

**FOR THE LOVE
OF HEALTH™**



ChristianaCare™



Prostate Health, Prevention and Cancer

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Let's talk about it!

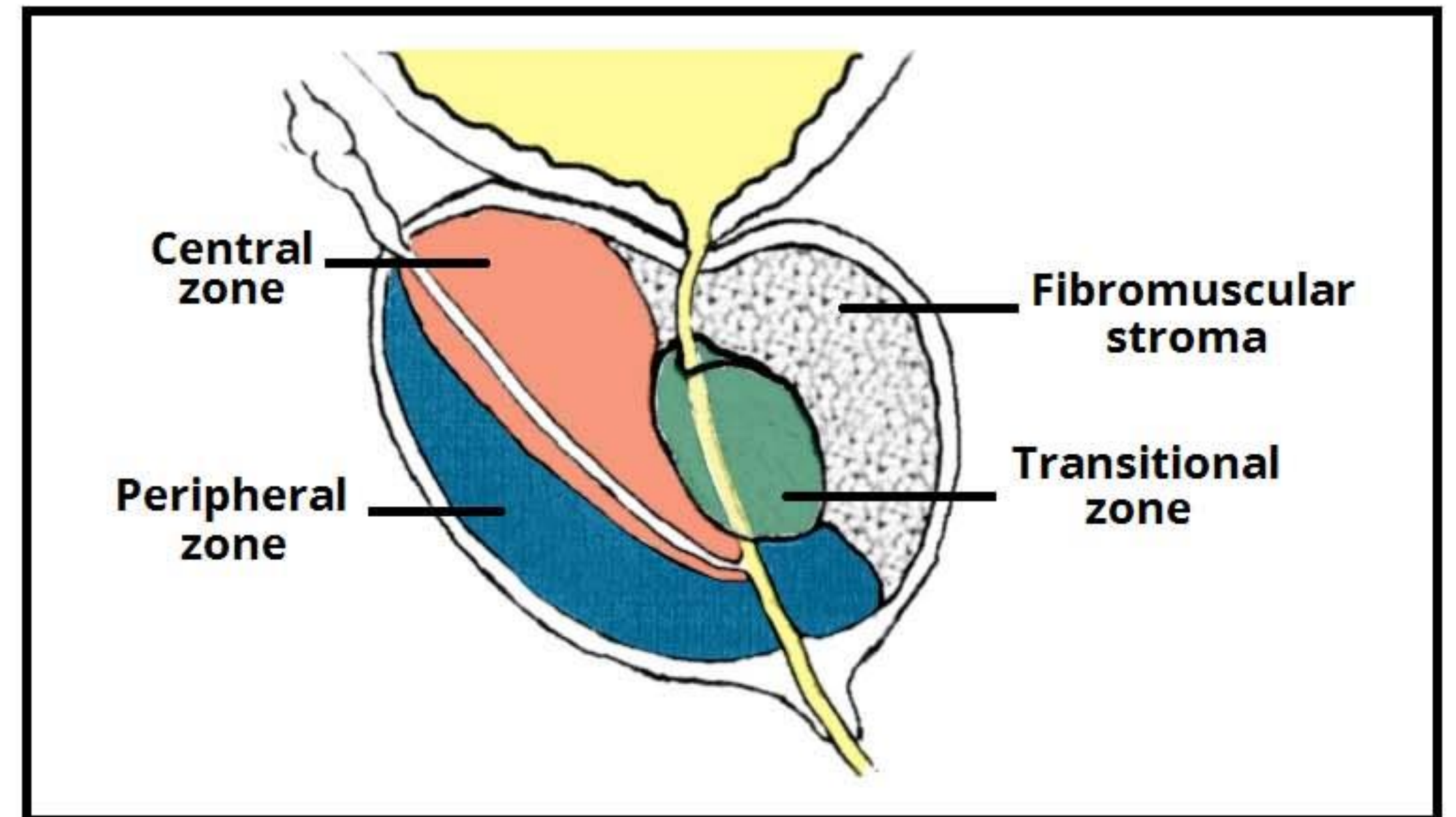
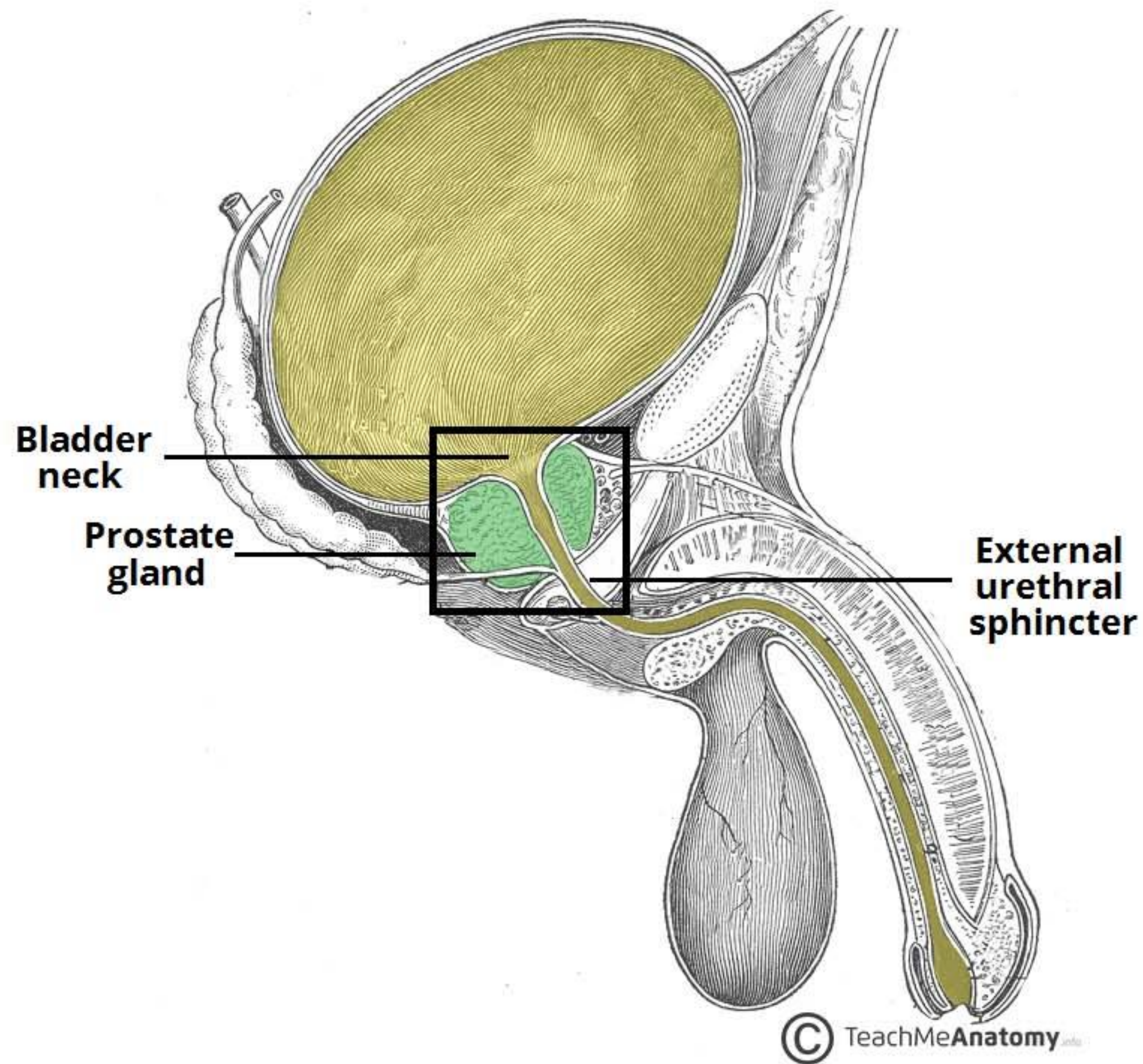




Agenda

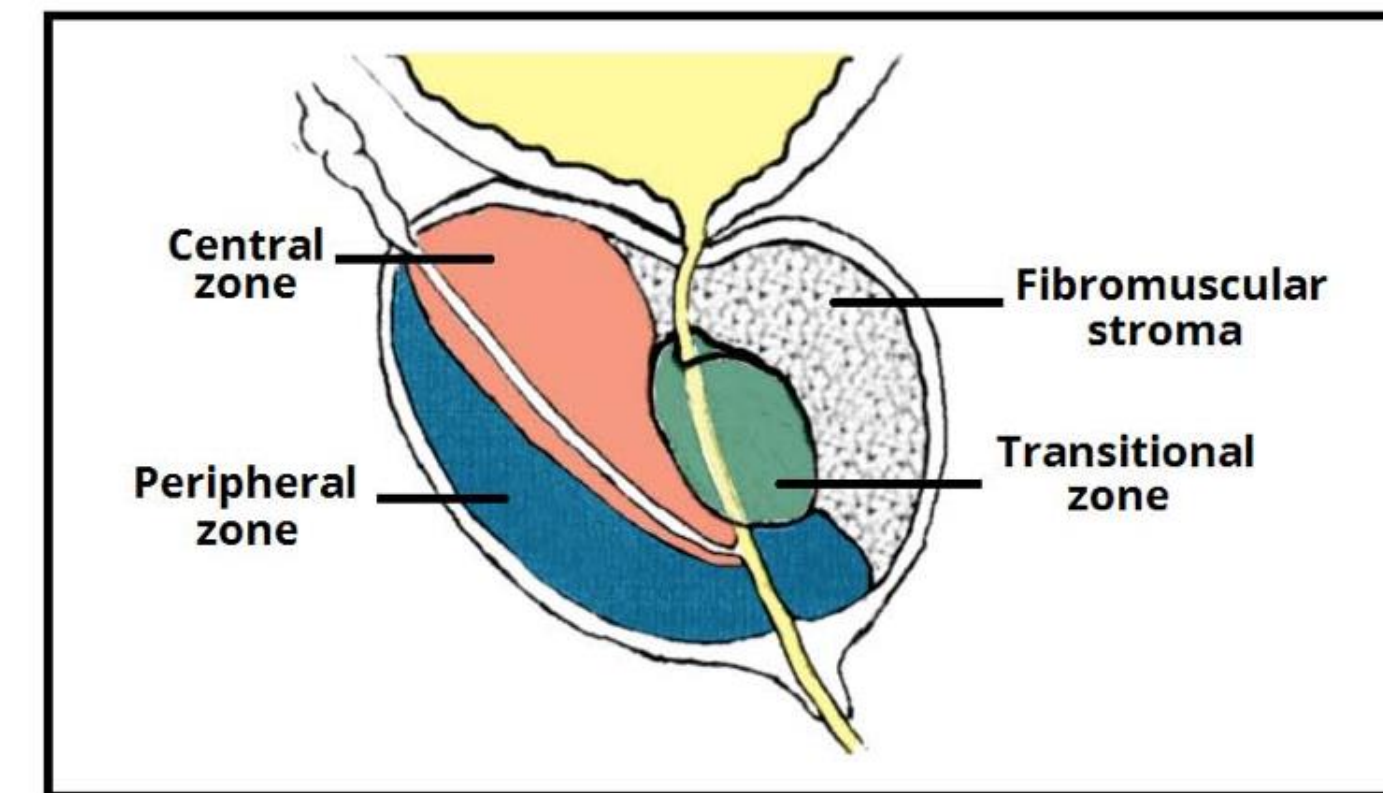
- Anatomy
- What is BPH?
- Evaluation of BPH
- Management of BPH
- What is Prostate Cancer ?
- Evaluation of Prostate Cancer
- Management of Prostate Cancer
- Survivorship

Anatomy of the Prostate



What is Benign Prostatic Hyperplasia (BPH)?

- Enlargement of the prostate gland that is a benign overgrowth
- Extremely common and occurs with aging
- 50% of all men between 50-60 years of age have BPH
- Upto 90% of all men above age 80 have BPH





Story of Mr. G

- Mr. G is a 65 year old man who had a history of high blood pressure and high cholesterol. He presents with a new onset urinary symptoms that started over past several months:
 - His urine stream had gotten weaker
 - He is going to urinate more frequently
 - He is waking up 3 times a night to urinate from only once before
 - When he feels the urge to go, he can no longer hold it.



Symptoms of BPH

- Weak or slow stream
- Going more frequently to void
- Can not hold urine as long
- Have to push the urine out
- Does not feel like the bladder is completely empty
- Stream takes a long time to start
- Stream starts and stops a lot
- Urine dribbles out at the end



Evaluation for BPH

- Good History and Physical Exam
- IPSS
- Uroflowmetry with PVR
- Cystoscopy
- Ultrasound of the prostate



American Urological Association BPH Symptom Score Index Questionnaire

Having to urinate more frequently, as well as more urgently, can definitely interrupt the flow of your day. You should know that frequent urination is often a symptom of benign prostatic hyperplasia (BPH), a noncancerous enlargement of the prostate gland. BPH is a common condition among men over the age of 50. Waking up several times a night to urinate and having a weaker, slower, or delayed urine stream are other common symptoms.

Circle the number that best applies to you.

Patient Name _____ **Date** _____

	Not at all	Less than 1 time in 5	Less than 1/2 the time	About 1/2 the time	More than 1/2 the time	Almost always
1. Incomplete Emptying Over the last month how, often have you had a sensation of not emptying your bladder completely after you finish urinating?	0	1	2	3	4	5
2. Frequency During the last month, how often have you had to urinate again less than two hours after you finished urinating?	0	1	2	3	4	5
3. Intermittency During the last month, how often have you stopped and started again several times when you urinate?	0	1	2	3	4	5
4. Urgency During the last month, how often have you found it difficult to postpone urination?	0	1	2	3	4	5
5. Weak Stream During the last month, how often have you had a weak urinary stream?	0	1	2	3	4	5
6. Straining During the last month, how often have you had to push or strain to begin urination?	0	1	2	3	4	5
7. Nocturia During the last month, how many times did you most typically get up to urinate from the time you went to bed until the time you got up in the morning?	0	1	2	3	4	5

Add the score for each number above, and write the total in the space to the right **TOTAL** _____

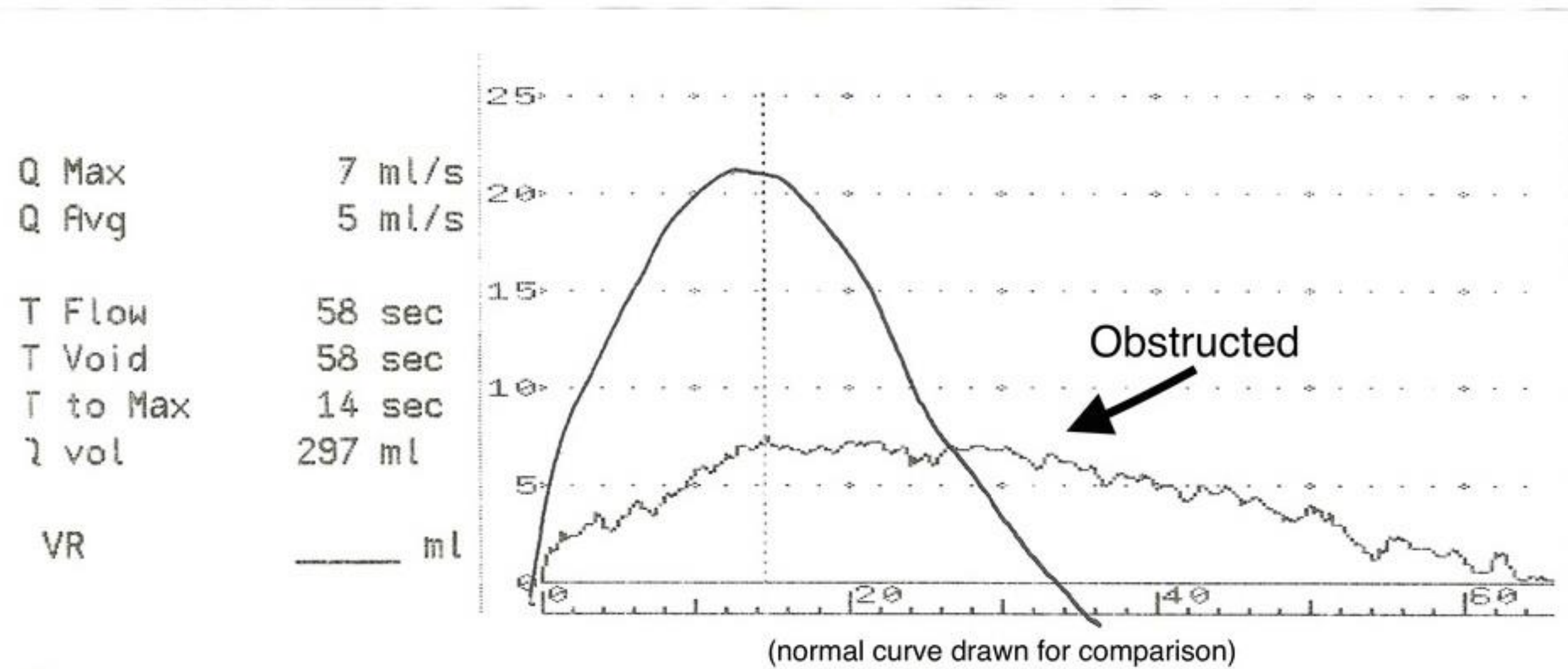
SYMPTOM SCORE: 1-7 = MILD 8-19 = MODERATE 20-35 = SEVERE

0=Delighted 1=Pleased 2=Mostly Satisfied 3=Mixed 4=Mostly Not Satisfied 5=Unhappy

8. Quality of life How would you feel if you had to live with your urinary condition the way it is now, no better, no worse, for the rest of your life?	0	1	2	3	4	5
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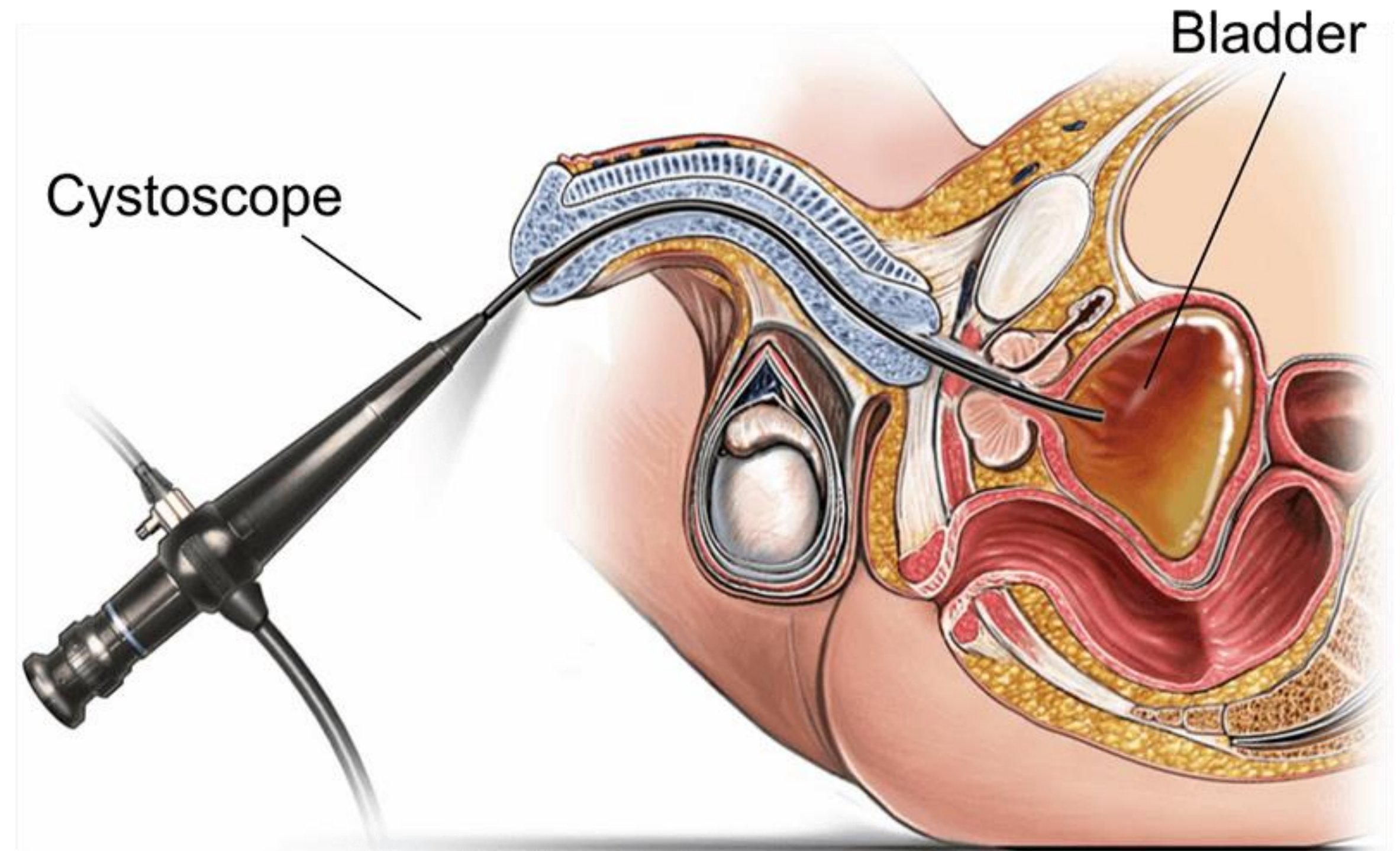
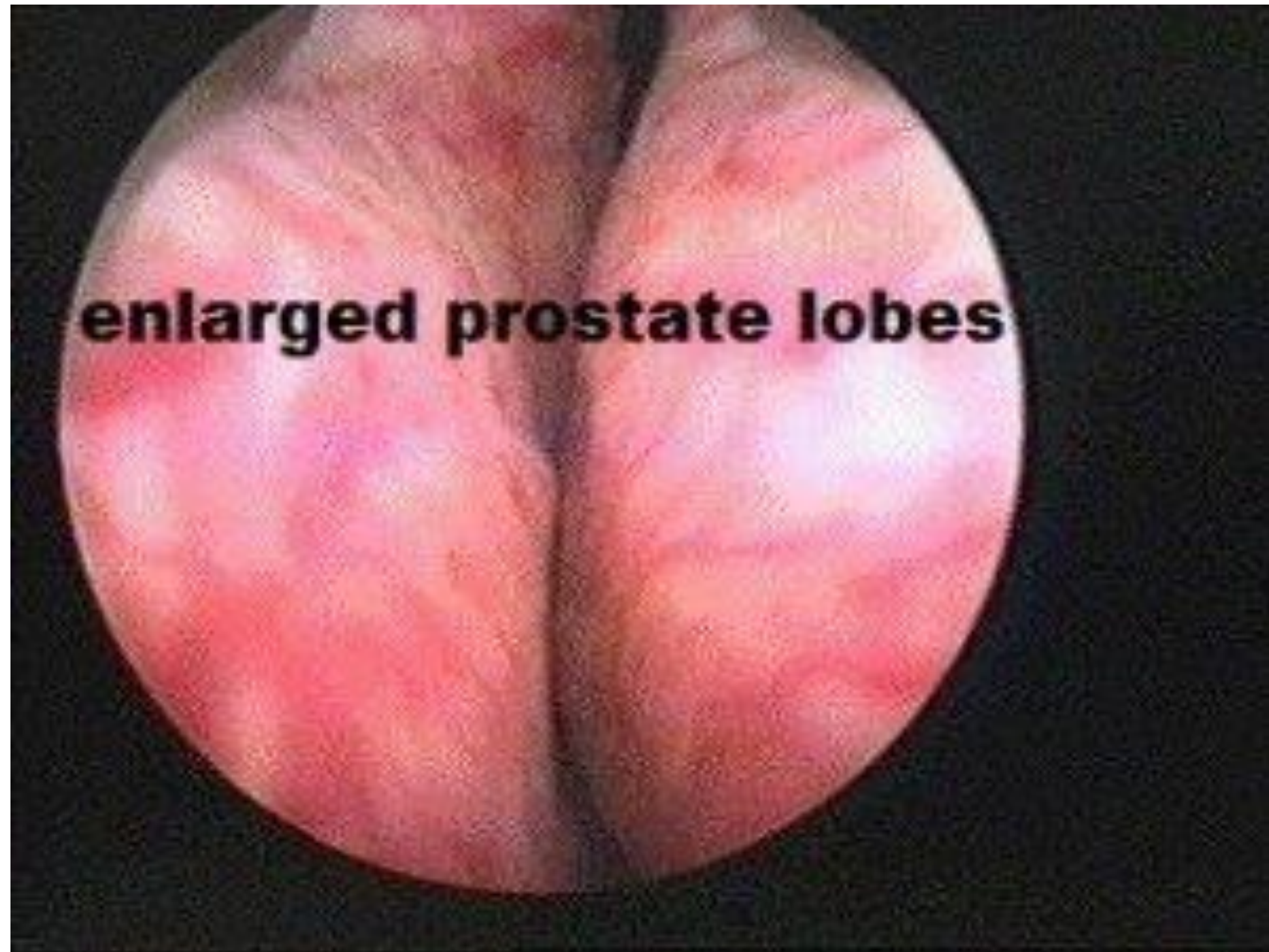


Uroflow



https://centralmourology.com/procedure_types/uroflow/

Cystoscopy





Who needs Treatment for BPH?

- Not all men with BPH need treatment
- If you have symptoms of BPH and they are bothersome to you - treatment can be beneficial
- In some severe cases, if BPH is not treated
 - patient may not be able to urinate at all
 - urine can back up into the kidneys and cause kidney failure
 - patient can get urinary tract infections



Medical Management of BPH

- Alpha Blockers

- Tamsulosin (Flomax), Doxazosin (Cardura), Alfuzosin (Uroxatral), Silodosin (Rapaflo), Terazosin (Hytrin), Prazosin (Minipress)
- Relaxes the smooth muscle at the bladder neck and prostate
- Side effects: dizziness (5-15%), retrograde ejaculation (6%), rhinitis (12%), intra-op Floppy Iris syndrome during cataract surgery (0.9-3.7%)



Medical Management of BPH

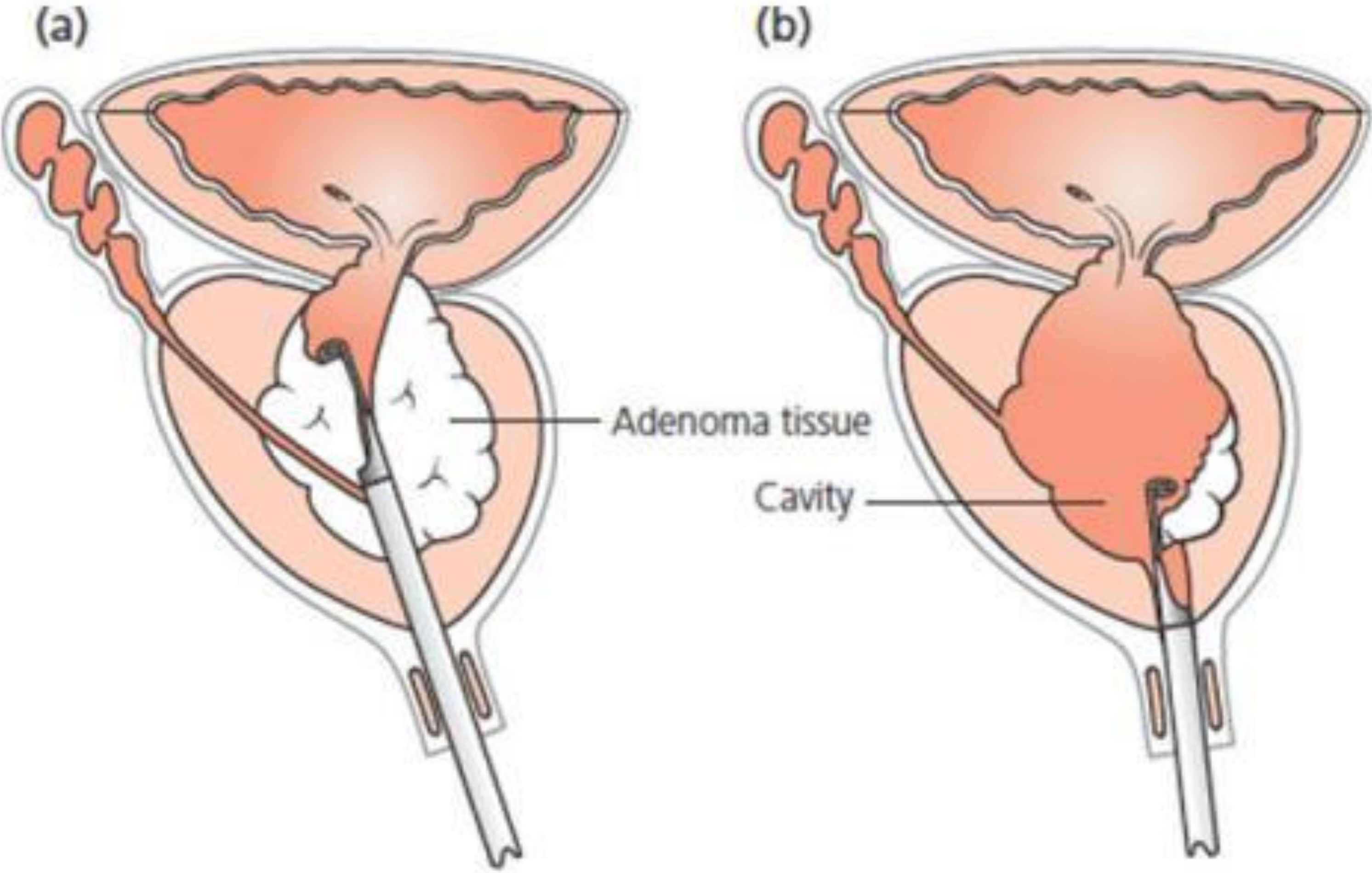
- 5-Alpha-Reductase Inhibitors
 - Finasteride (Proscar), Dutasteride (Avodart)
 - Blocks the conversion of Testosterone to DHT which causes reduction in prostate volume (15-30%) & PSA (50%) as well as decrease in urinary symptoms
 - Slow onset - need 6 months for clinical benefit
 - Side Effects: decrease libido (6.4%), ED (8.1%), ejaculatory disorder (0.8%), gynecomastia (0.5%). Breast tenderness (0.4%). Some of these side effects don't necessarily reverse upon stopping medication



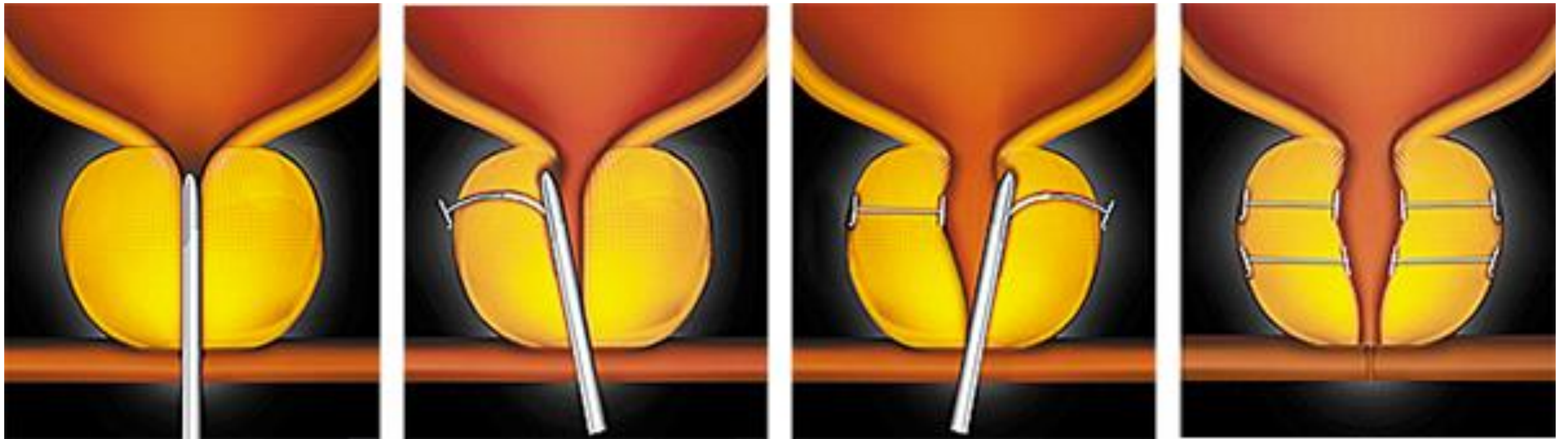
Surgical Management of BPH

- Transurethral resection of the prostate (TURP)
- Urolift
- Holmium Laser Enucleation of the prostate (HoLEP)
- Robotic Simple Prostatectomy
- REZUM
- Aquablation
- Open Simple Prostatectomy
- Greenlight Laser TURP

TURP



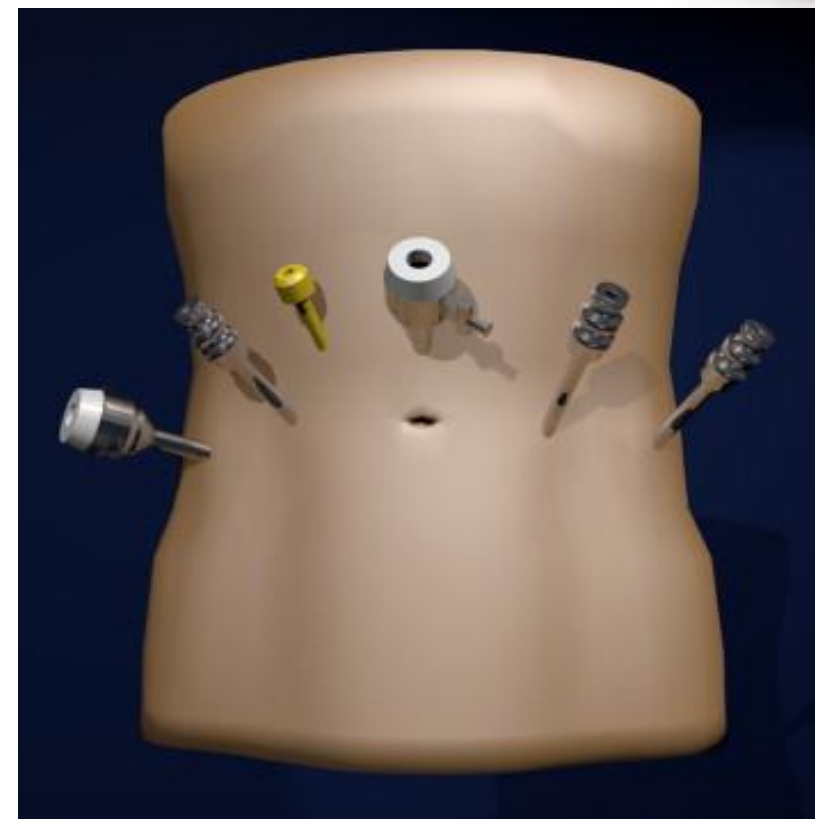
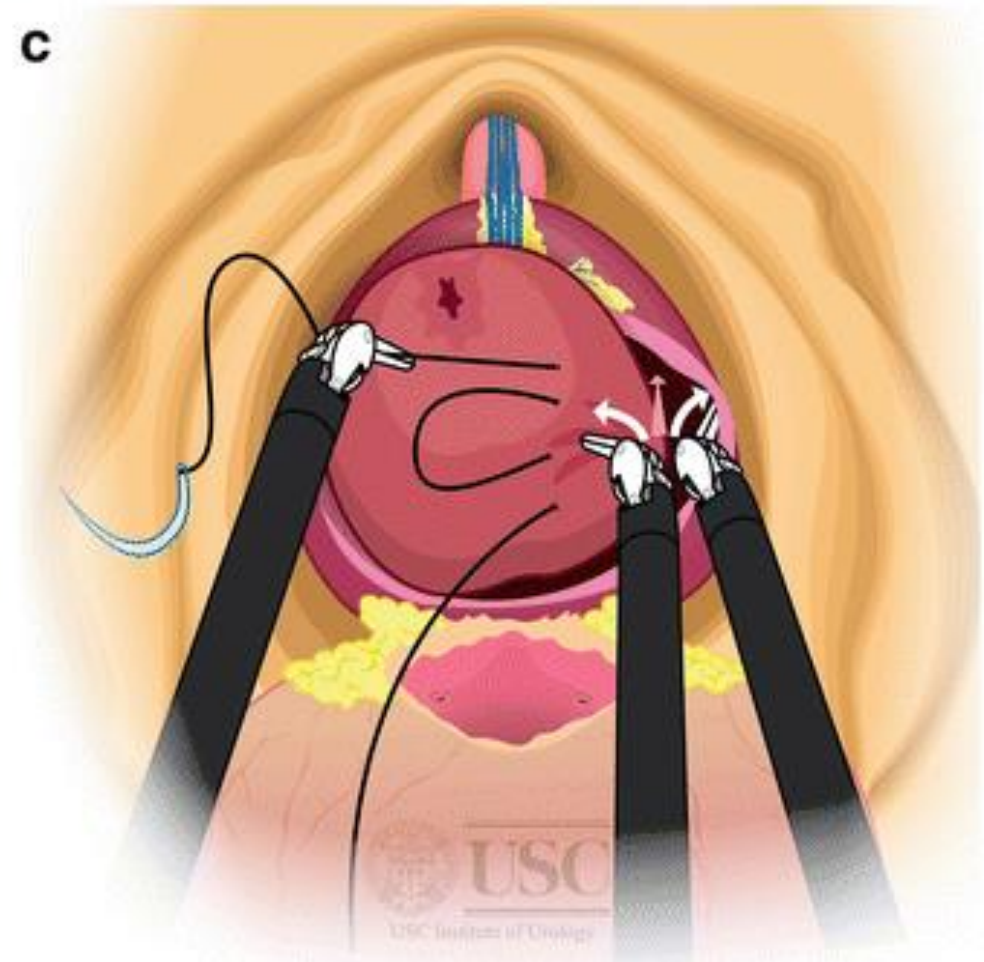
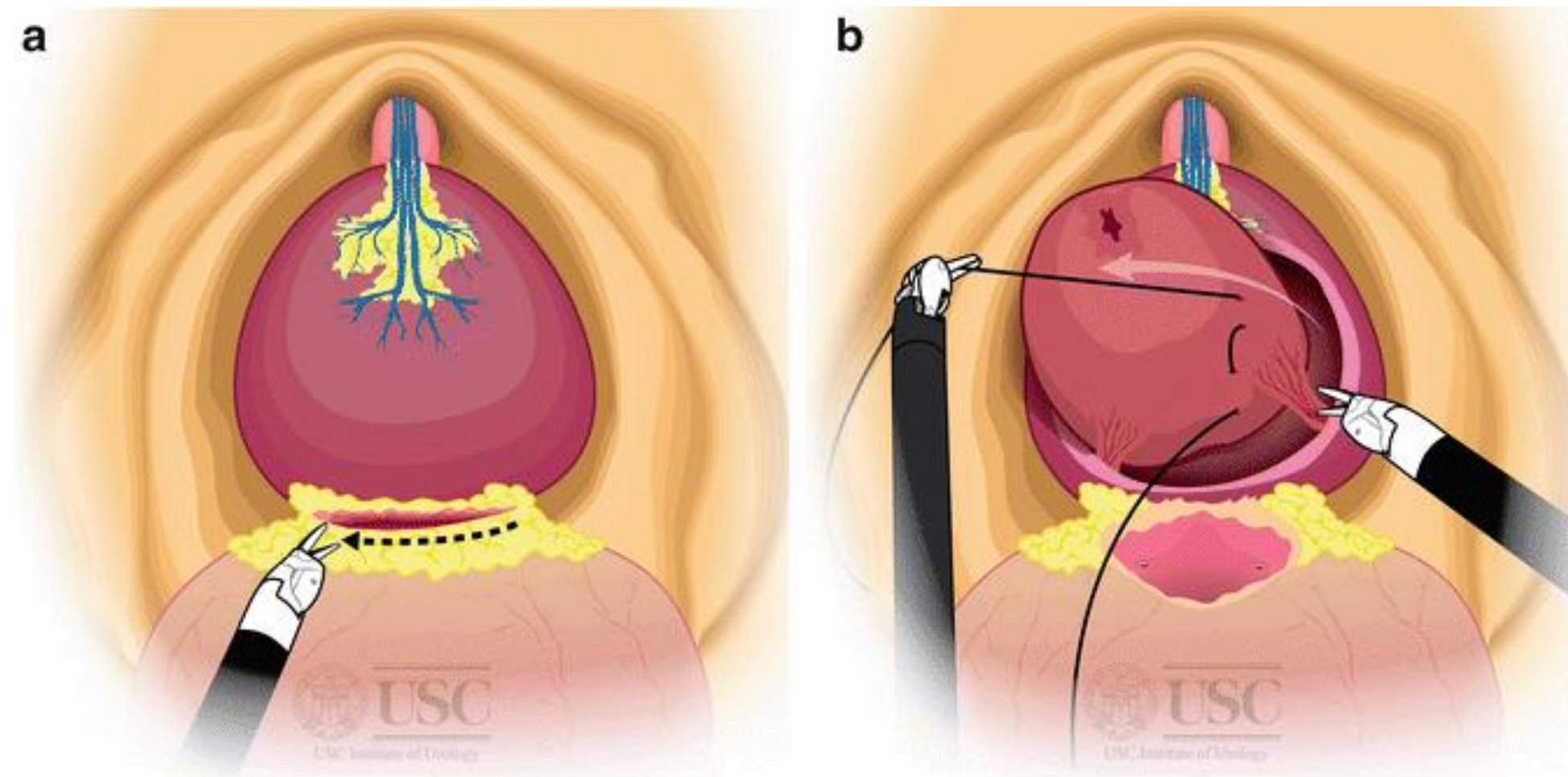
Urolift



HOLEP



Robotic Simple Prostatectomy

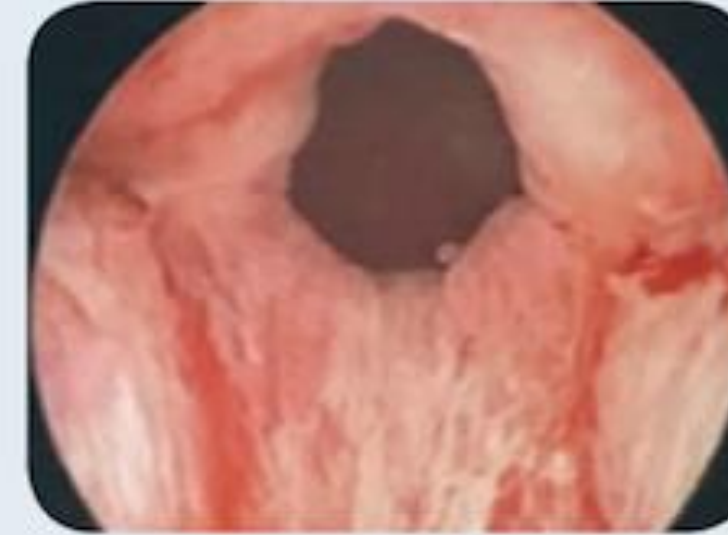
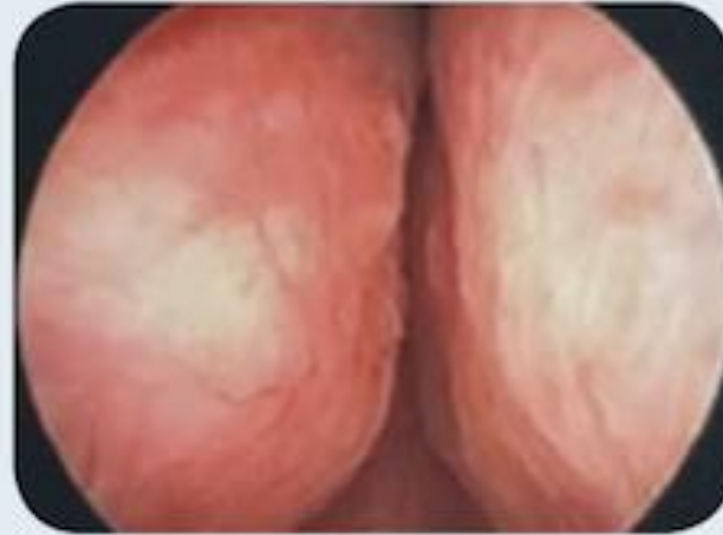




PROSTATIC URETHRA BEFORE AND AFTER THREE NEWER BPH PROCEDURES

BEFORE

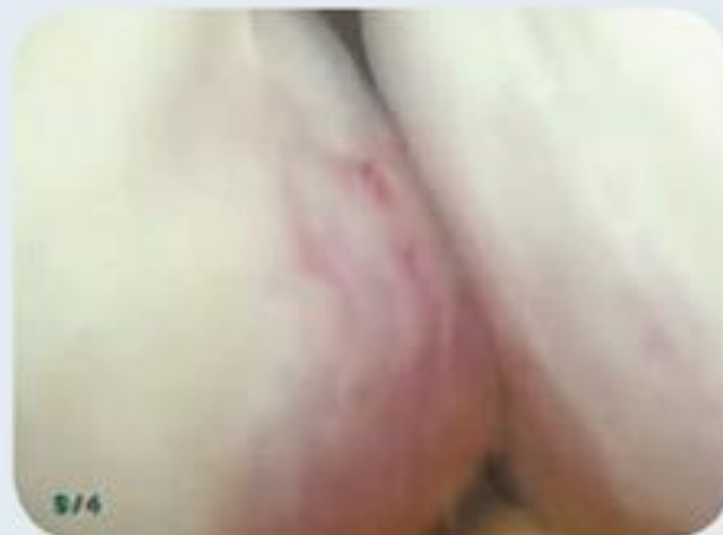
AFTER



Urethral lift procedure



Water vapor thermal therapy



Aquablation procedure

Photos courtesy of Teleflex (top), Boston Scientific (middle), and Peter Gilling, MD (bottom).

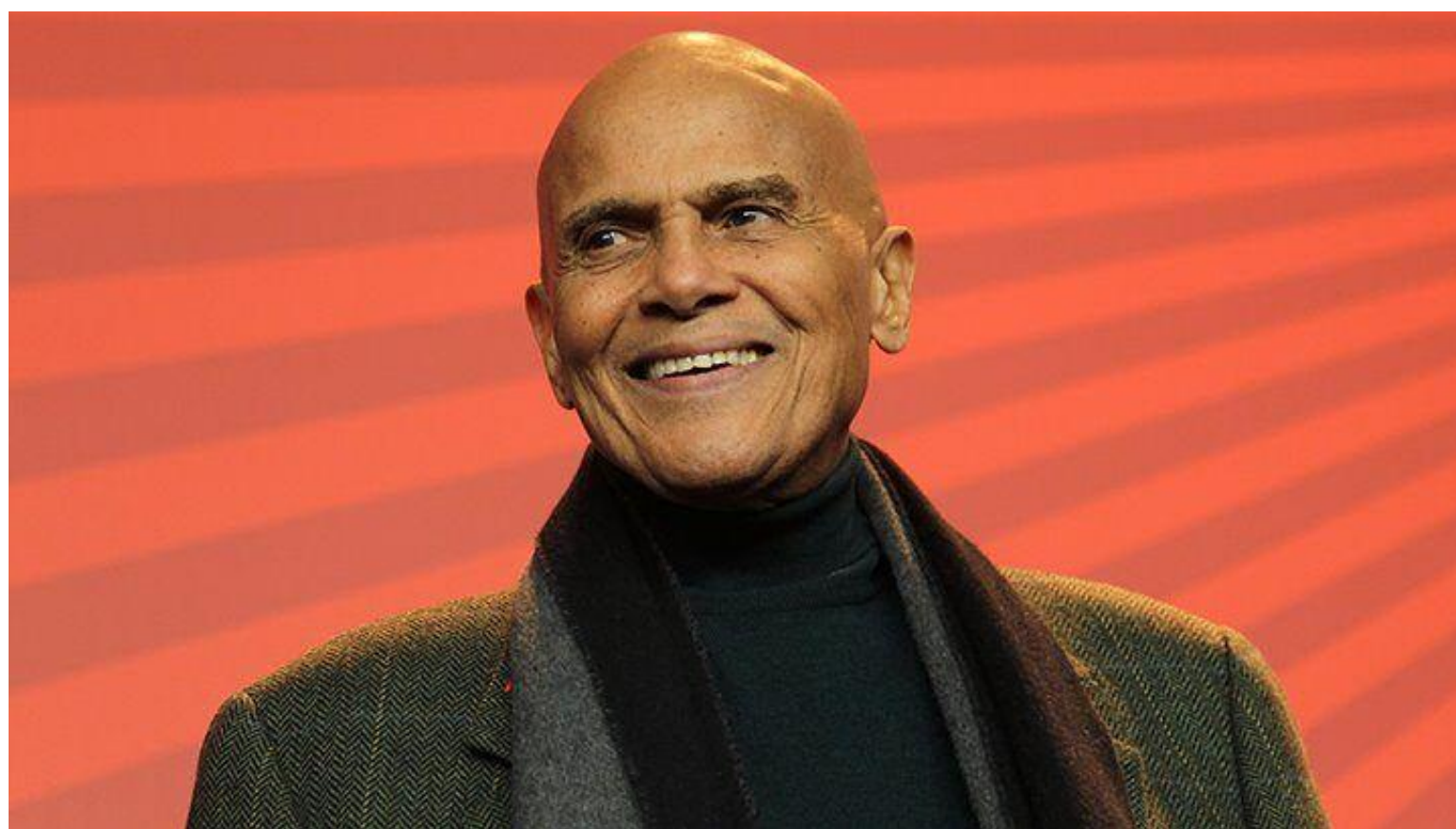
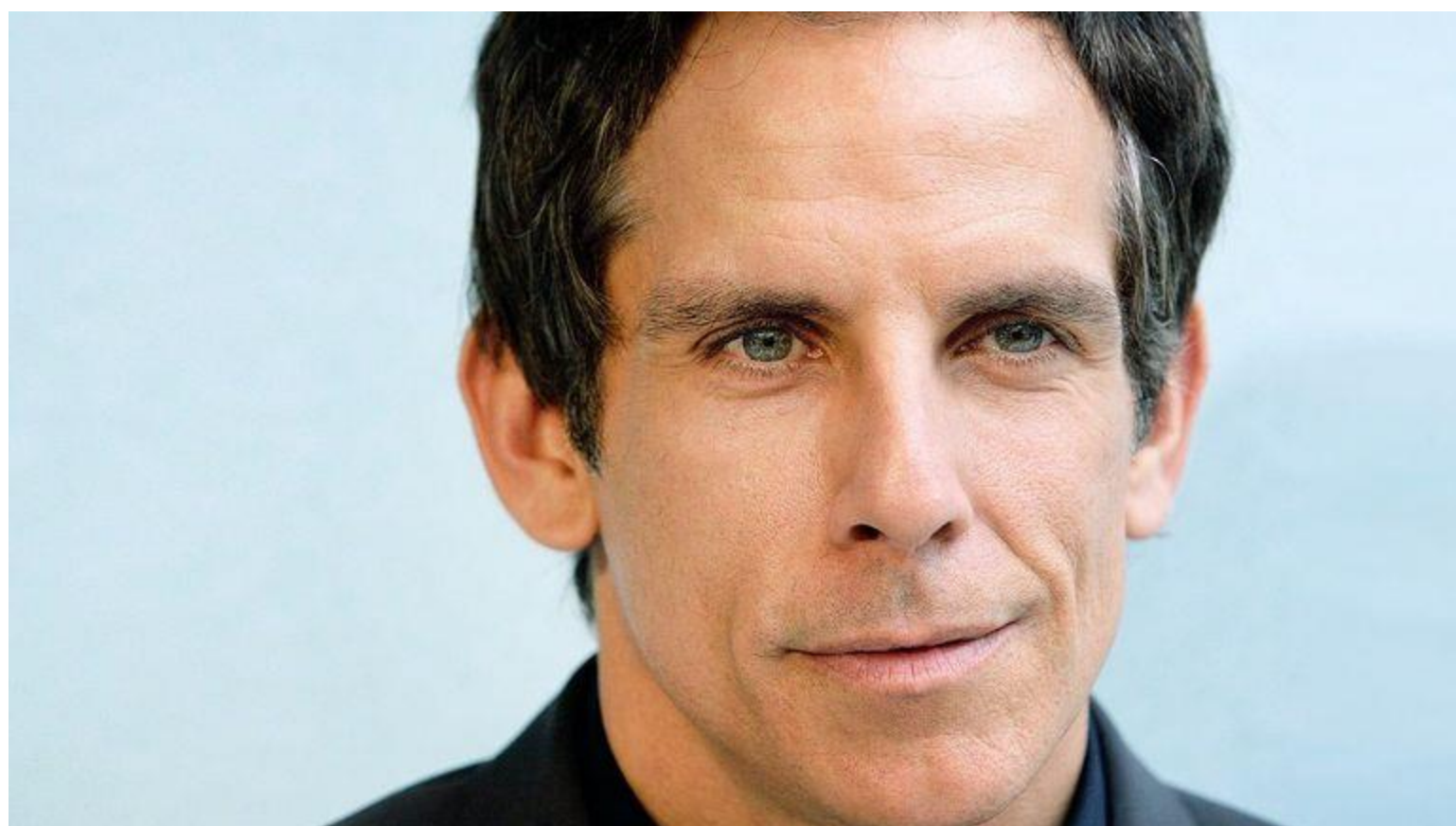


Take Home Message - BPH

- Very common benign condition in men and incidence increases with age
- BPH causes bothersome urinary symptoms
- If you have these symptoms - you should discuss further with your PCP or Urologist
- Treatment with medications or minimally invasive procedures can be of benefit to relieve symptoms as well as prevent progression of disease



What do these men have in common?





What is Prostate Cancer?

- Abnormal cells in the prostate grow out of control
- These cells can spread out of the prostate to other organs such as lymph nodes and bones via blood vessels and lymphatic vessels
- It is the **most common cancer** in men

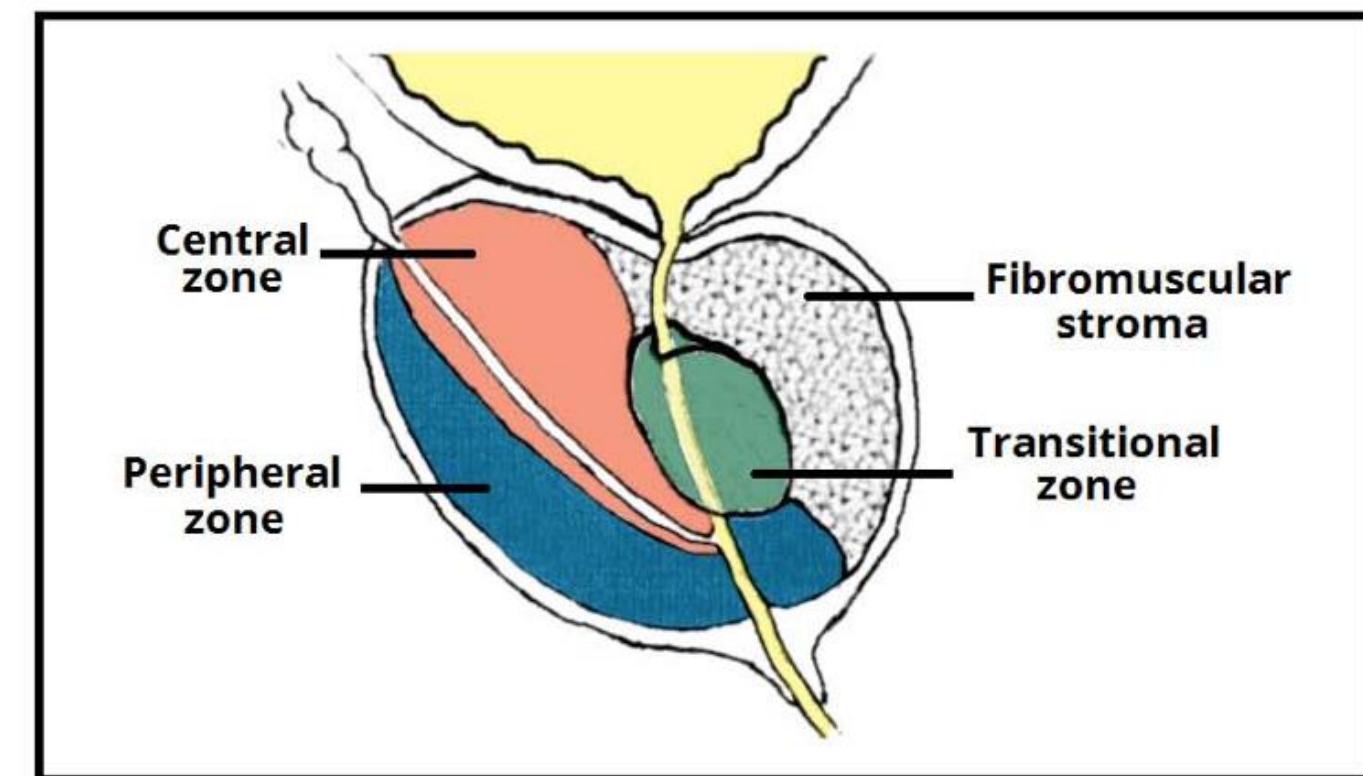


Statistics - Why does this matter?

- **1 in 9 men** will be diagnosed with prostate cancer in their life
- **1 in 6 African American men** will be diagnosed with prostate cancer
- **1 in 5 men** whose fathers or brothers were diagnosed with prostate cancer will be diagnosed with it
- **170,000 men** will be diagnosed with it each year
- **30,000 men** die from prostate cancer each year

Screening for Prostate Cancer

- Screening for prostate cancer is to look for the disease before it has presented any symptoms
- Early prostate cancer causes no symptoms
- Screening involves
 - digital rectal exam of the prostate
 - blood test called PSA (Prostate Specific Antigen)





Prostate Specific Antigen

- PSA is a reproductive protein produced by the prostate with a goal of seminal fluid liquefaction.
- PSA can increase with infection, inflammation, trauma, BPH or prostate cancer
- Abnormal PSA is not specific to prostate cancer
- Up to 15% of prostate cancers are diagnosed in men with “low PSA” levels (<4.0ng/dl)



Who Should Be Screened For Prostate Cancer?

- Depends on a man's age and his risk for prostate cancer
- Risk factors that place men at **high risk** for getting prostate cancer
 - Being African American.
 - Having a grandfather, father or brother who had prostate cancer.
 - When a gene change, such as BRCA, runs in your family.



Screening Recommendations

- Men under 40 years of age
 - **Men are not advised** to undergo screening for prostate cancer
- Men 40 to 55 years of age
 - **Men at average risk are not advised** to undergo screening for prostate cancer
 - **Men at high risk** should talk with their doctors and consider getting screened for prostate cancer

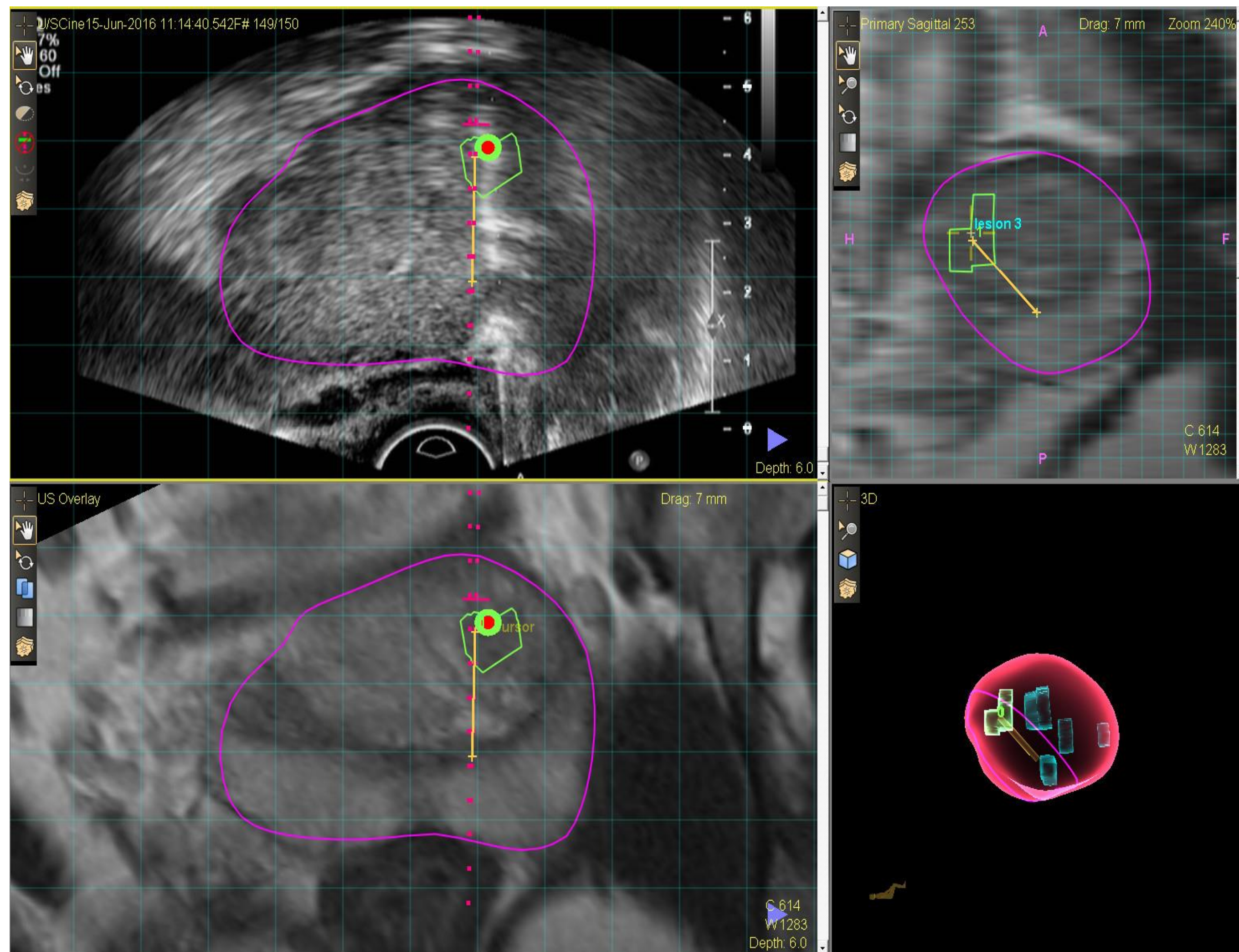
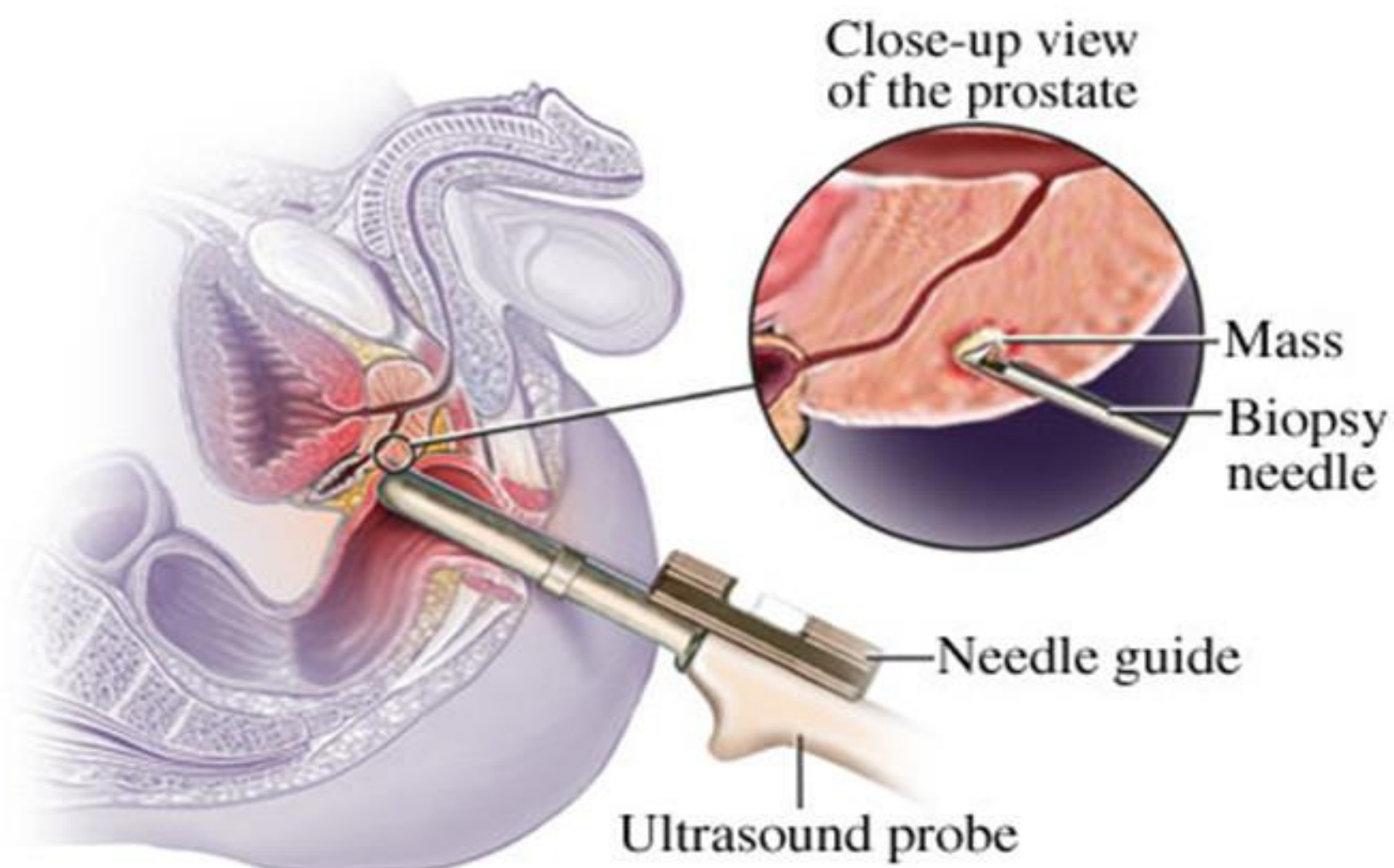


Screening Recommendations

- Men 55 to 69 years of age
 - **All men** are recommended to consider getting screened for prostate cancer after they have talked with their doctor about the pros and cons of screening
- Men 70 years of age or older
 - **Most men are not advised** to undergo screening for prostate cancer as the side effects of screening often outweigh the benefits.

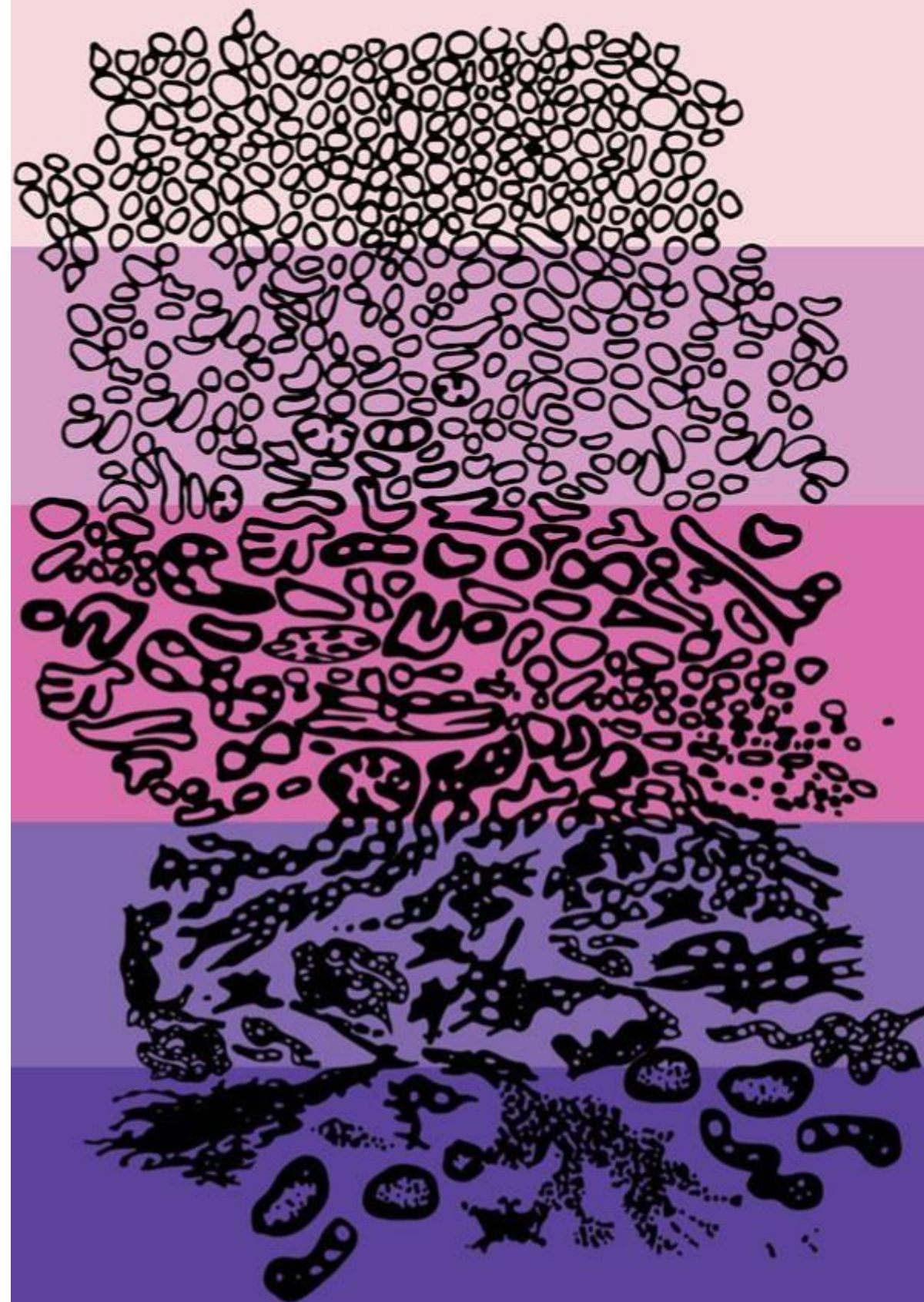
Diagnosing Prostate Cancer

- MRI of the Prostate
- MRI Fusion Biopsy of the Prostate



Pathological Diagnosis

Gleason's Pattern



1. Small, uniform glands

2. More stroma between glands

3. Distinctly infiltrative margins

4. Irregular masses of neoplastic glands

5. Only occasional gland formation

Well differentiated

Moderately differentiated

Poorly differentiated / Anaplastic

ISUP Prostate Cancer Grade Groups

Grade group	Gleason score	Gleason pattern
1	≤6	≤3+3
2	7	3+4
3	7	4+3
4	8	4+4, 3+5, 5+3
5	9 or 10	4+5, 5+4, or 5+5



Risk Categories for Prostate Cancer

Very Low Risk	PSA <10 ng/ml AND Grade Group 1 AND clinical stage T1-T2a AND <34% of biopsy cores positive AND no core with >50% involved, AND PSA density <0.15 ng/ml/cc
Low Risk	PSA <10 ng/ml AND Grade Group 1 AND clinical stage T1-T2a
Intermediate Risk	PSA 10-<20 ng/ml OR Grade Group 2-3 OR clinical stage T2b-c <ul style="list-style-type: none">· Favorable: Grade Group 1 (with PSA 10-<20) OR Grade Group 2 (with PSA<10)· Unfavorable: Grade Group 2 (with either PSA 10-<20 or clinical stage T2b-c) OR Grade Group 3 (with PSA < 20)
High Risk	PSA \geq 20 ng/ml OR Grade Group 4-5 OR clinical stage \geq T3*

*Clinical stage T3 cancer is considered locally advanced and, therefore, outside the scope of this guideline.



Treatment for cancer contained within the Prostate

- Treatment can **CURE** this type of prostate cancer
 - Low Risk Prostate Cancer: Active Surveillance
 - Intermediate Risk Prostate Cancer: Active Surveillance (in select cases) Surgery or Radiation
 - High Risk Prostate Cancer: Surgery or Radiation +/- Hormone Therapy

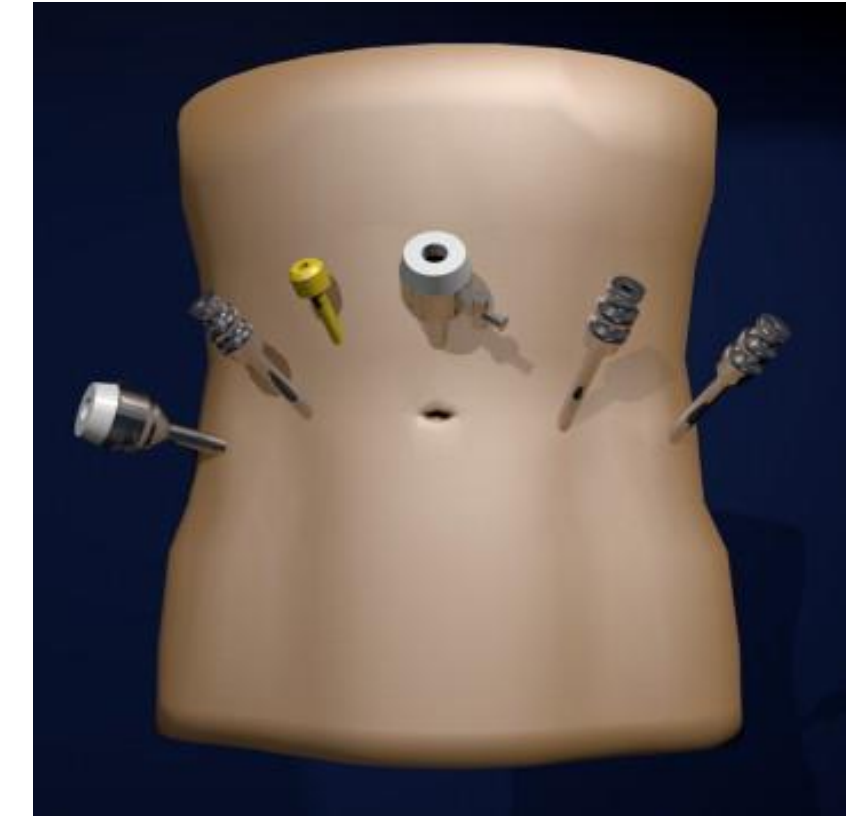


Active Surveillance

- Keeping a close eye on the cancer with:
 - Frequent prostate exams
 - PSA tests
 - Prostate Biopsies every couple years
- Avoids all of the side effects of treatment with radiation or surgery

Surgery

- Benefits of Robotic Surgery
 - Less Bleeding
 - Less Pain post op
 - Faster Recovery
 - Shorter Hospital Stay
 - Improved visualization for surgeon
 - Same cancer control





Radiation

- Brachytherapy (Radiation seed implants)
- External Radiation
 - Proton beam
 - Cyber knife
 - IMRT (image guided radiotherapy)
 - SBRT (stereotactic radiotherapy)



When the cancer has spread ...

- Cancer can spread to lymph nodes, bones or other nearby organs
- Goal of treatment at this point is to stop further spread and growth of the cancer
- Treatment involves:
 - Radiation
 - Chemotherapy
 - Hormone Therapy



Multidisciplinary Team & Services

Urologic Oncology

Radiation Oncology
Rehab

Medical Oncology

Genetics

Dietitians

Specialty Physical Therapy &

Social Work

Supportive & Palliative Care



Team - Supports Patient and Family Needs

Nurse Navigators

Our navigators help coordinate care for the patient with multiple caregivers and guide patients in making informed decisions.

They also collaborate with a multidisciplinary team for screening, diagnosis, treatment, and supportive care across the cancer continuum.



Clinical Trials

- HFGCC is a NCI Community Oncology Research Program Designated
- Enroll in trials involving cutting edge treatments and medications



Thank you!!

Questions ??



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The **ChristianaCare** Way

We serve our neighbors as respectful, expert, caring partners in their health. We do this by creating innovative, effective, affordable systems of care that our neighbors value.