitis, Benign Prostatic Hyperplasia (BPH) and Prostate Cancer. Having prostatitis or BPH does not cause nor increase your risk of prostate cancer.

To help diagnose prostate problems, one or more of these tests are used:

- Digital rectal exam (DRE) – During the examination, the doctor inserts a gloved, lubricated finger into the patient’s rectum to feel the size and condition of the prostate gland.
- Prostate-specific antigen (PSA) test – A blood test to check the level of PSA, a protein produced by prostate cells. A high level can be a sign of prostate problem.
- Biopsy – A removal of a small piece of tissue to check for cancer by examination under a microscope.

I. Prostatitis

Prostatitis is an inflammation of the prostate gland. The condition is not contagious and cannot be spread through sexual contact. Diagnosis includes a digital rectal exam, urine and semen test to check for bacteria and white blood cells, which can indicate an infection.

Symptoms of prostatitis
- Frequent urge to urinate
- Difficulty urinating
- Burning or pain during urination
- Pain in the lower back, genital or pelvic area
- Chills and fever

Types of prostatitis
1. Acute bacterial prostatitis – least common; symptoms appear suddenly and often include chills and fever
2. Chronic bacterial prostatitis – symptoms appear slowly and often return
3. Chronic nonbacterial prostatitis – most common; symptoms come and go

Treatment of prostatitis
Bacterial prostatitis is treated with antibiotics. The length of treatment (1-3 months) depends on whether the infection is acute or chronic. For symptoms relief, try the following:
- Soak in a warm bath
- Avoid caffeine and alcohol which can irritate the bladder
- Avoid jogging or bicycling which may irritate the prostate gland
- Take medications to relieve pain
- Take prescription medications that relax the muscles near the prostate to improve urine flow

II. Benign Prostatic Hyperplasia (BPH) or prostate gland enlargement

Changes in hormone levels that occur with aging may be responsible for prostate gland enlargement. A growing gland may gradually compress the urethra and block the flow of urine. An enlarged prostate increases the risk of urinary tract infection and kidney damage. Diagnosis generally includes a digital rectal exam and urine test
to determine whether the symptoms are due to other conditions. Additional tests may be ordered to help confirm the diagnosis.

Symptoms of BPH
- Difficulty starting and stopping urination
- Weak urine stream
- Frequent and urgent need to urinate, especially at night
- Incomplete emptying of the bladder
- Blood in the urine

Treatment of BPH
BPH can be treated with medications, lifestyle changes, nonsurgical therapies or surgery. Some over-the-counter cold and cough medicines and prescription medications can worsen BPH symptoms. Be sure to discuss their use with your doctor.

1. Prescription medications
   - Alpha blockers – These drugs relax the muscles of the prostate and bladder neck, making it easier to urinate.
   - Enzyme inhibitors – These drugs shrink the prostate and control growth.
   - Combination drug therapy

2. Lifestyle changes
   - Limit fluids 1 to 2 hours before bedtime
   - Limit caffeine and alcohol
   - Urinate at regular times
   - Urinate when you feel a strong urge (by urinating too frequently when there is a mild urge sensation, the urinary stream will usually be slow and dribbling)
   - Be physically active and stay warm
   - Be aware that with aging, you need only 6-8 hours of sleep. Going to bed too early or staying in bed for 10-12 hours will inevitably lead to waking up and urinating more at night.

3. Nonsurgical therapies
   These treatments are considered less invasive and can reduce the size of the prostate. They involve the use of microwave energy, radio waves, electrical current or laser to safely heat and destroy part of the prostate.

4. Surgery
   Surgery is done when symptoms are severe and medications are not helpful. Transurethral resection of the prostate (TURP) is the most common surgery for BPH. The procedure is performed under anesthesia. A narrow instrument is passed through the urethra and obstructing prostate tissue is trimmed away. Temporary side effects may include urinary incontinence (inability to hold in urine) and irritation. Long-term effect may include retrograde ejaculation (semen goes into the bladder rather than out of the penis during orgasm) and, in rare cases, impotence (inability to have an erection).

III. Prostate Cancer
Compared to other types of cancer, prostate cancer is a slow growing disease. In older men who have the slow growing form (low grade disease), very few will die from the disease. In men who have the aggressive form (high grade disease), death can occur rapidly. Prostate cancer has no obvious symptoms until it is in an advanced stage. The symptoms are similar to that of BPH.

Prostate cancer screening
The American Cancer Society recommends that discussion about prostate cancer screening takes place at age 50 for men who are at average risk for prostate cancer.
and are expected to live at least 10 more years. The discussion for screening should begin earlier for those who have had a first-degree relative (father, brother, or son) diagnosed with prostate cancer at an early age (before age 65). Screening includes digital rectal exam and PSA blood test. A rapid increase in PSA level can suggest cancer. Your doctor may refer you to an urologist, a specialist in the diseases of the male reproductive and urinary tract systems, for further evaluation. A prostate biopsy may be performed to determine whether cancer cells are present.

Treatment of prostate cancer
The treatment of choice is determined by the stage and grade of the cancer. They include:

- **Prostatectomy** – surgical removal of the entire prostate gland and nearby lymph nodes
- **Radiation therapy** – use of high energy rays (such as X-ray) or particles (such as electrons or protons) to destroy cancer cells which can be achieved by external beam or radioactive seed implantation
- **Hormone therapy** – use of hormone pills or injection to reduce the production of male hormones in the testicles and stop the spread of cancer cells
- **Chemotherapy** – use of anti-cancer drugs to destroy cancer cells
- **Watchful waiting** – close monitoring without immediate treatment for slow growing disease

For more information on prostate health, contact:
**National Cancer Institute**
[www.cancer.gov](http://www.cancer.gov)
1-800-422-6237

**National Kidney and Urologic Diseases Information Clearinghouse**
1-800-891-5390