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## PROSTATE GLAND

Gland of the male reproductive system & is located in front of rectum just below bladder

Main purpose to produce fluid for semen

About size of chestnut, somewhat conical in shape

Consists of base, apex, anterior, posterior & lateral surfaces

The prostate & its plexus is surrounded by the prostatic fascia.

Denovilliers fascia — Posterior portion of the fascia which forms barrier between prostate & rectum.

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## **TERMS**

# **Base** of prostate

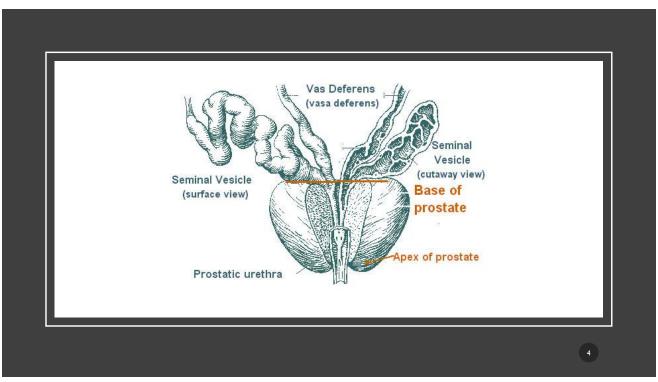
- Directed upward near inferior surface of bladder.
- Greater part of this surface is directly continuous with bladder wall

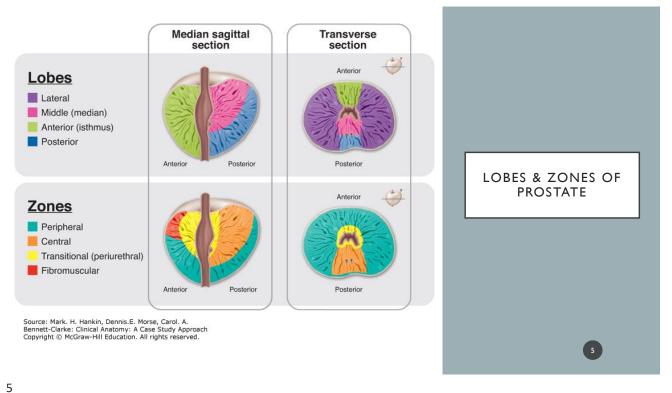
# **Apex** of prostate

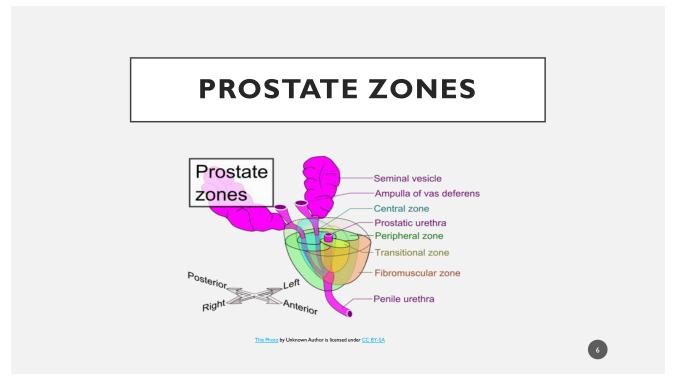
- Apex is directed downward
- In contact with superior fascia of urogenital diaphragm



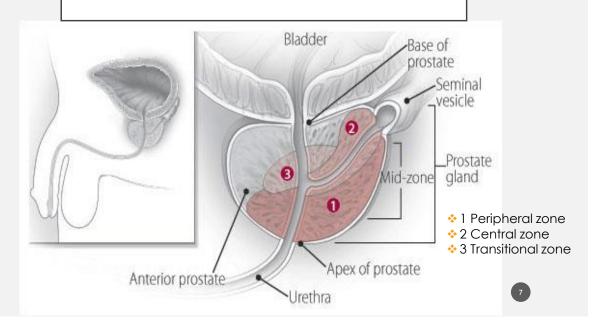
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#### **ZONES OF PROSTATE**



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## BENIGN PROSTATIC HYPERTROPHY (BPH)

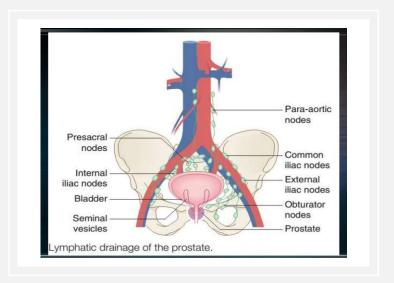
- Benign condition which an overgrowth of prostate tissue pushes against urethra causing obstruction of urine flow
  - May cause frequent urination, difficulty to start or complete obstruction in severe cases.
- ❖A gradual enlargement of prostate & occurs in more than half of men over 45
- While BPH is not a malignant condition, prostate CA is present in about 38% of men who undergo surgery to relieve symptoms



#### REGIONAL LYMPH NODES

#### Groups:

- Pelvic, NOS
- Hypogastric
- Obturator
- Iliac
- Sacral





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#### **DIAGNOSING PROSTATE CANCER**



## PROSTATE CA

- Prostate CA usually arises near surface of gland, & may be felt by physician during digital rectal exam (DRE)
- As tumor grows, prostate expands around the urethra & may cause urinary symptoms similar to BPH. By the time tumor large enough to cause symptoms, has often spread beyond its capsule.
- ❖ May invade surrounding fat & tissue, seminal vesicles &/or neck of bladder.
- ❖ May involve LN's in pelvic region. Later can spread to bones, primarily in spine, hip, pelvis & chest.



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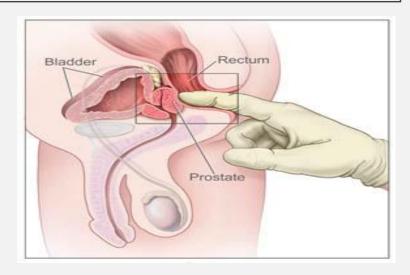
## PHYSICAL EXAM

#### **❖Key information to document:**

- palpable mass, tumor, nodule on DRE
- enlargement of prostate (Many times numbered 1+, 2+, and so forth)
- size of nodule
- nodularity in prostate or pelvis
- palpable lymph nodes, palpable nodes
- evidence of "frozen" pelvis
- organomegaly (hepatosplenomegaly)



## DIGITAL RECTAL EXAM (DRE)





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#### PSA ~ BLOOD

- Tumor marker assay of blood serum for antigen released from cells in prostate tissue.
  - ❖ Value may be elevated in benign prostatic hypertrophy.
  - ❖ After radical prostatectomy or radiation therapy, rising levels of PSA indicate residual disease or recurrence
- ❖Normal range: 0 4.0 ng/ml.
  - ❖Normal range also varies depending on the patient's age.
- ❖SSDI Lab value
  - ❖Code prior to biopsy/treatment and within 3mo of diangosis



#### **IMAGING**

- ❖ Prostatic Ultrasound –Many times called Transrectal U/S (TRUS). Document "increased areas of attenuation", mention of "hypoechoic area or nodule".
- CT Abd/Pelvis Done to assess primary tumor extension, regional LN mets & distant mets.
- Bone Scan common site of distant mets in prostate CA. Document mention of "lytic", "osteolytic" or "blastic" lesions. Exception: Use of these terms in conjunction with a (suspected) Dx of arthritis, previous fracture or osteomyelitis.



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## **PI-RADS**

#### SEER 2024 Appendix E1:

https://seer.cancer.gov/manuals/2024/SPCSM\_2024\_Appendix\_E.pdf

PI-RADS 4 or 5 REPORTABLE

19	Prostate cancer cases with an PI-RADS category 4 or 5	Report based on the American College of Radiology Prostate Imaging Reporting and Data System (PI-
		RADS) <u>definitions</u> .
		PI-RADS categories 4 (high-clinically significant cancer is likely to be present) and 5 (very high-
		clinically significant cancer is highly likely to be present) are reportable, unless there is other
		information to the contrary.

Appendix E1: Reportable Examples

E.1.2



## **ENDOSCOPIES**

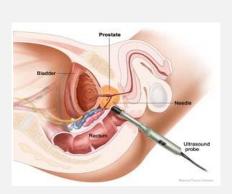
## Cystoscopy

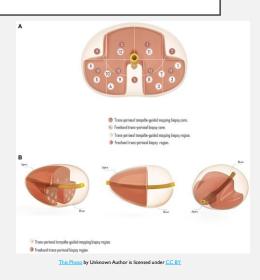
- \*Examination of the bladder using a fiberoptic instrument.
- \*Used to also evaluate the prostatic urethra & any stricture potentially caused by an enlarged prostate.
- **Used to access PROSTATE when performing a TURP.**



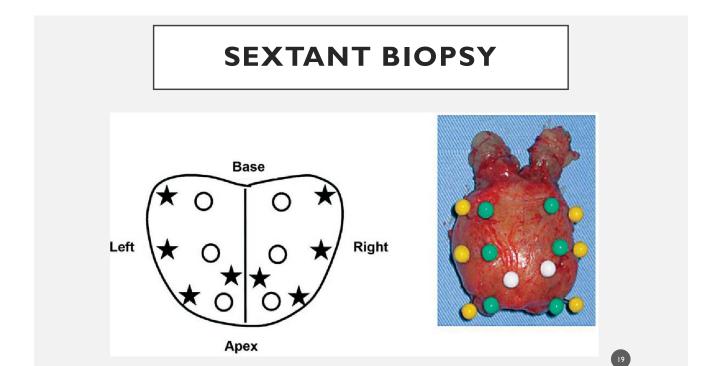
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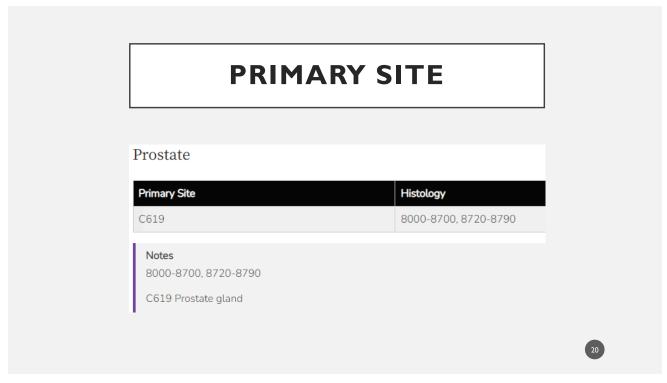
#### **PROSTATE BIOPSY**

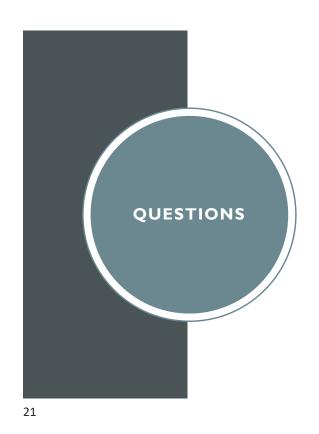




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