



PROSTATE CANCER

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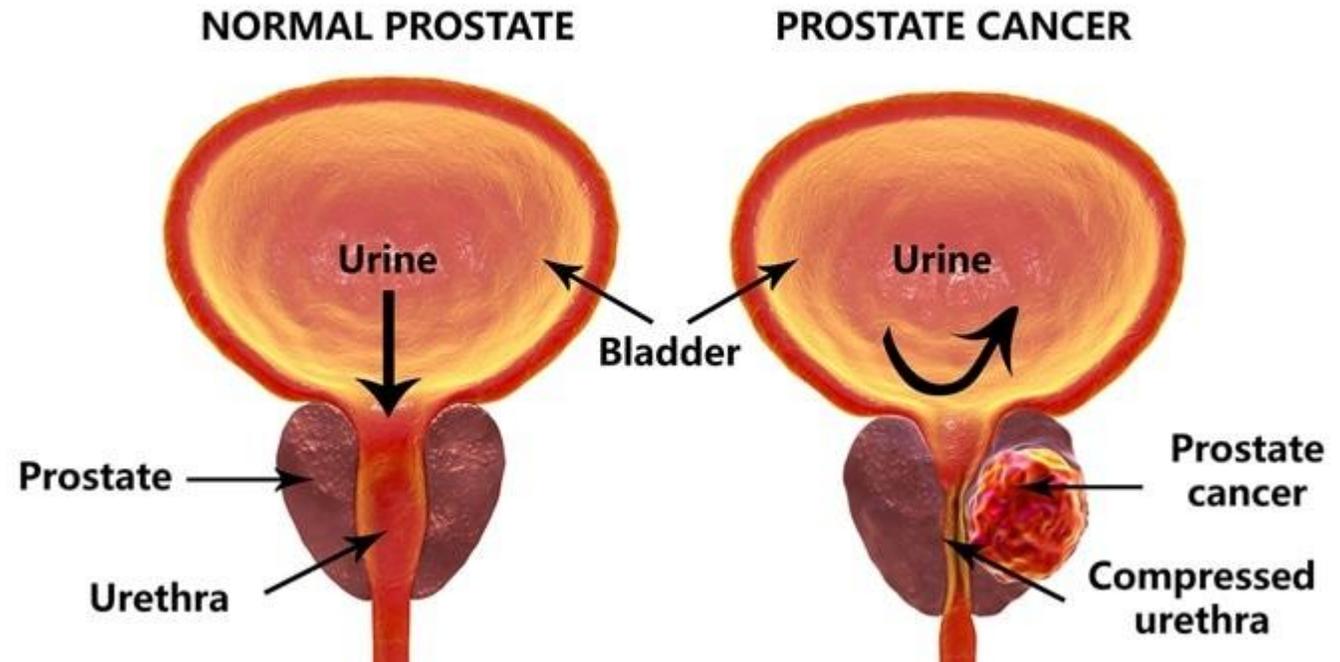


PROSTATE CANCER

DEFINITION

Prostate cancer is a malignant tumor of the prostate gland.

PROSTATE CANCER





PROSTATE CANCER

INCIDENCE

- ❖ Prostate cancer or tumor is the most common cancer in men other than non-melanoma skin cancer.
- ❖ The majority (more than 75%) of cases occur in men over age 65.

RISK FACTOR / ETIOLOGY

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- Risk factors for prostate cancer including increasing age, the incidence of prostate cancer increase rapidly after the age of 50 years. And more than 70% cases occur in men older than 65 year of age.
 - A Familial predisposition may occur in men who have a father or brother previously diagnosed with prostate cancer or tumor.
 - The risk of prostate cancer is also greater in men who consume diet contain excessive amounts of red meat, animal fat, dairy products that are high in fat.

RISK FACTOR / ETIOLOGY

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- Obesity, smoking and excessive alcohol intake also contribute factors of prostate cancer.
 - Age, Ethnicity, family history are three non – modifiable risk factors. Although occupational exposure to chemicals (e.g. cadmium), a history of BPH is not a risk factor for prostate cancer.
 - The influence of dietary fat intake esp. animal fat intake, serum testosterone levels, and industrial exposure to carcinogens are investigation.

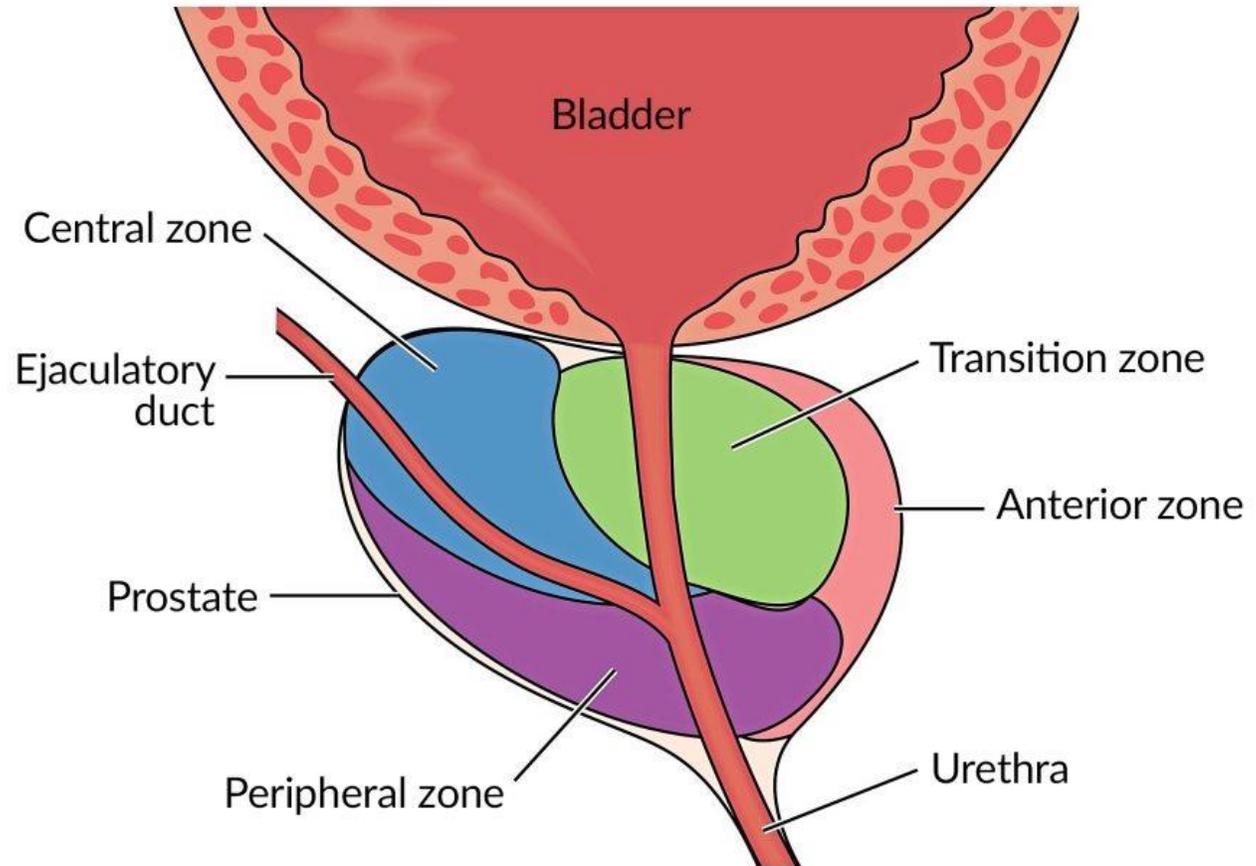


RISK FACTOR / ETIOLOGY

- The majority of tumor occur in the outer aspect of the prostate gland or peripheral zone of the prostate gland. Prostate cancer is usually slow growing.
- It can spread by mainly three routes:
 - 1. Direct extension**
 - 2. Through the lymph system and**
 - 3. Through blood stream.**

If prostate cancer spread through direct extension involves the seminal vesicles , urethral mucosa, bladder wall and external sphincter . The cancer later spreads through the lymphatic system.

PERIPHERAL ZONE OF THE PROSTATE GLAND



CLINICAL MANIFESTATION



- ❖ Prostate cancer in its early stages rarely produce (most early-stage prostate cancer are asymptomatic) symptoms, is usually asymptomatic in the early stages.
- Difficulty and frequency of urination
- Urinary retention
- Decrease size and force of urine stream
- Blood in urine or semen (Hematospermia)
- Pain full sperm ejaculation
- Hematuria
- Dysuria and Nocturia
- Dribbling of urine and Urgency

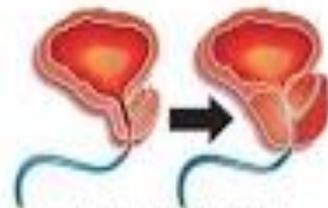
CLINICAL MANIFESTATION

❖ Prostate cancer can metastasis or metastasize to bone and lymph nodes, Symptoms related to metastasis include:

- Backache
- hip pain
- renal discomfort
- Anemia
- weight loss
- Weakness
- Nausea
- oliguria.



SEXUAL DYSFUNCTION



CHANGES IN
BLADDER HABITS



WEAKNESS OR
NUMBNESS IN LEGS



FREQUENT PAIN



BLOOD IN
THE URINE

SIGNS AND SYMPTOMS OF PROSTATE CANCER

THAT YOU MUST KNOW





DIAGNOSTIC EVALUATION

- History collection
- Physical examination

The two primary diagnostic tool are:

1. DRE (Digital rectal examination)

Prostate can felt through the wall of the rectum, hard nodule may be felt.

2. PSA (prostatic specific antigen)

Biopsy of prostate tissue is necessary to confirm the diagnosis of prostate cancer.



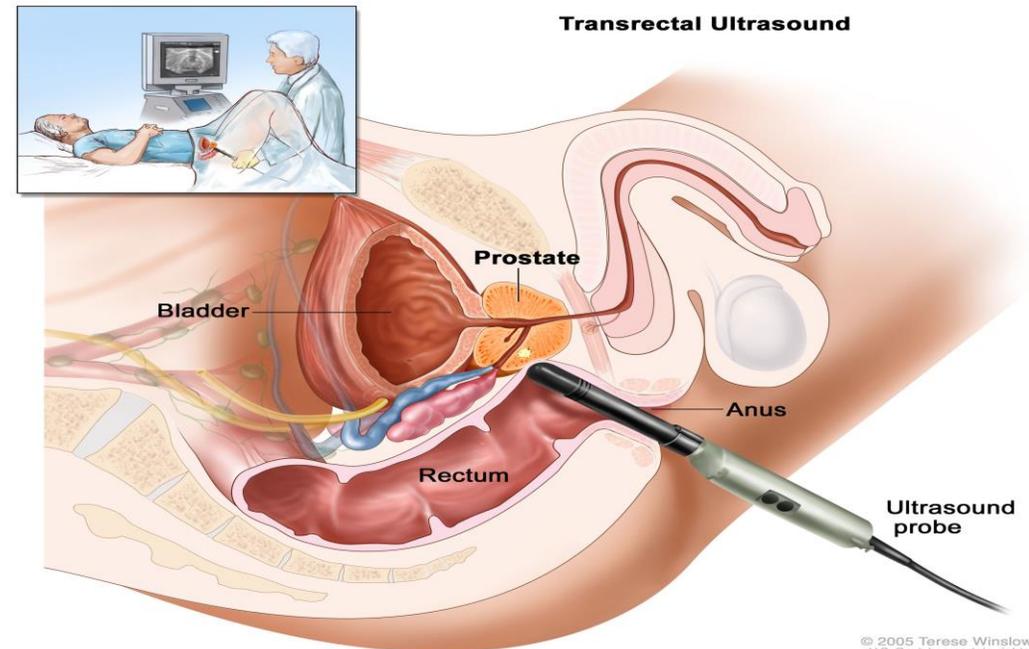
DIAGNOSTIC EVALUATION

3. TRUS (Transrectal ultrasound)

A transrectal ultrasound (TRUS) may also be called prostate sonogram or endorectal ultrasound. It is used to look at the prostate and tissues around it.

4. CT and MRI

5. Bone scan



MEDICAL MANAGEMENT



- ❖ Treatment of prostate cancer based on the stage of disease, tumor size, patient age, general conditions, severity of symptoms and level of obstruction of urine flow system.
- ❖ Objective of the medical Management
 - Reduce symptoms associated with prostate cancer and cure if in early stage
 - Improve quality of life
 - Prevent complications associated with PCA and its treatment
 - Improve sexual function



MEDICAL MANAGEMENT

❖ Collaborative therapy patients with prostate cancer

STAGE A

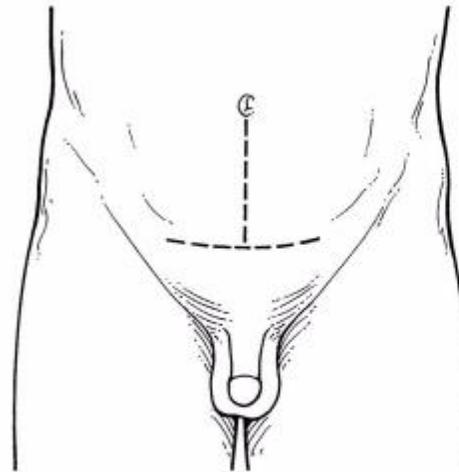
1. Watchful waiting with annual PSA & DRE
2. Radical prostatectomy (in the radical prostatectomy, the entire prostate gland, seminal vesicles, and part of the bladder neck (ampulla) are removed).

A radical prostatectomy is the surgical procedure considered the most effective treatment for long - term survival.

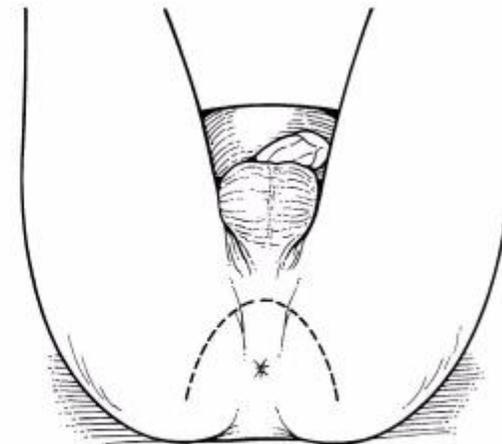
Thus it is the preferred treatment for men younger than 70 years of age who are in good health and prostate cancer in first or second stage.

MEDICAL MANAGEMENT

- ❖ The two most common approaches for radical prostatectomy.
- Retro pubic radical prostatectomy (more common)
- Perineal radical prostatectomy



Retropubic Approach

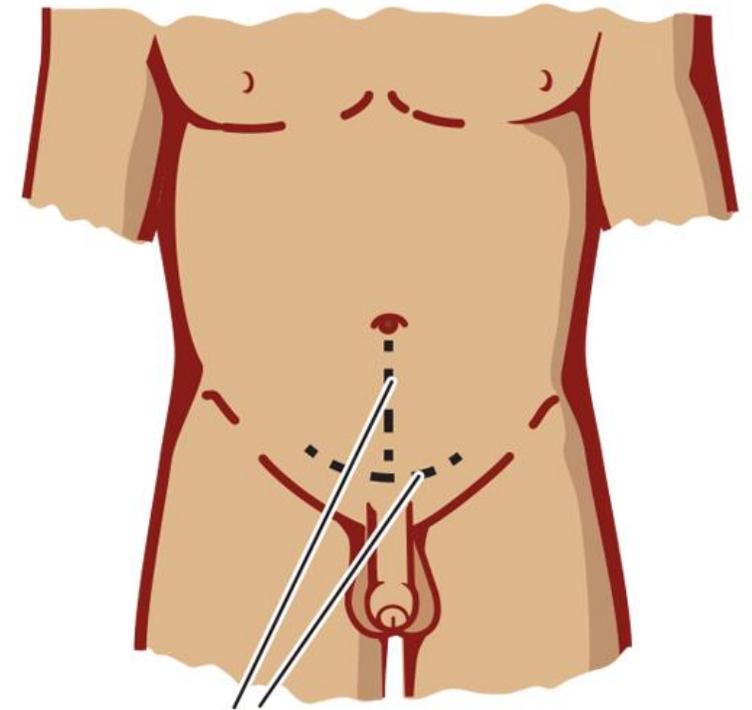
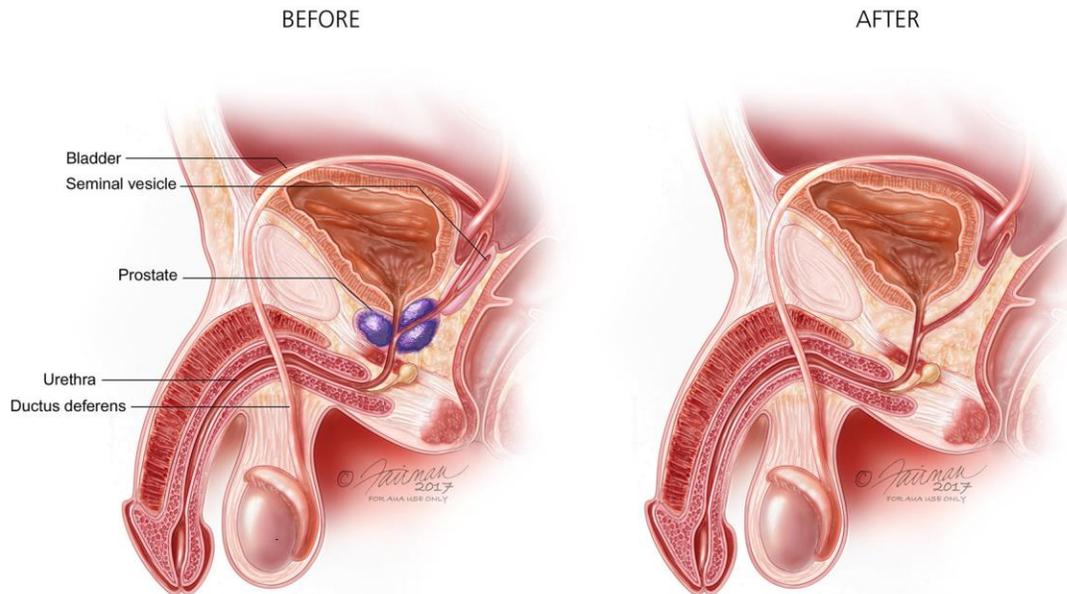


Perineal Approach

MEDICAL MANAGEMENT

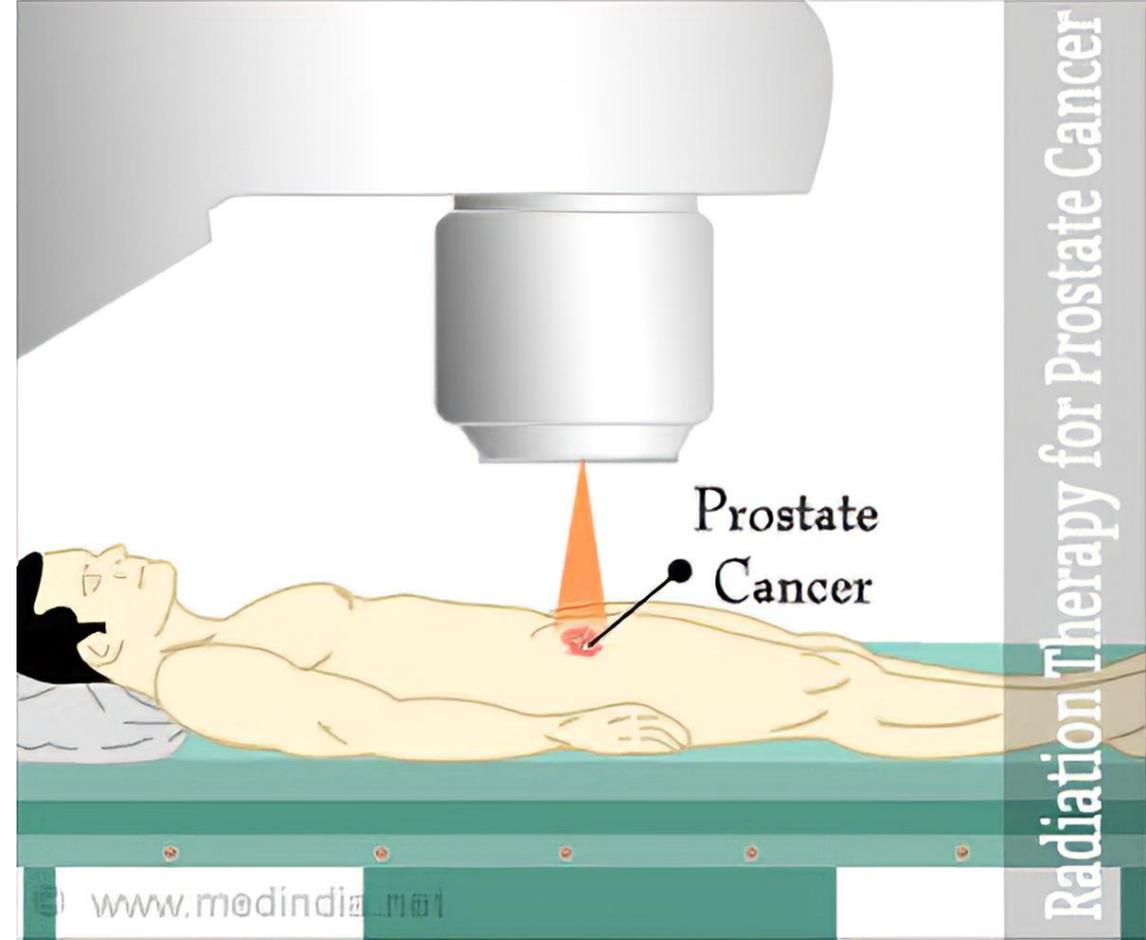
STAGE B

1. Radical prostatectomy
2. Radiation therapy



Incision sites for open radical prostatectomy

RADIATION THERAPY



RADIATION THERAPY



Possible side effects of **Radiation therapy**

- 1. Erectile Dysfunction** : Radiotherapy can affect the nerves surrounding the prostate that control a man's erections.
- 2. Urinary problems** : Radiotherapy does not usually cause urinary incontinence but sometimes it may cause a narrowing of the urethra which may then cause difficulties passing urine. This tends to occur some years following treatment.
- 3. Bowel problems** : Radiotherapy can cause inflammation to the lining of the rectum in a small percentage of men. This may be temporary or occasionally permanent. It may cause bleeding from the back passage or the need to go to the toilet to pass stool more frequently.

MEDICAL MANAGEMENT

STAGE C

1. Radical prostatectomy
2. Radiation therapy
3. Hormonal therapy (Prostate cancer growth is largely dependent on the presence of androgens. Therefore androgen deprivation is a primary therapeutic approach in some cases)
4. Orchiectomy (is a surgical removal of the testis that may be done alone or in combination with prostatectomy). Side effects of orchiectomy include erectile dysfunction, loss of sex drive and hot flashes.



MEDICAL MANAGEMENT

STAGE D

1. Hormone therapy
2. Orchiectomy
3. Chemotherapy
4. Radiation therapy to metastatic bone areas.



COMPLICATIONS

- Hemorrhage and hypovolemic shock
- Infection
- DVT (Deep venous thrombosis)
- Pulmonary embolism
- Sexual dysfunction



NURSING MANAGEMENT

Nursing assessment

1. History collection
2. Physical examination regarding presenting urinary problems, voiding functions, UTI, urinary retention, Dysuria
3. Obtain family history of PCA
4. Nutritional assessment and life style



NURSING MANAGEMENT

PRE OPERATIVE NURSING MANAGEMENT

1. Anxiety about surgery, medical therapies and it's out come related to diagnosed with prostate cancer.
2. Acute pain related to bladder distention.
3. Deficient knowledge about factors related to disorder and treatment protocol.

POST OPERATIVE NURSING MANAGEMENT

1. Acute pain related to surgical incision, catheter placement and bladder spasms
2. Deficient knowledge about post operative care and management
3. Risk for infection related to surgical site, urinary catheter and drainage and secondary to imbalanced nutritional status
4. Deficient knowledge related to medications, infection preventive techniques and signs and symptoms of complications.



THANK YOU

