



SHRI VIDEO TRAINING SERIES  
2018 DX  
Recorded 9/2019

## Prostate Intro & Anatomy

Presented by Lori Somers, RN  
Iowa Cancer Registry  
2019

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SEER.CANCER.GOV | Did You Know?



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### SIGNS & SYMPTOMS

- ❖ Early stage prostate cancer is silent
- ❖ Weak urinary stream
- ❖ Frequent &/or urgent urination, nocturia
- ❖ Difficulty starting/stopping stream
- ❖ Incomplete bladder emptying
- ❖ Painful burning urination
- ❖ Blood in urine or semen
- ❖ Painful ejaculation
- ❖ Pain or stiffness in lower back, hips or upper thighs.

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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.
- ❖ Denonvilliers' 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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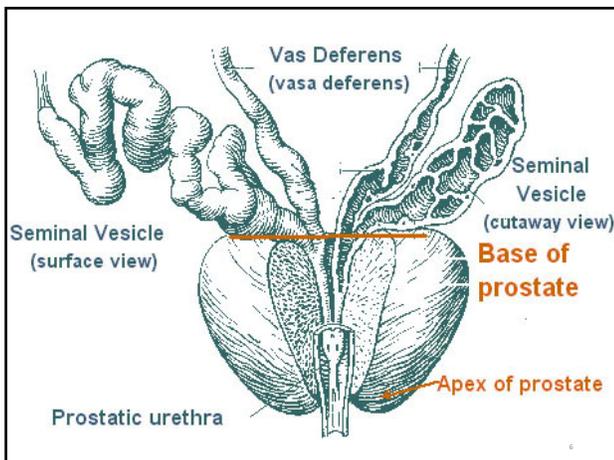
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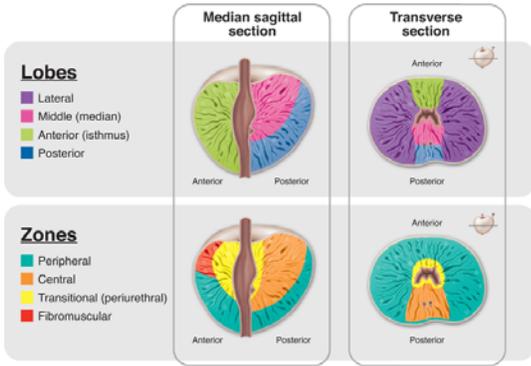
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## Lobes of Prostate



Source: Mark, H. Hankin, Dennis E. Morse, Carol, A. Bennett-Clarke: Clinical Anatomy: A Case Study Approach  
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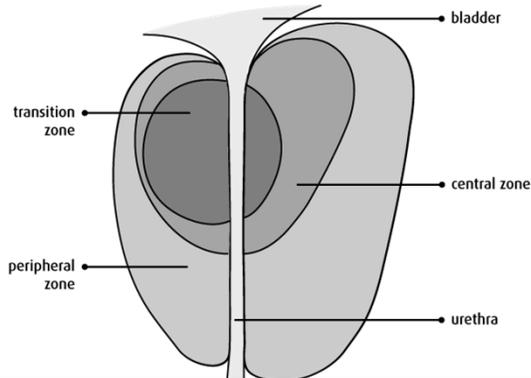
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## Prostate Zones




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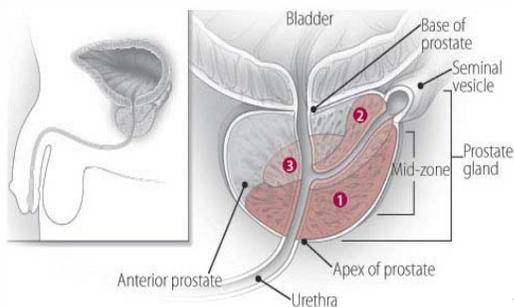
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## Zones of Prostate




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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

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## 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)

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## PHYSICAL EXAM

- |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Possible involvement</b></p> <ul style="list-style-type: none"> <li>❖ nodularity</li> <li>❖ induration</li> <li>❖ fixation of seminal vesicles</li> <li>❖ enlargement</li> <li>❖ firmness</li> <li>❖ lesion</li> <li>❖ neoplasm</li> <li>❖ malignancy</li> <li>❖ active bleeding</li> </ul> | <p><b>Not involved</b></p> <ul style="list-style-type: none"> <li>❖ If there is no mention of prostatic abnormality during the exam</li> <li>❖ stated to be negative</li> <li>❖ benign prostatic hypertrophy</li> </ul> |
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## CLINICALLY INAPPARENT

### Not palpable on DRE

- Documentation of DRE that does not mention:
  - Palpable 'tumor'
  - Mass
  - Nodule
- Includes findings limited to BPH/enlargement or hypertrophy

} Infer as inapparent

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## CLINICALLY APPARENT

### Palpable on DRE

- Documentation by doctor on DRE:
  - Tumor
  - Mass
  - Nodule

} Infer as apparent

Imaging: tumor, mass or nodule only use if managing doctor uses it.

Imaging is not used to determine clinical extension unless doctor clearly incorporates imaging findings into eval.

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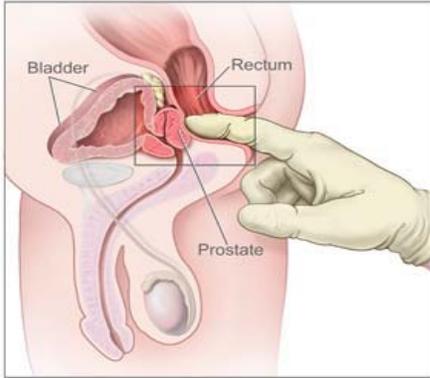
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❖ **Digital Rectal Exam (DRE)**




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**Prostate Specific Antigen blood test (PSA)**

- ❖ 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
  - ❖ Note: Test results may be affected by recent prostatic massage or palpation; PSA level should be assayed before digital rectal examination.
- ❖ Normal range: 0 - 4.0 ng/ml. Normal range also varies depending on the patient's age.

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**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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REGIONAL NODES  
PROSTATE

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- LYMPH NODES
- Groups:
- Pelvic, NOS
  - Hypogastric
  - Obturator
  - Iliac
  - Sacral

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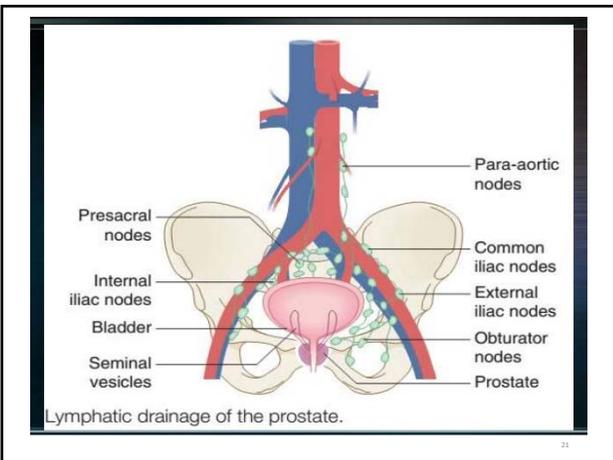
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# DIAGNOSTIC PROCEDURES

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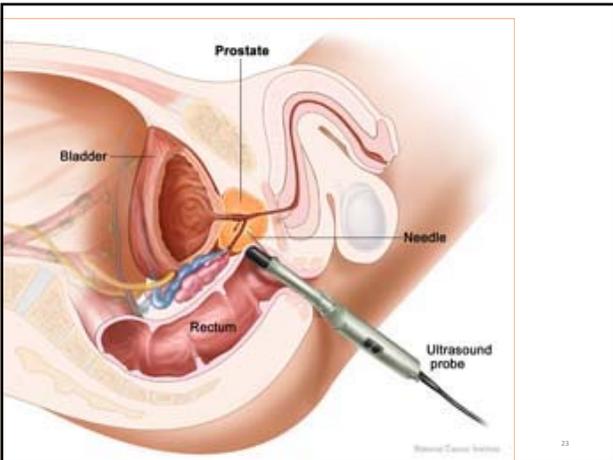
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# ENDOSCOPIES

## ❖ 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 when performing a TURP.

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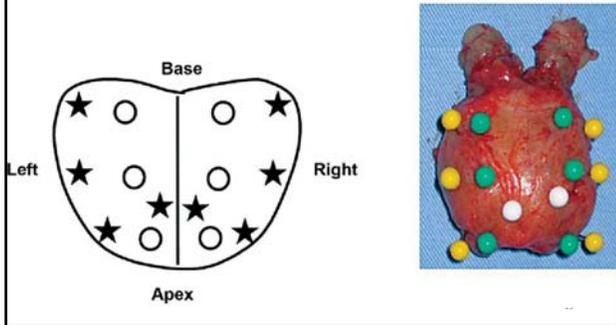
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### DRAWING OF SEXTANT BX



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### Primary Site

- C619
- Laterality coded to 0

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### QUESTIONS

Contact Info  
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