

### Side effects of treatment

The treatments carry a significant risk of side effects, both long term and short term. After prostatectomy there is a high risk of impotence and a small risk of urinary incontinence. Radiotherapy carries a similar risk of impotence, but a smaller incontinence risk. Almost all patients receiving hormone therapy experience impotence during the course of treatment. Hot flashes, tiredness, and weakness are also common, but all side effects cease when the treatments are over.

### Conclusions-

No specific measures are known to prevent the development of prostate cancer but we can hope to prevent progression by making early diagnosis and then attempting early treatment, and possibly cure the disease.

CPAA provides screening for early detection at our centres in Mumbai for a token cost. Free PSA testing is provided by CPAA's Well Men Clinic Programme supported by the Suman Samant and Dattaram Sarnaik Memorial Trust.

### Suman Ramesh Tulsiani Cancer Detection & Rehabilitation Centre

Prabhadevi Industrial Estate, Gala No. 15, 1st floor, Mumbai- 400 025

Tel: 022 2438 3296 / 24924000 [Wednesdays and Thursdays]

### Lila Kishanchand Shahani Clinical Diagnostic Centre

Naigaon Municipal Maternity Hospital, 1st Floor, Mumbai-400 014

Tel: 022 2412 1680 [Tuesdays]

### Acknowledgements-

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### Cancer Patients Aid Association

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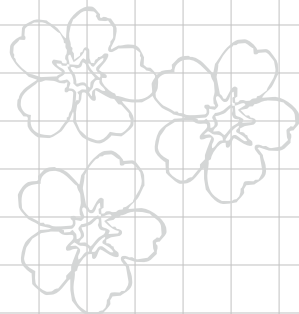
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**What you need  
to know about  
PROSTATE CANCER**



Prostate cancer is one of the most common cancers affecting men. According to the Indian cancer registry 2001, Prostate cancer has the third highest incidence among the male population.

Prostate cancer usually starts on the peripheral surface of the gland and grows slowly, remaining confined to the gland for many years. During this time, there may be little or no symptoms and/or warning

signs. As the cancer advances, it can spread into the surrounding tissues and also metastasize i.e. spread to other parts of the body, such as the bones, lungs and liver.

### What is a Prostate Gland?

The prostate gland is located at the neck of the urinary bladder. The gland surrounds the first part of the urethra, through which urine drains from the bladder to exit from the penis. One function of the prostate gland is to help control urination by pressing directly against the part of the urethra that it surrounds. Another function of the prostate gland is to produce some of the semen, the fluid that transports the sperm. A man can manage quite well, without his prostate gland.



### Risk Factors

The causes of prostate cancer are not well understood. Doctors cannot explain why one man gets Prostate cancer and another does not. Studies have found the following factors associated with prostate cancer.

- Age: The risk of prostate cancer increases after the age of 50.
- Family history: A man's risk of developing prostate cancer is higher if his father or brother has had the disease.
- Diet and dietary factors: Some evidence suggests that a diet high in animal fat may increase the risk of prostate cancer

### Signs and Symptoms

Early prostate cancer often does not cause symptoms, but locally advanced prostate cancer can cause any of these problems:

- Frequent or nocturnal urination
- Difficulty starting urination or holding back urine
- Inability to urinate
- Weak or interrupted flow of urine
- Painful or burning urination
- Painful ejaculation
- Blood in urine or semen

Once the cancer spreads i.e. metastasizes, a person can get

- back or bone pain or radiating down the legs
- unexplained weight loss
- anemia
- spontaneous fractures
- sudden weakness in lower limbs

Any of these symptoms may be caused by cancer or by other less serious health problems also, so it is advisable to see an Urologist and have a proper diagnosis done. If prostate cancer is diagnosed early, it can be treated very successfully. As the disease advances and it spreads to other parts of the body, it becomes incurable.

### Screening & Early Detection

Symptoms and signs are more often seen in advanced prostate cancer. It is therefore important to be personally vigilant and undergo regular screening after the age of 50.

### Methods of Diagnosis

**DRE (Digital Rectal Examination):** This is a physical exam wherein the doctor examines the prostate by inserting a finger in the rectum to feel for any hard nodules and enlargement.

**PSA (Prostate Specific Antigen):** This is a simple blood test that measures the PSA, a tumour maker, level in the blood. PSA is made by the prostate that may be found in an increased amount in the blood of men who have prostate cancer. The normal value is 0-4ng/ml.

**Trans-rectal ultrasound (USG):** This is a procedure in which a USG probe that is about the size of a finger is inserted into the rectum to check the prostate for presence of a tumour.

**Biopsy:** Once cancer is suspected, a biopsy is essential to establish the diagnosis. This is usually done under Trans-rectal ultrasound guidance where prostate tissue is removed and sent for pathological evaluation.

### Prostate Cancer Staging

The doctor needs to know the stage, or extent of the disease to determine the appropriate line of treatment. The main features of each stage are as follows:

Stage I (A) – The cancer cannot be felt during a rectal examination. It may be found by accident when surgery is done or for another reason or on investigation for a raised PSA. There is no evidence that the cancer has spread outside the prostate.

Stage II (B) – The tumour involves tissues within the prostate. It can be felt during rectal examination. There is no evidence that the cancer has spread outside the prostate.

Stage III (C) – The cancer has spread locally beyond the prostate to nearby tissues.

Stage IV (D) - The cancer has spread to associated lymph nodes or to other parts of the body.

### Treatment Options

Depending on age of the patient, stage and symptoms experienced, treatment for prostate cancer may involve watchful waiting, surgery, radiation therapy, chemotherapy or hormonal therapy.

**Watchful waiting** – may be suggested for the early stage of cancers especially if it is slow growing. This is usually suggested to older men or men with other serious medical problems.

**Surgery** - The Prostate gland is removed surgically. In a procedure called Radical Prostatectomy, the prostate and surrounding tissue is removed. This results in excellent cure rates. For patients who cannot have radical prostatectomy due to age or illness, Trans-urethral resection (TURP) is done. This procedure removes cancerous tissue and is sometimes done to relieve symptoms (obstruction of urine flow) caused by a tumour before other cancer treatment is given.

**Robotic Surgery** – This minimally invasive surgical procedure uses finely controlled robotic instruments to perform the surgery improving patient recovery and outcome. In India due to the high costs of the machine, it is still not freely available.

**Cryosurgery** – Cryosurgery is used to treat prostate cancer by freezing the cells with cold metal probes. This is still considered investigational.

**Radiation therapy** – Radiation therapy uses high energy X-rays to kill cancer cells. It can be done in early stages of cancer or after surgery to destroy any cancer cells that may remain in the area. Radiation is effective for patients who cannot undergo surgery. In advanced stages, it may be given to relieve pain due to bone metastasis or manage other symptoms. Modern radiation machines are able to give accurate doses specifically to the prostate resulting in minimal side effects.

Consult CPAA's brochure on **Radiation therapy** for details and Frequently Asked Questions.

**Hormone therapy** – Hormone therapy removes or blocks male hormones (androgens) which nourish the cancer cells. This is done in two ways: Orchiectomy the surgical removal of testicles which produce male hormones, or administration of injections which control the release of androgens with or without oral anti-androgen drugs. Metastatic Prostate cancer can be controlled by this therapy for a period of time, often several years. Eventually, however, most prostate cancers will be able to grow with very little or no male hormones. When that happens hormonal therapy is no longer effective.

**Chemotherapy** – Chemotherapy is used if prostate cancer is metastatic and hormone therapy isn't working. It is unlikely to result in a cure but may slow the cancer's growth and reduce symptoms, resulting in a better quality of life. Side effects include nausea, vomiting, loss of appetite, hair loss, mouth sores, etc depending on the type, dosage and length of drug treatment.

Consult CPAA's brochure on **Chemotherapy** for details.

