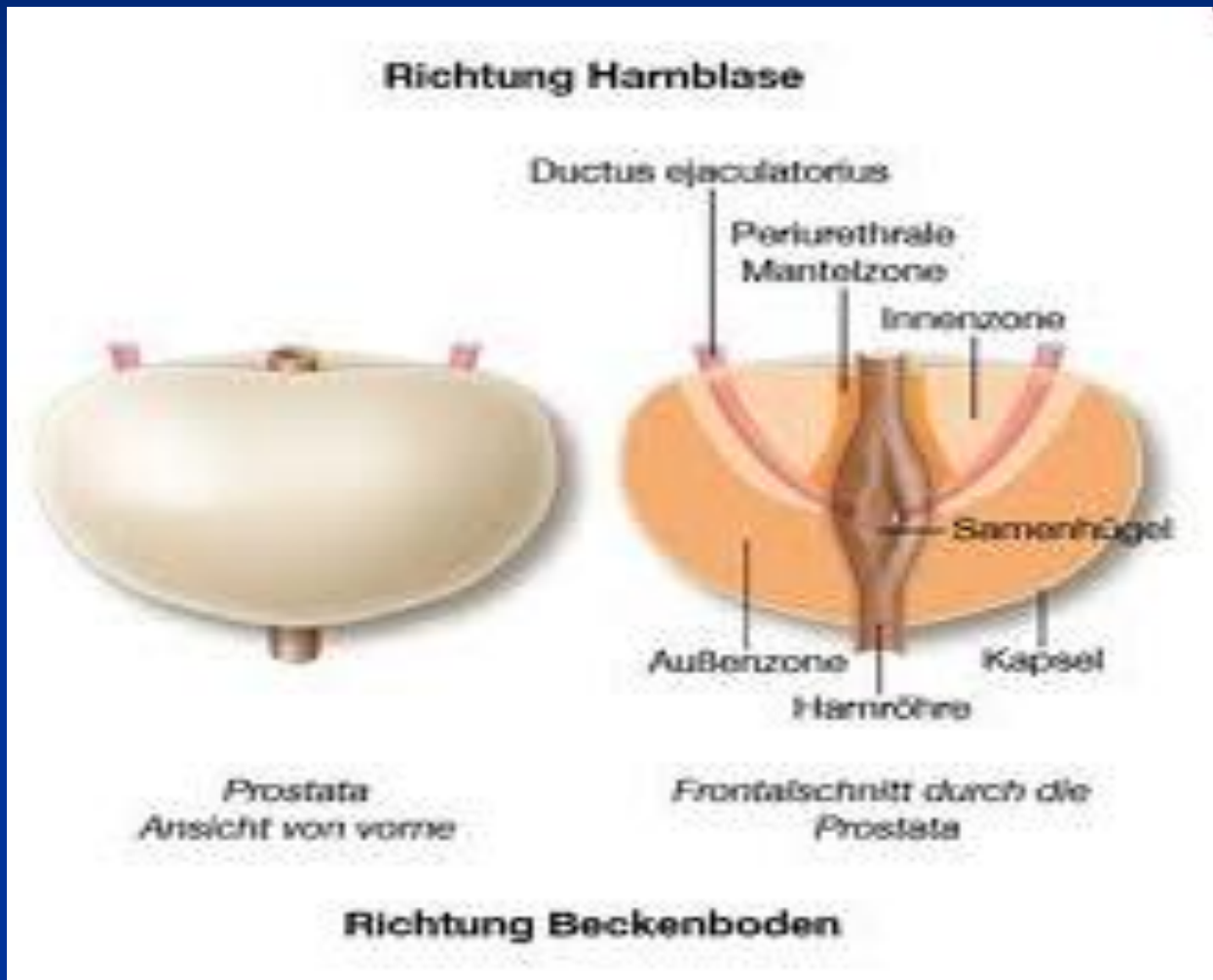


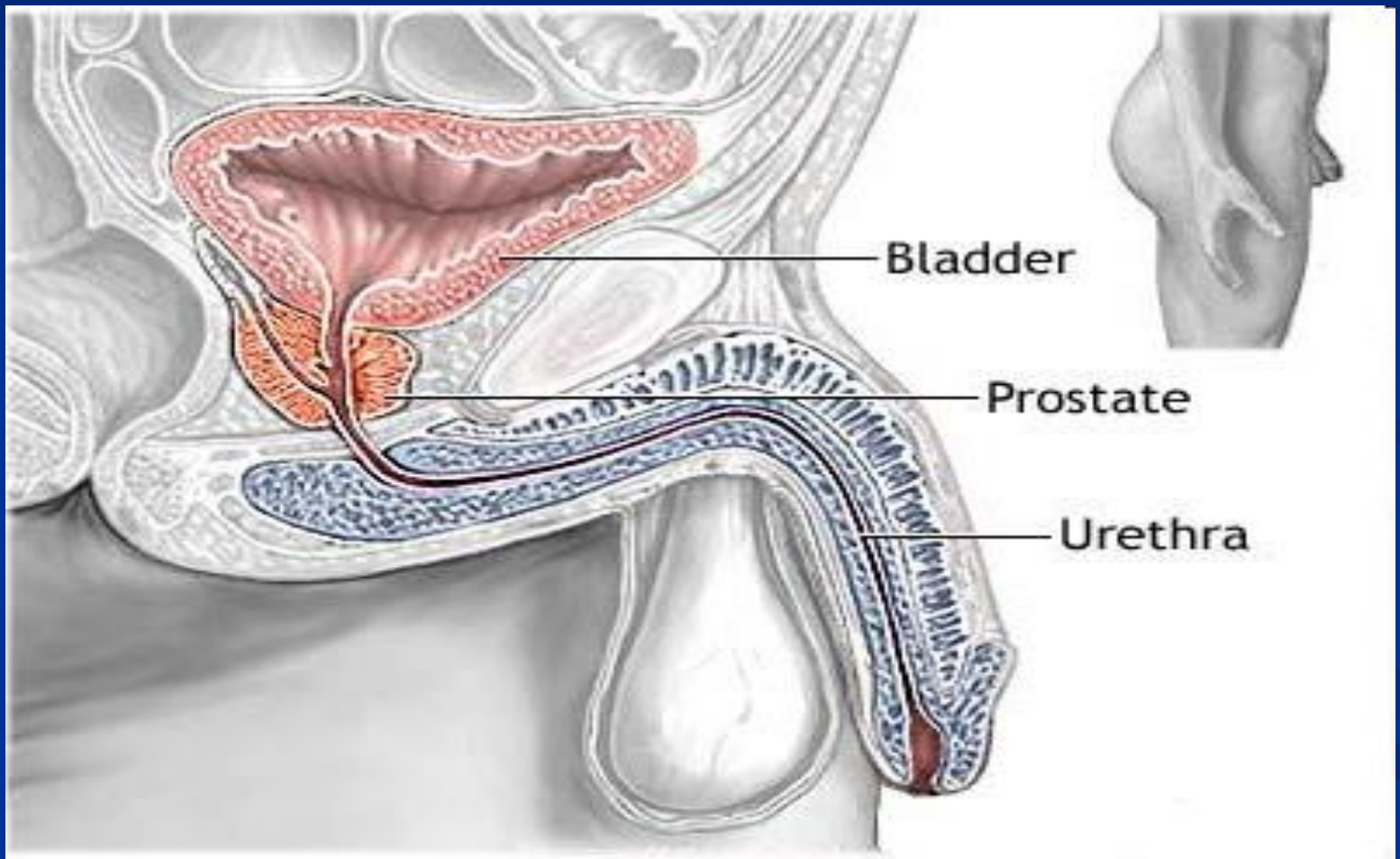
Patologia prostatei

Curs 3

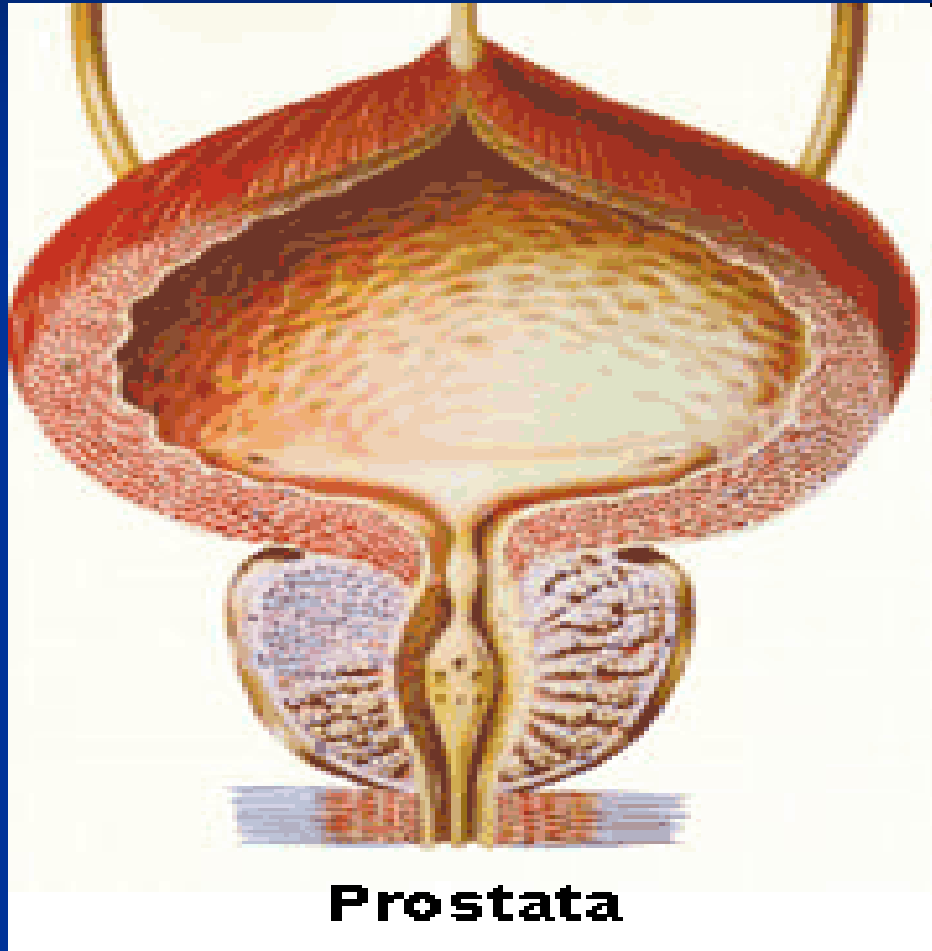
Anatomia prostatei



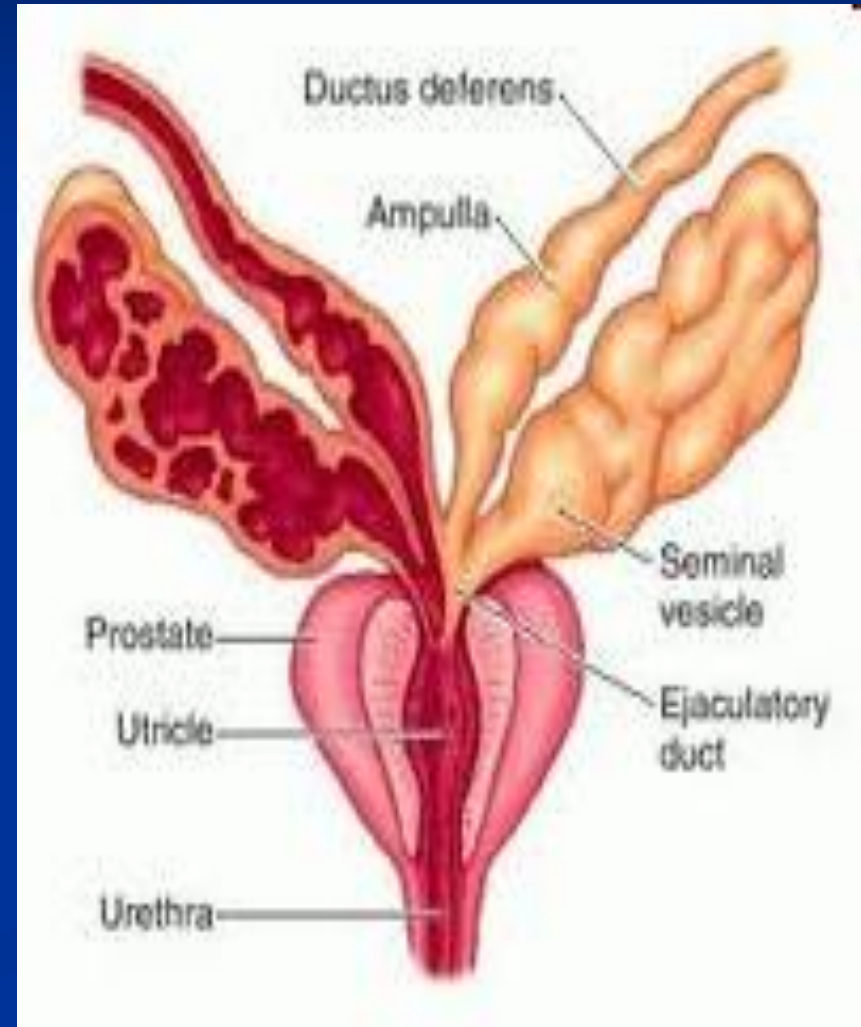
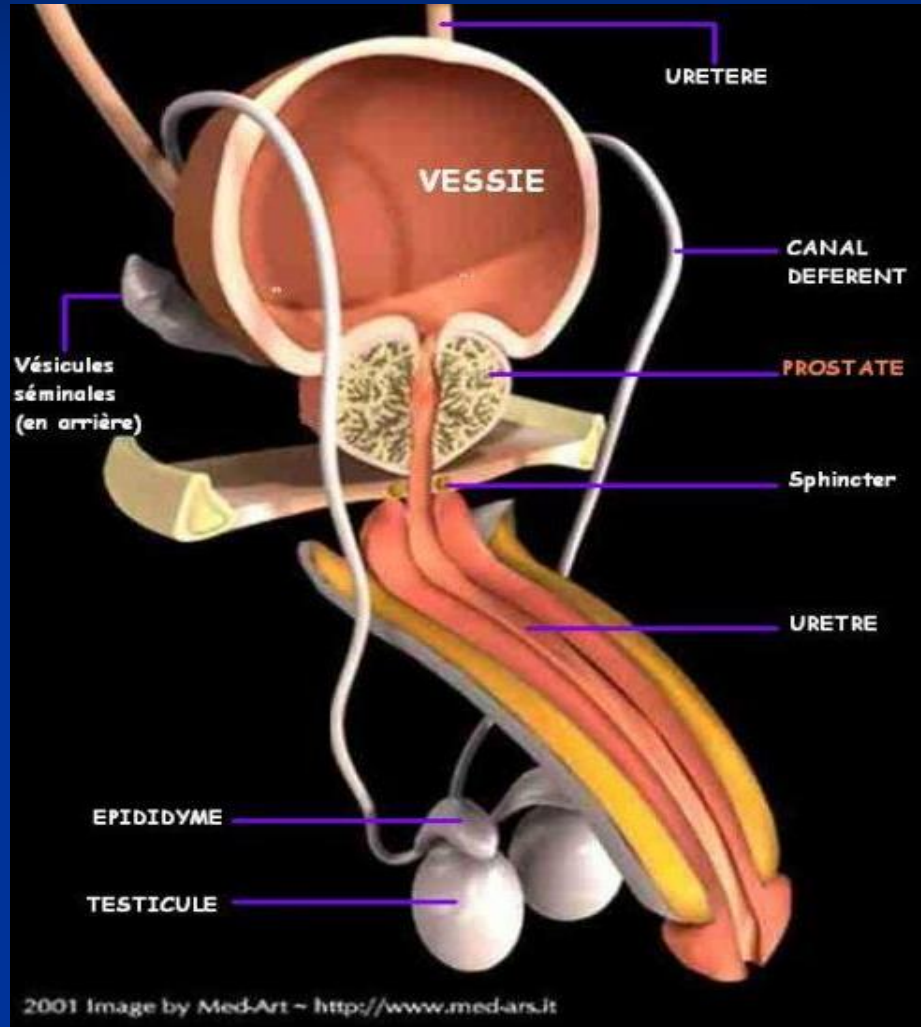
Anatomia prostatei

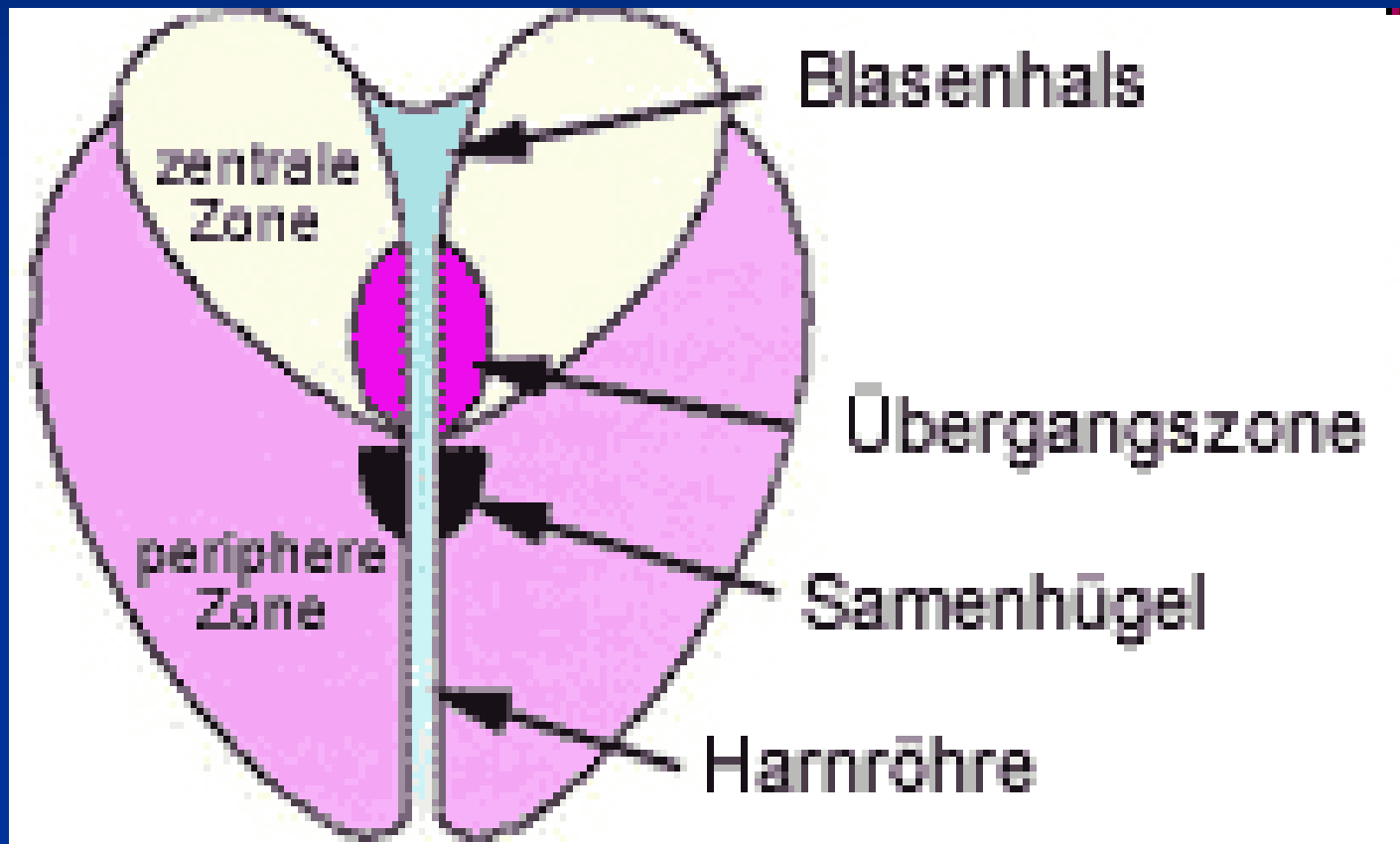


Anatomia prostatei

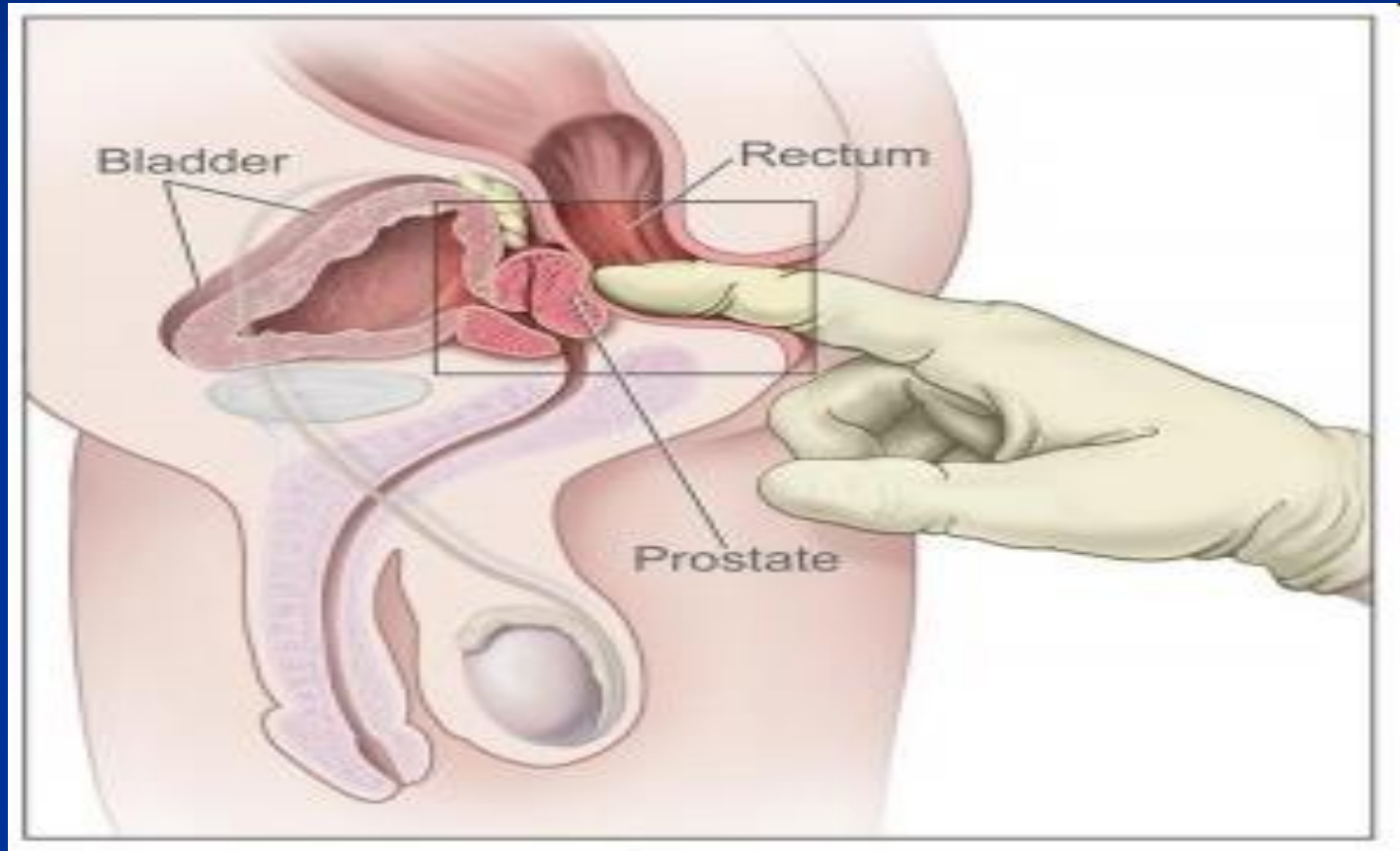


Anatomia prostatei





Examinarea clinică a prostatei



HPB

- **HIPERPLAZIE**, creșterea de volum a unui țesut, sau a unui organ prin *proliferarea* (înmulțirea) elementelor celulare constitutive; rar este fiziologică, compensatorie; apare, de regulă, patologic, producând tumori: hiperplazie *adenomatoasă*, sau simplă; hiperplazie *glandulo-chistică* a mucoasei uterine (v. *metropatia hemoragică*). Hiperplazia poate fi congenitală (**hiperplazia** rinichiului, timusului, tiroidei) sau câștigată, provocată de diferite boli (ale sistemului hematopoetic, ficatului, splinei, ganglionilor limfatici). Tratamentul **hiperplaziei** este cauzal.

HPB

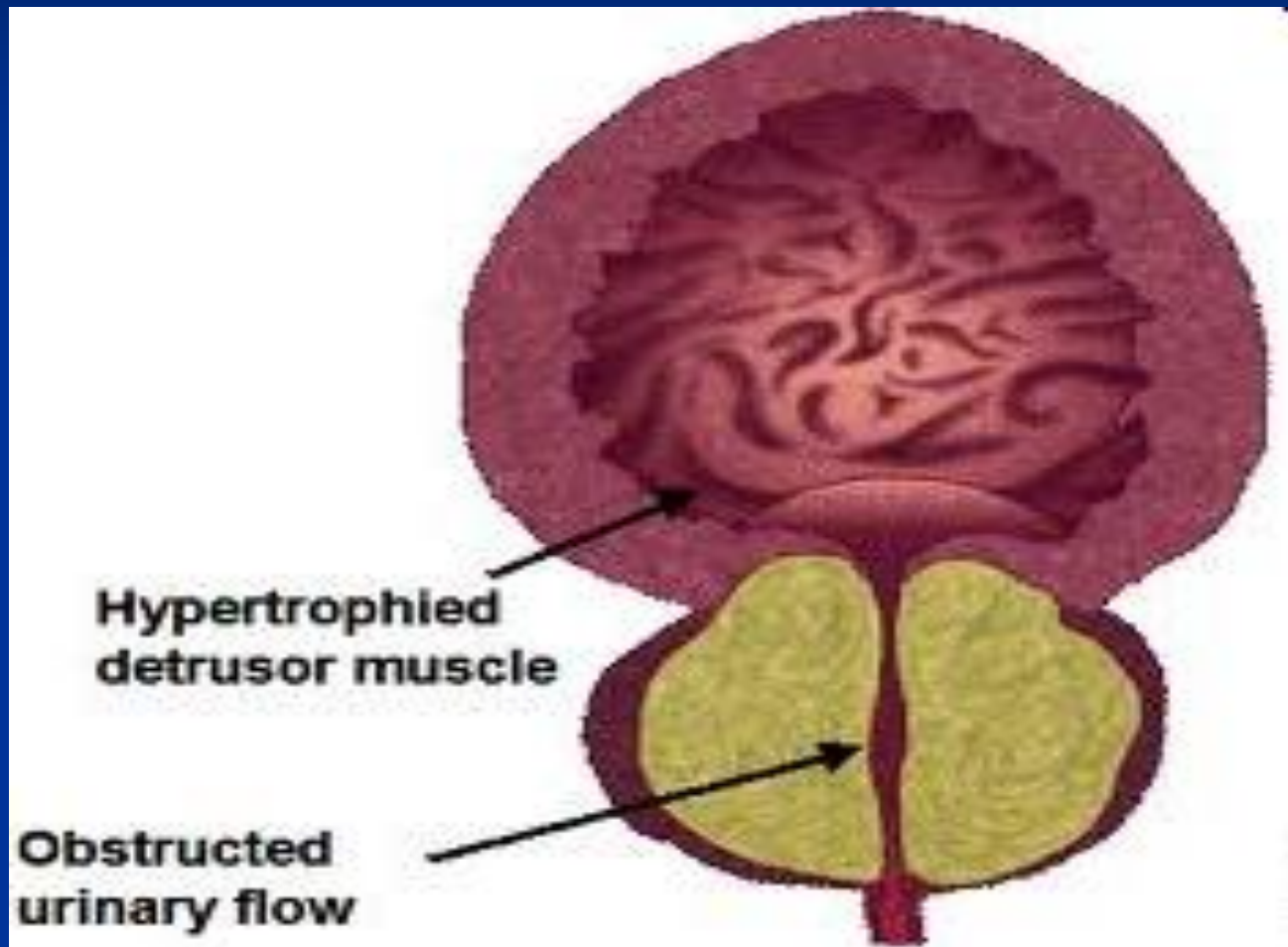


Normal Prostate



Enlarged Prostate

BPH

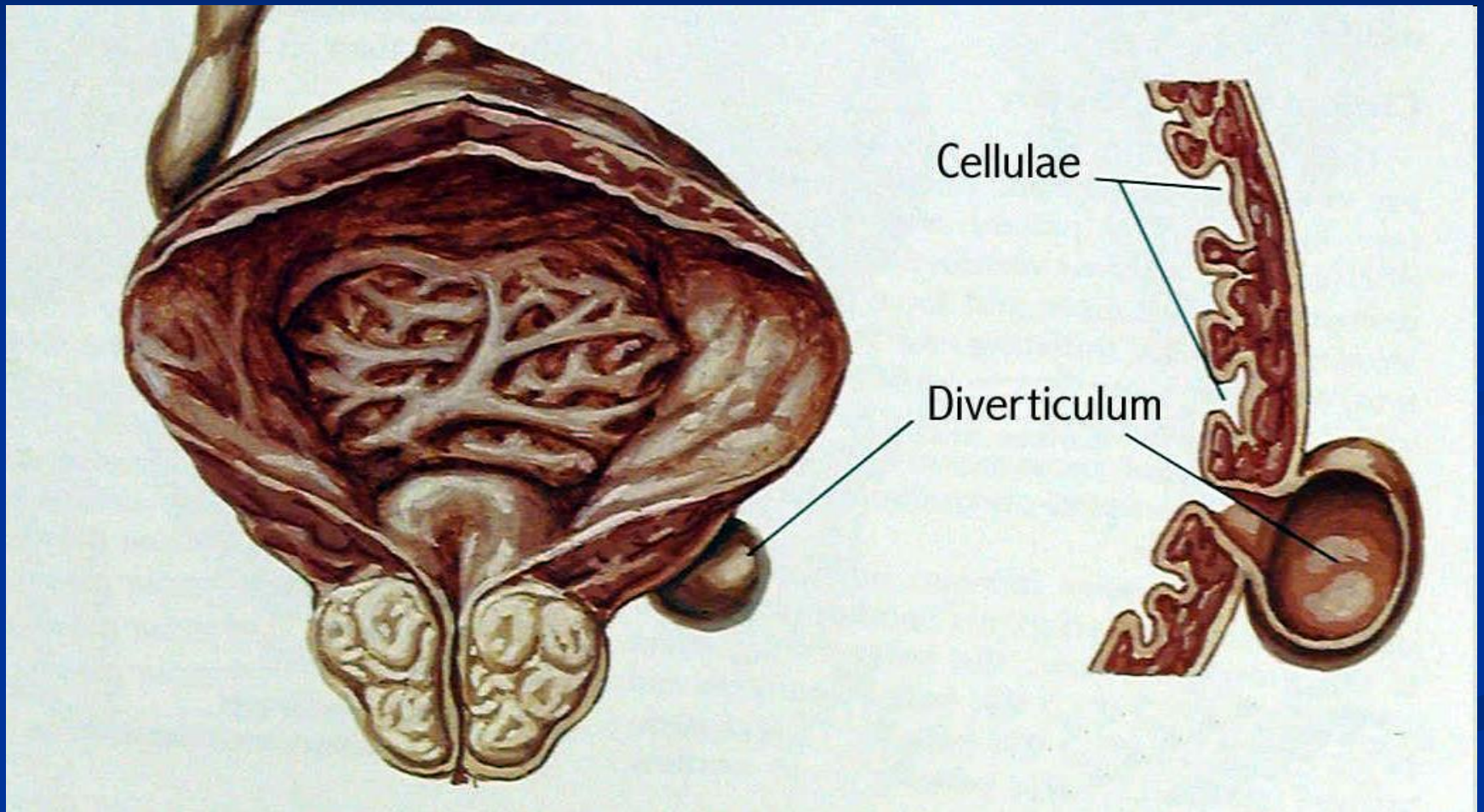


BPH = obstacol

Consecințe fiziopatologice:

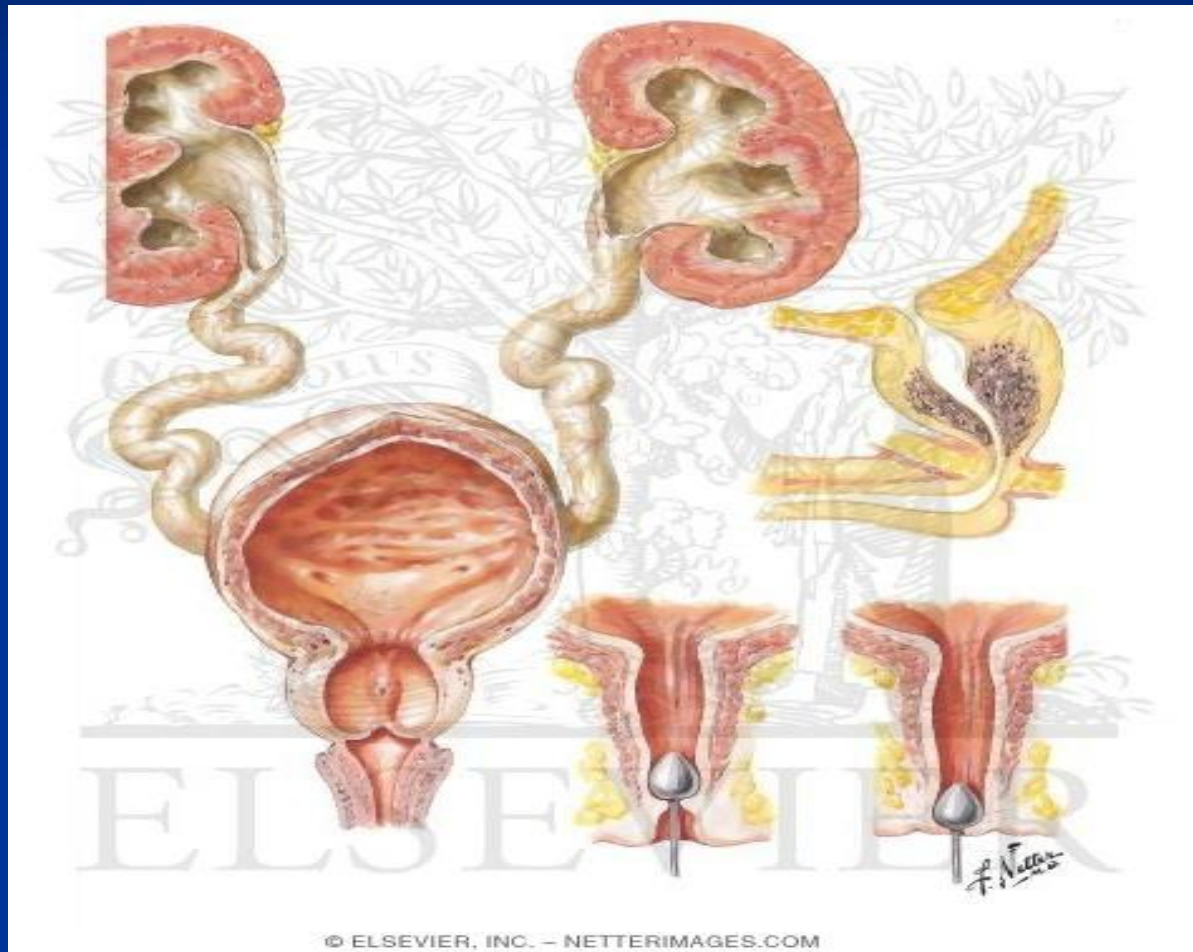
- Hipertrofia fibrelor musculare (vezica de luptă)
- Diverticuli vezicali
- Decompensarea detrusorului
- U.H.N bilaterală
- I.R.C.

Vezica “de luptă”



UHN bilaterală

IRC



BPH- manifestări clinice

■ Simptome de stocare

- polakiuria
- nocturia
- micțiunea imperioasă
- incontinența prin urgență micțională

BPH-manifestări clinice

■ Simptome de golire:

- debut tardiv/inițiere dificilă a micțiunii
- jet subțire, slab proiectat
- micțiune întreruptă
- durata anormală a micțiunii
- ”terminal dribbling”
- senzație de golire incompletă a V.U.

IPSS

■ International **P**rostate **S**ymptoms **S**core

- chestionar cu 7 întrebări, fiecare cu variante de răspuns de la 0 la 5
- prin însumarea răspunsurilor pacienților, se calculează IPSS
- cuantifică obiectiv simptomatologia
- permite aprecierea răspunsului la tratament

Patient Name _____ Date of Birth _____ Date Completed _____	Not at all	Less than 1 time in 5	Less than half the time	About half the time	More than half the time	Almost always	Score
Incomplete Emptying Over the past month, how often have you had a sensation of not emptying your bladder completely after you finished urinating?	0	1	2	3	4	5	
Frequency Over the past month, how often have you had to urinate again less than 2 hours? After you finished urinating?	0	1	2	3	4	5	
Intermittency Over the past month, how often have you found you stopped and started again? Several times when you urinated?	0	1	2	3	4	5	
Urgency Over the past month, how often have you found it difficult to postpone urination?	0	1	2	3	4	5	
Weak Stream Over the past month, how often have you had to push or strain to begin urination?	0	1	2	3	4	5	
Straining Over the past month, how often have you had to push or strain to begin urination?	0	1	2	3	4	5	
	None	1-Time	2-Times	3-Times	4-Times	5-Times or more	
Nocturia Over the past month, how many times did you most typically get up to urinate from the time you went to be at night until the time you got up in the morning?	0	1	2	3	4	5	

Your Total I-PSS Score

IPSS

- 0-7 simptomatologie ușoară
- 8-19 simptomatologie moderată
- 20-35 simptomatologie severă
- IPSS este util doar în BPH necomplicată !!!

IPSS

- cuantifică obiectiv simptomatologia
- permite alegerea tratamentului
- permite urmărirea rezultatelor tratamentului medical
- permite urmărirea progresiei bolii la pacienții netratați

BPH - complicații

1. Infecțioase
2. Litiaza vezicală
3. Diverticulul (diverticuli) vezical(i)
4. Retenția acută de urină
5. Retenția cronică de urină (fără/cu distensie)
6. U.H.N. bilaterală și I.R.C.
7. Hematuria macroscopică

BPH - diagnostic

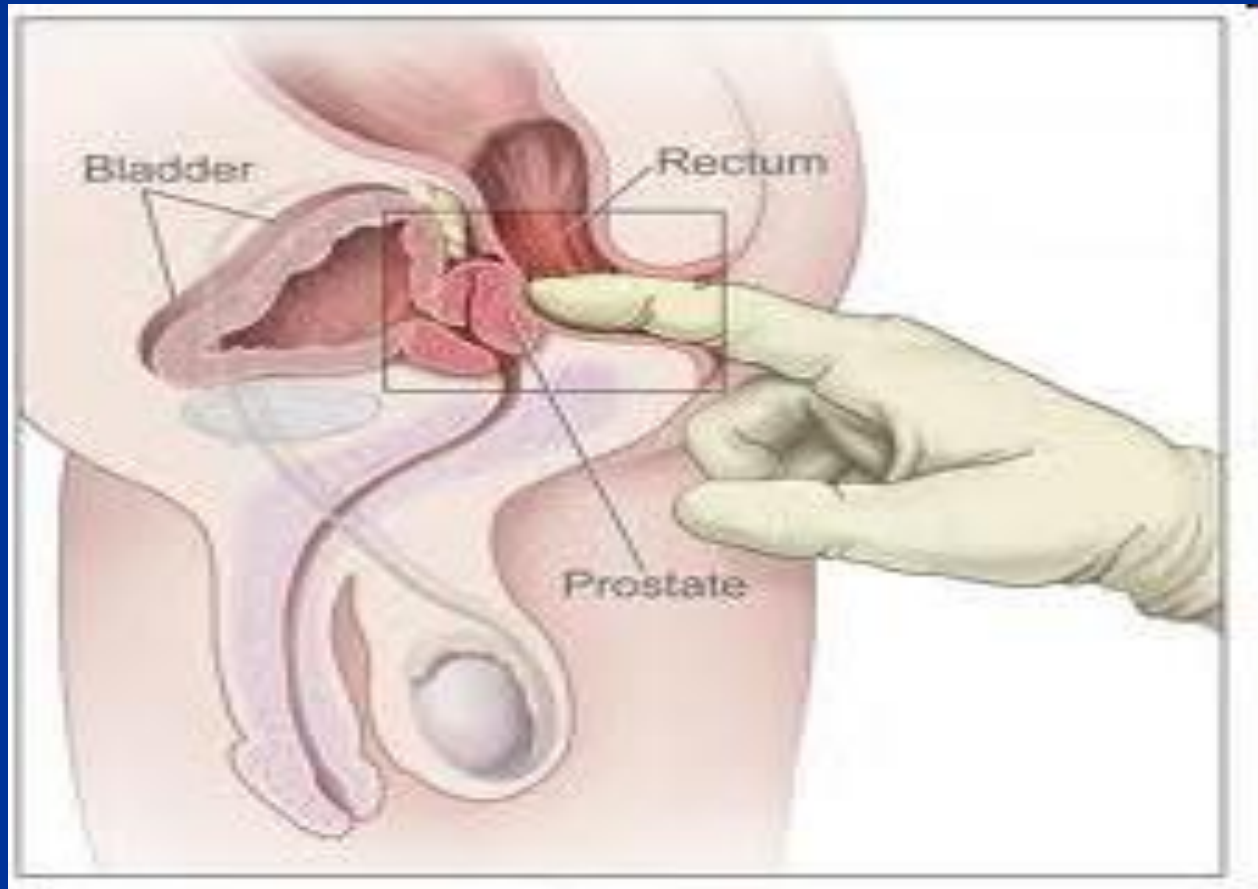
- Anamneza (inclusiv IPSS)
- Examenul fizic – tușeul rectal
- Examenul ecografic
- Uroflowmetria
- Examine de laborator
- Opționale: U.I.V și uretrocistoscopia

BPH - symptomatologie

- Symptome de stockage
- Symptome de golire

BPH – examen clinic

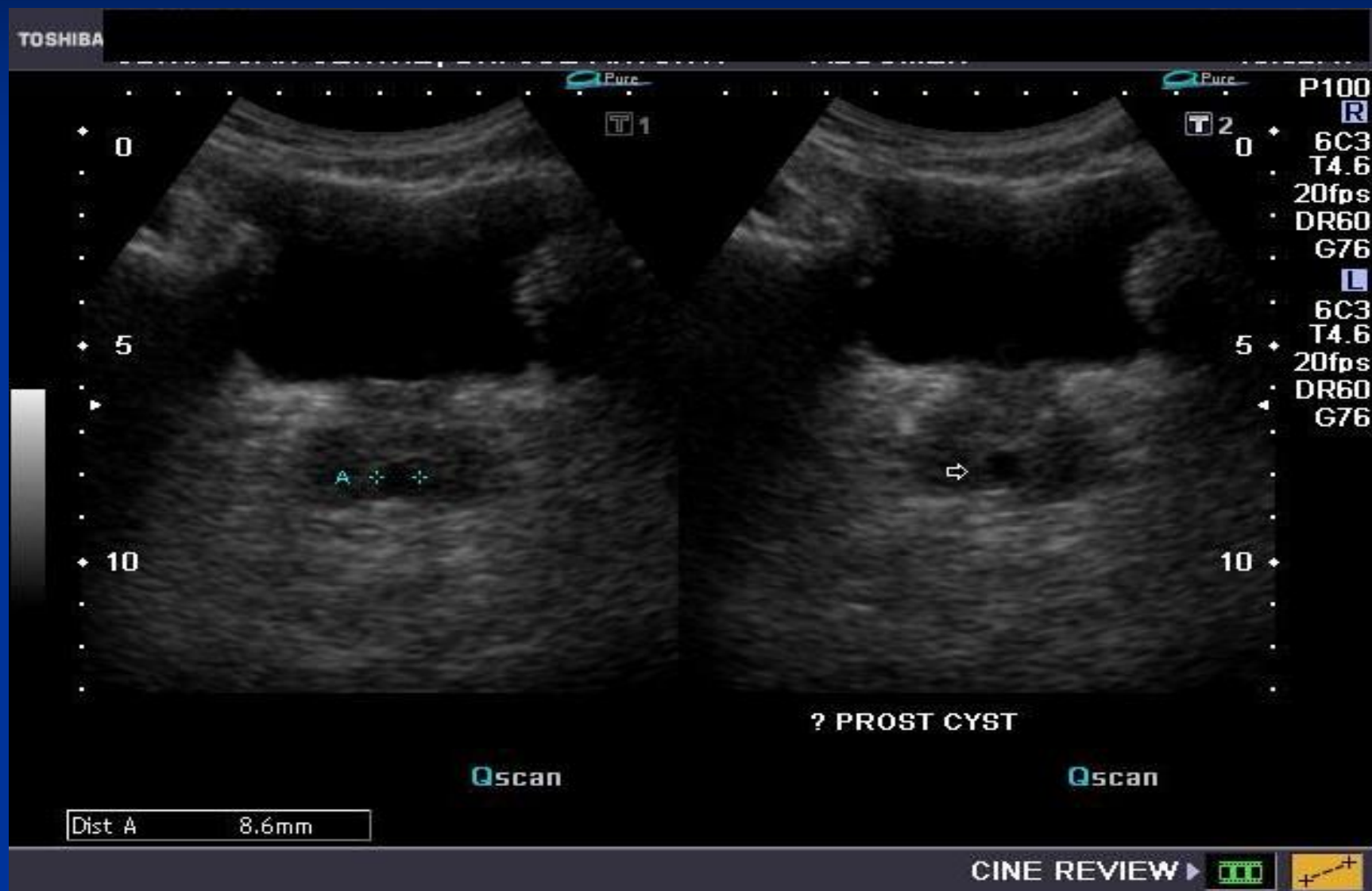
- General
- Local



BPH - ecografie



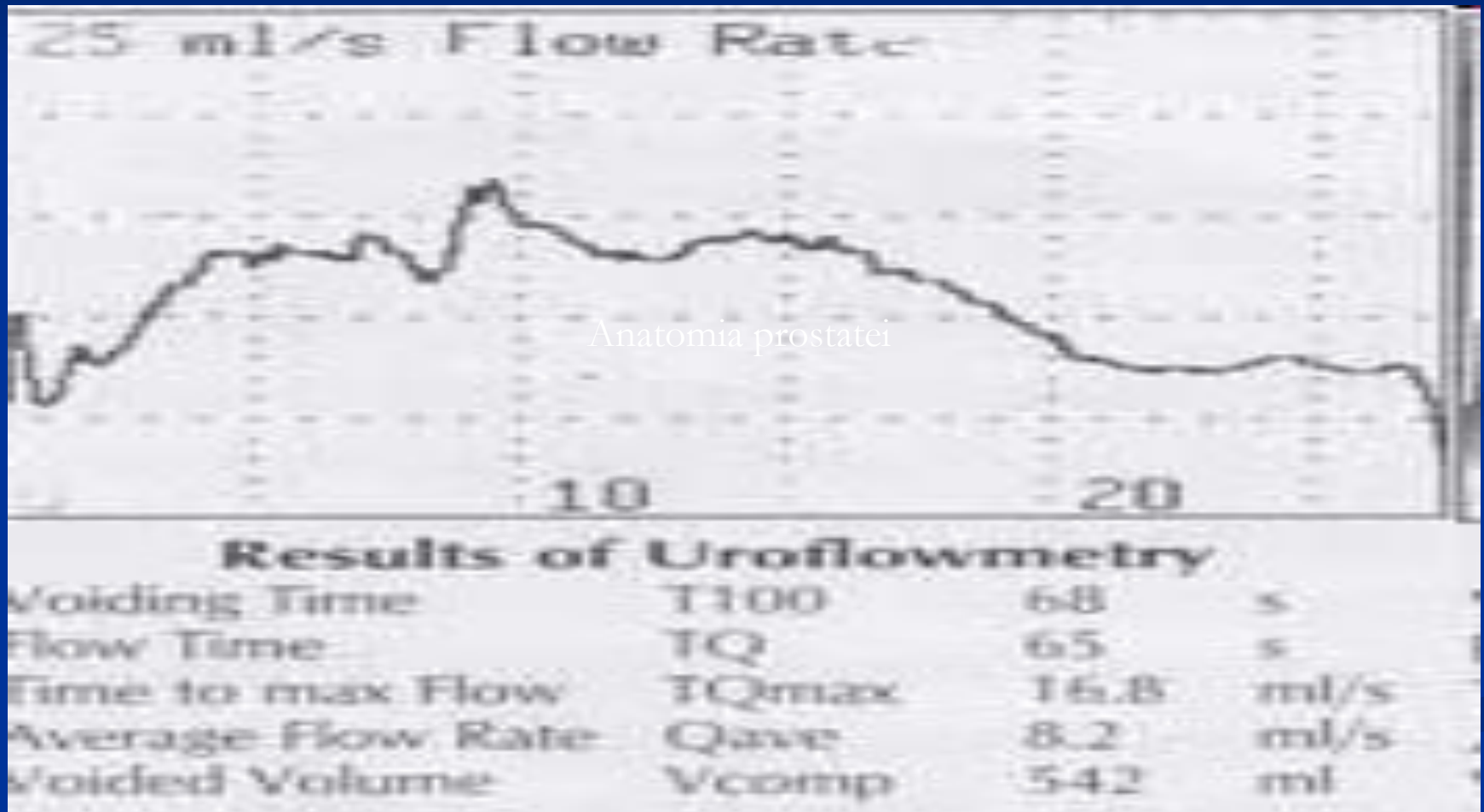
Prostata normală - ecografie



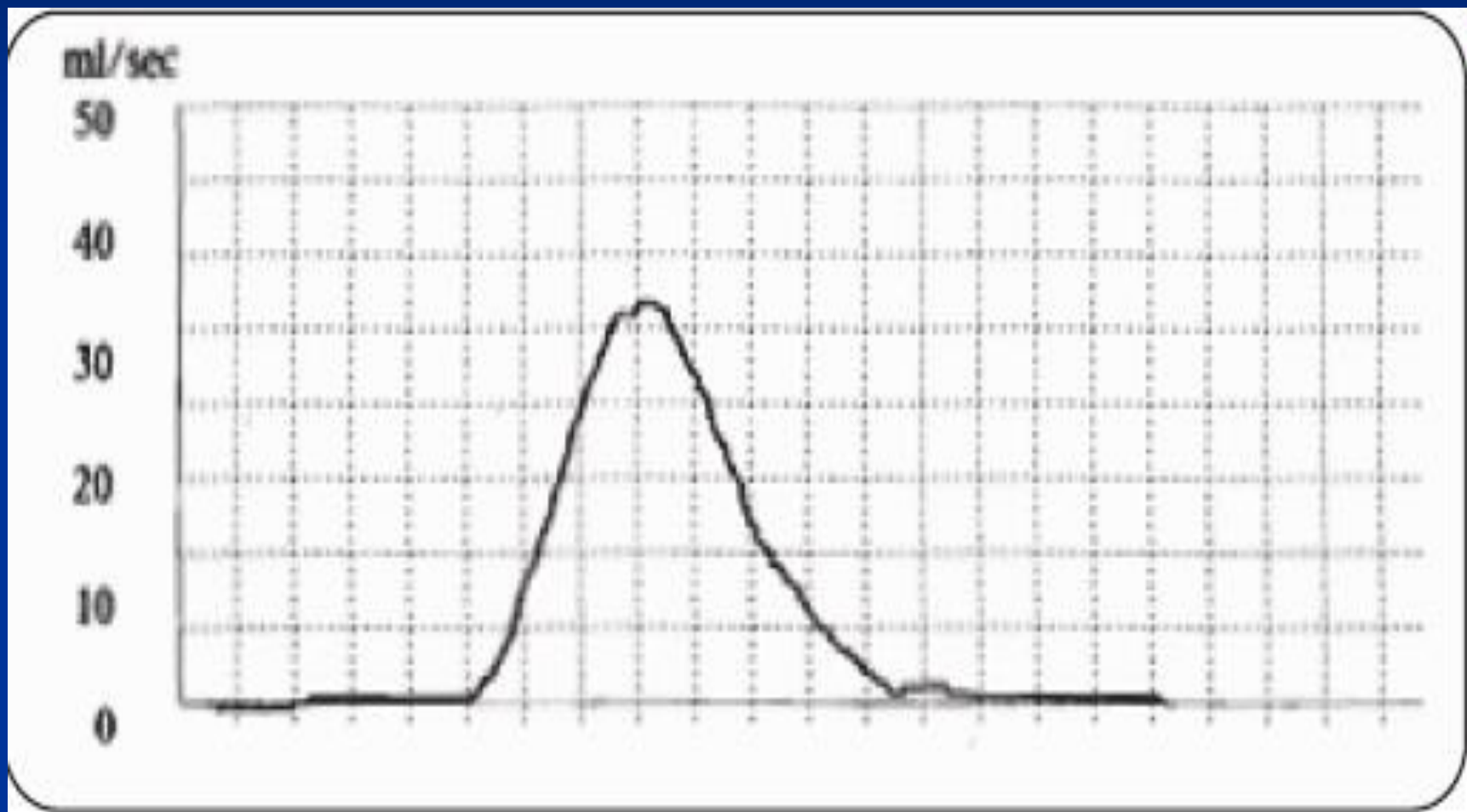
BPH - ecografie



BPH - uroflowmetrie



Uroflowmetrie normală



Uroflowmetrie BPH

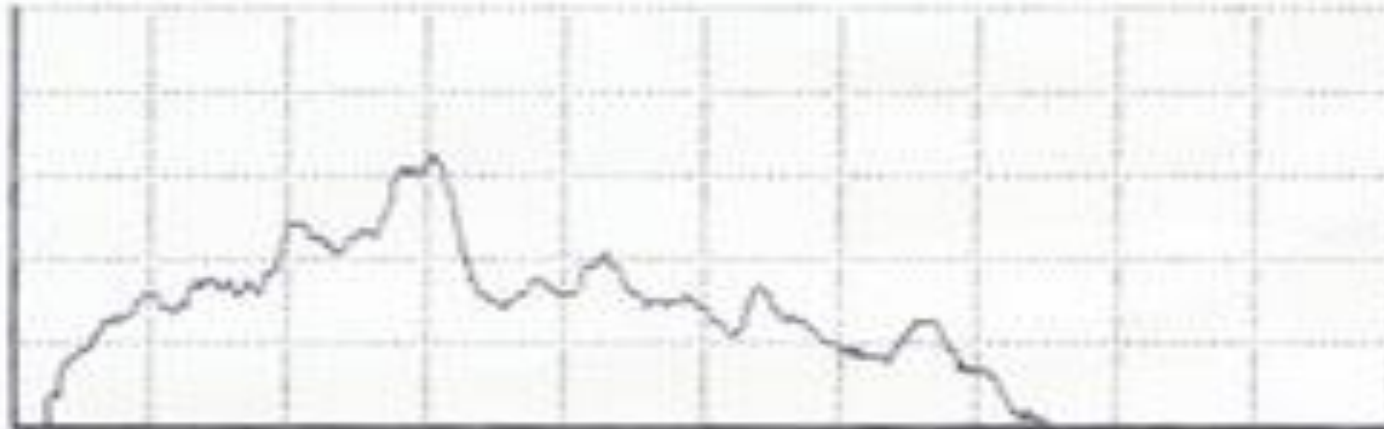
UROFLOWMETRY

Date: 1

1

Patient No:

FLOW RATE
5 ml/s per DIV



UROFLOW STATISTICS

Time 5s/DIV

Voided Volume 288 (ml)
Max Flow rate 15 (ml/s)
Average Flow rate 7 (ml/s)

Voiding Time 37 (sec)
Flow Time 36 (sec)
Time to Max Flow 14 (sec)

BPH – examene de laborator

- Glicemie
- Hemogramă
- Uree serică
- Creatinină plasmatică
- Examen sumar de urină
- Urocultură
- **PSA !!!!!!!**

PBH - cistoscopie



BPH - urografie



BPH - tratament

Opțiuni terapeutice:

- Supraveghere activă (watchful waiting)
- Tratament medical
- Tratament chirurgical
- Altele - HIFU, TUNA, TUMT, stenturi prostatice etc.

BPH – tratament medical

- Blocanți ai receptorilor α_1 adrenergici
- Inhibitori de 5α reductază
- Terapie combinată
- Antimuscarinice

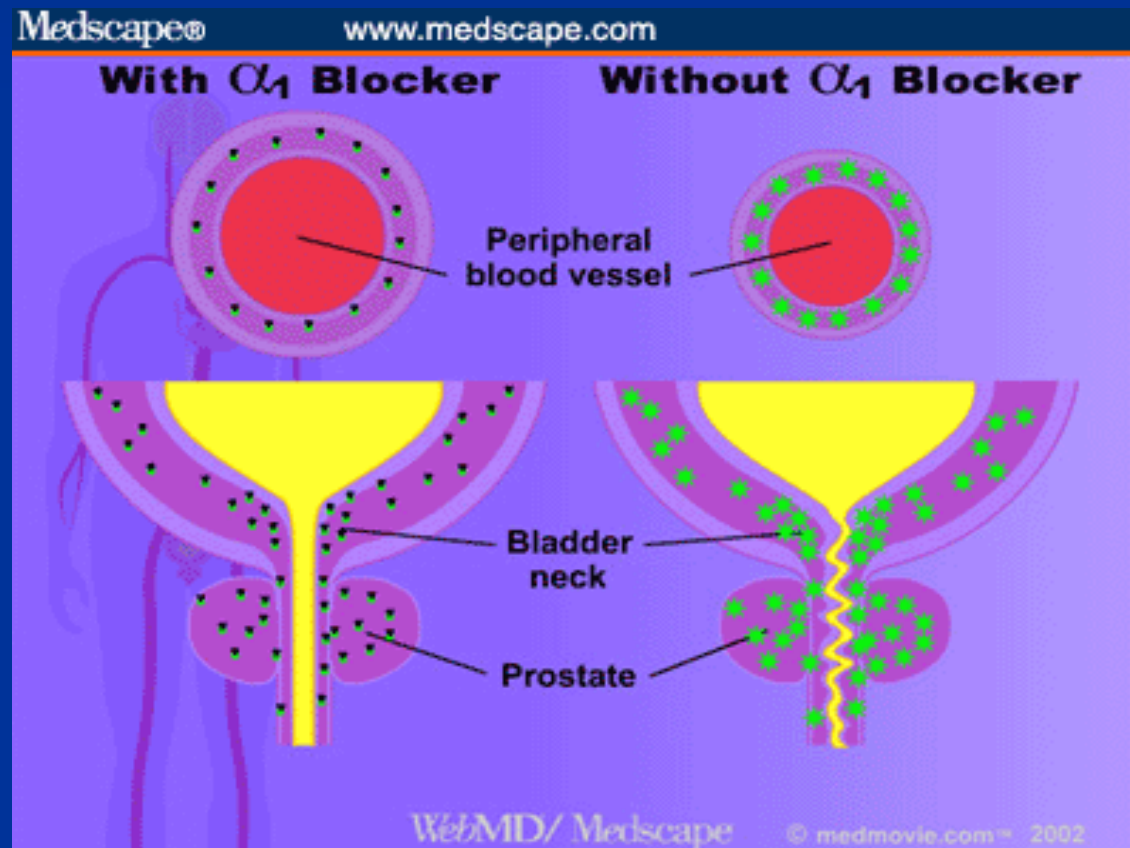
■ Fitoterapie*

EAU guideline - 4.2.3.1 CONCLUSIONS

The mode of action of phytotherapeutic agents is unknown. The biological effects are unclear although a few randomized clinical trials show encouraging results.

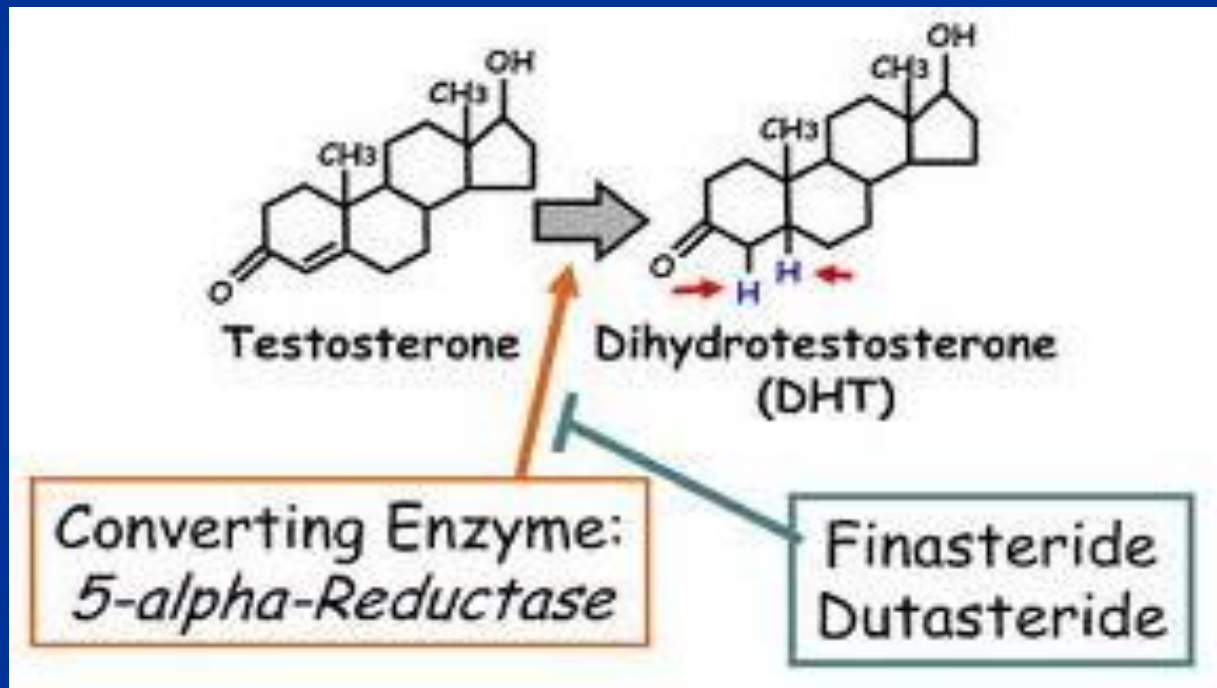
BPH - tratament

- Blocanți α_1 adrenergici

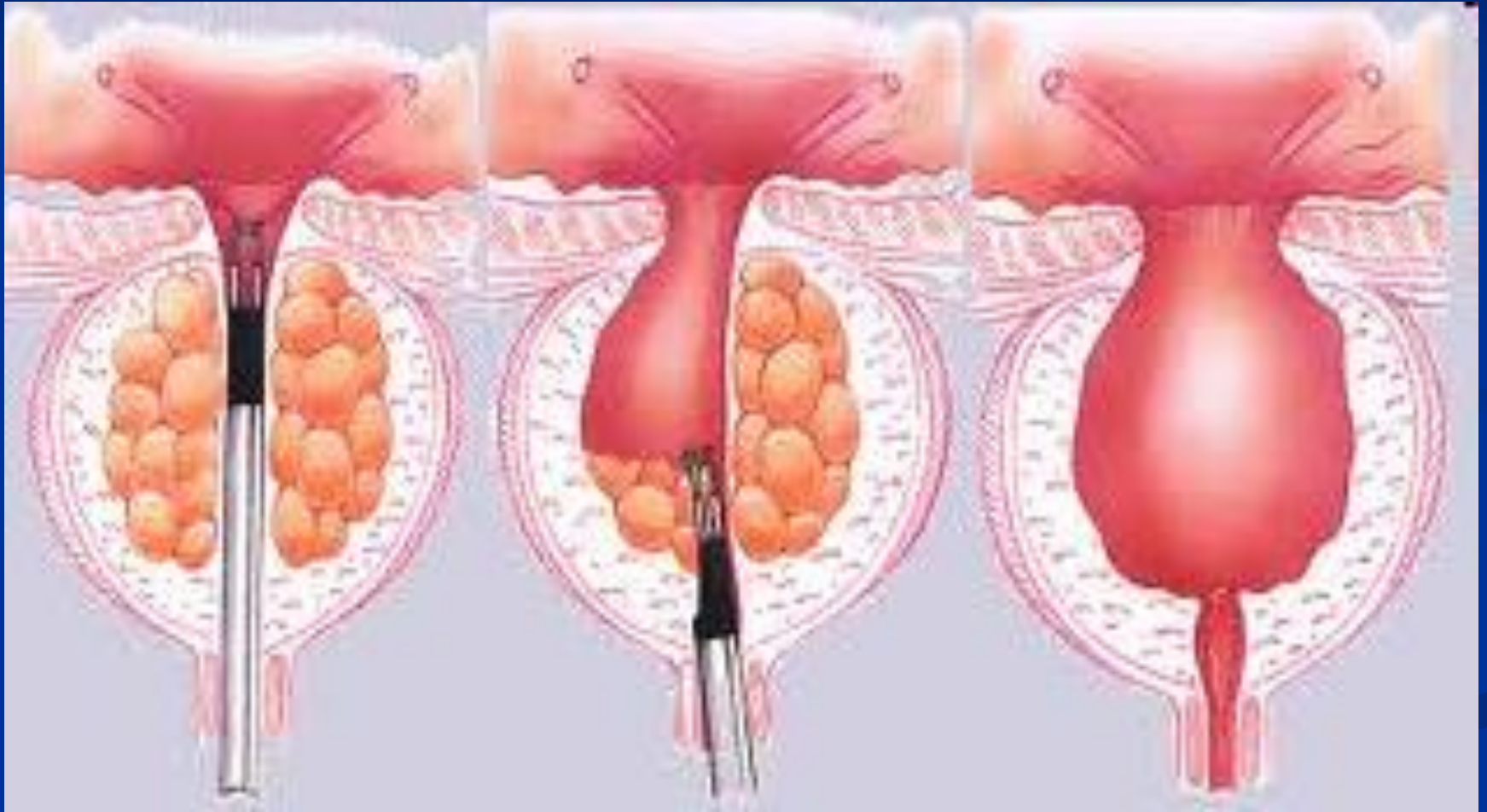


BPH - Tratament

■ Inhibitorii de 5α reductază



TURP



Stent prostatic



Chirurgie deschisă



Despre markeri tumorali

- **MARKER** *s. m.* 1. genă mutantă cu efecte fenotipice detectabile, cu localizare cunoscută, care permite localizarea altor gene. 2. particularitate morfologică ce permite identificarea corectă a unui cromozom. ◇ cromozom diferit de omologul său printr-o asemenea particularitate. 3. **factor de mare frecvență la suferinzii de o anumită afecțiune, servind pentru identificarea unei populații bolnave în cadrul populației generale.** (< engl. *marker*)

Despre markeri tumorali

- **MARKER TUMORAL** - Substanță secretată de către celulele canceroase sau de către țesuturile sănătoase ca răspuns la prezența unei tumori. Markerii tumorali sunt decelabili în țesutul canceros și în sânge. Ei sunt utilizați, în principal, pentru a urmări mutația unui cancer și eficacitatea unui tratament. În ce privește depistarea precoce a cancerelor, interesul lor este limitat la câteva tipuri de cancer.

MARKER TUMORAL IDEAL

- Apariția sa este precoce (înaintea apariției semnelor clinice)
- Este produs doar de celulele canceroase → apare doar în cancer (**este cancer-specific**)
- Creșterea concentrației este paralelă cu dezvoltarea bolii (cu creșterea numărului de celule care îl produc)
- Scăderea concentrației este paralelă cu involuția bolii

Antigenul Prostatic Specific

- Glicoproteină secretată de celulele epiteliului prostatic și de glandele periuretrale
- Concentrația în lichidul seminal: 0,3 – 3 mg/ml
- Concentrația în sânge: < 3 ng/ml
- Funcțional, este o enzimă proteolitică

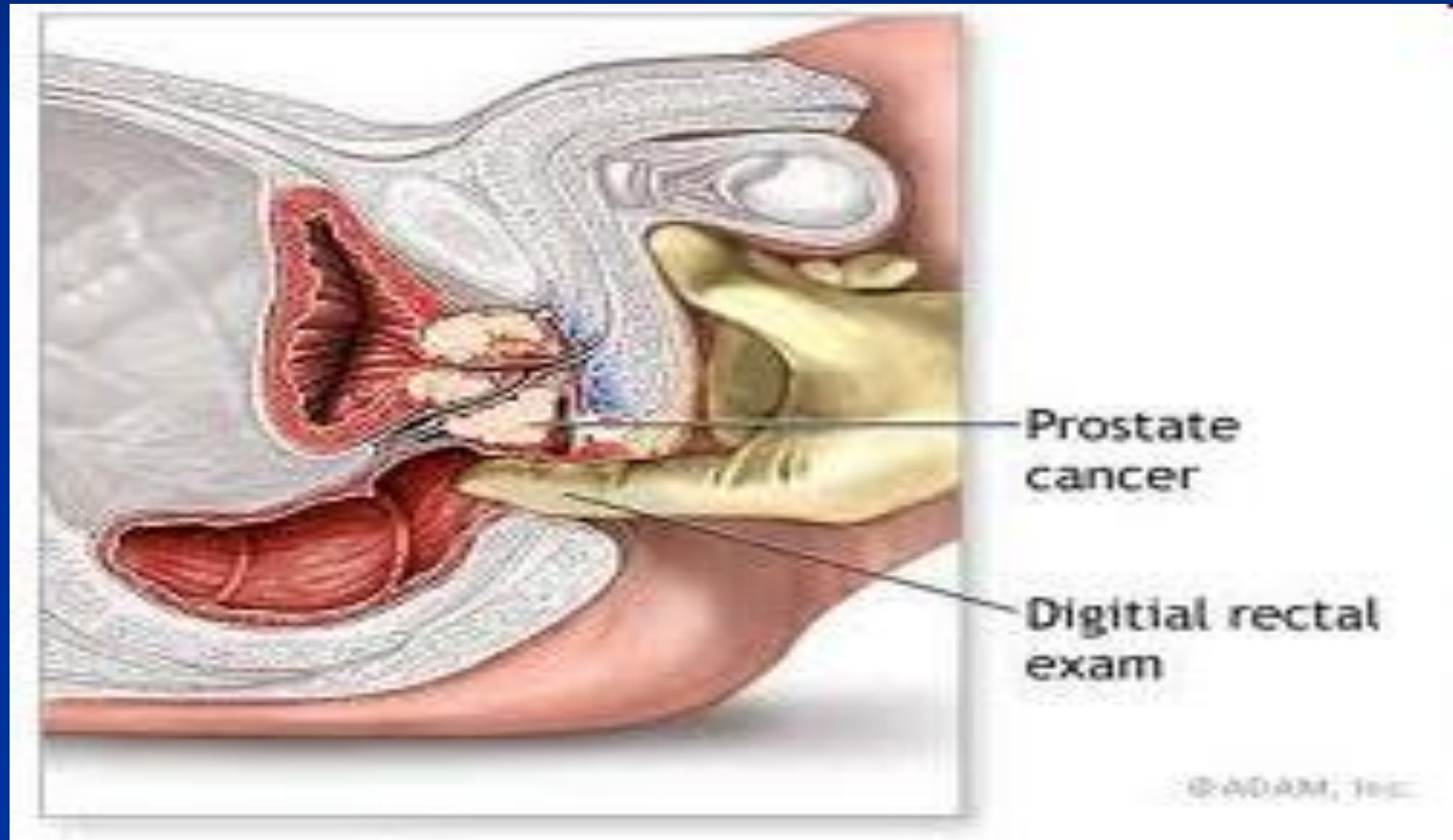
PSA

Valori normale: < 4 ng/ml

Valori patologice: ≥ 10 ng/ml

“Zona gri”: $4 - 9,99$ ng/ml

Tușeul rectal

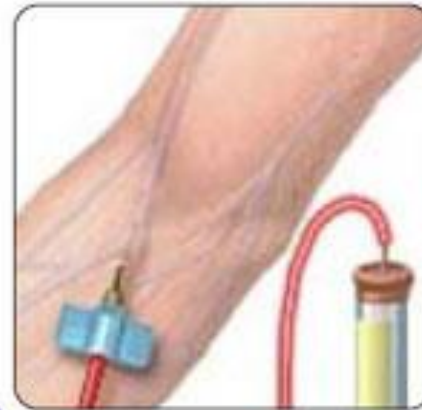




Suspicious DRE

and/or

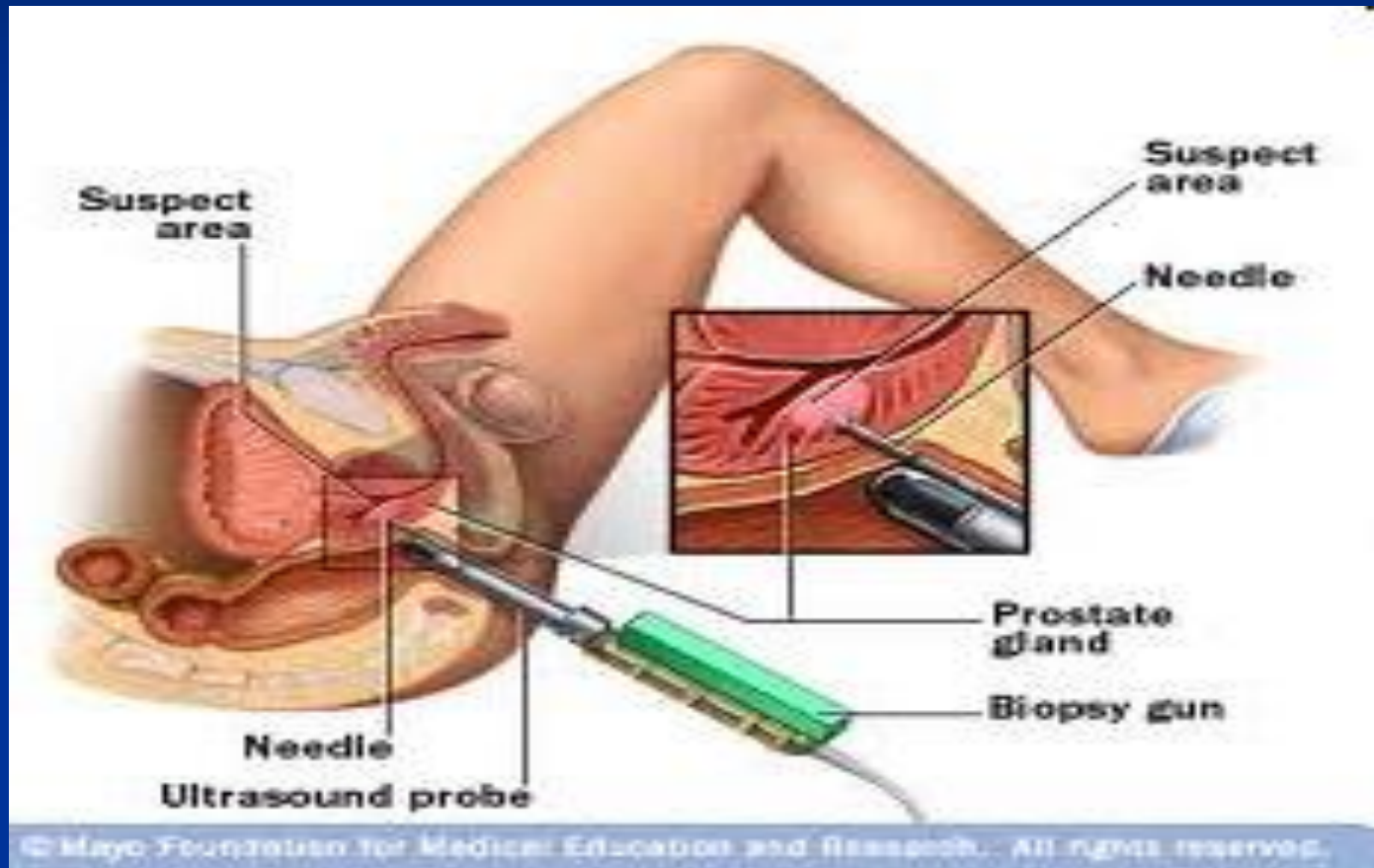
Elevated serum PSA



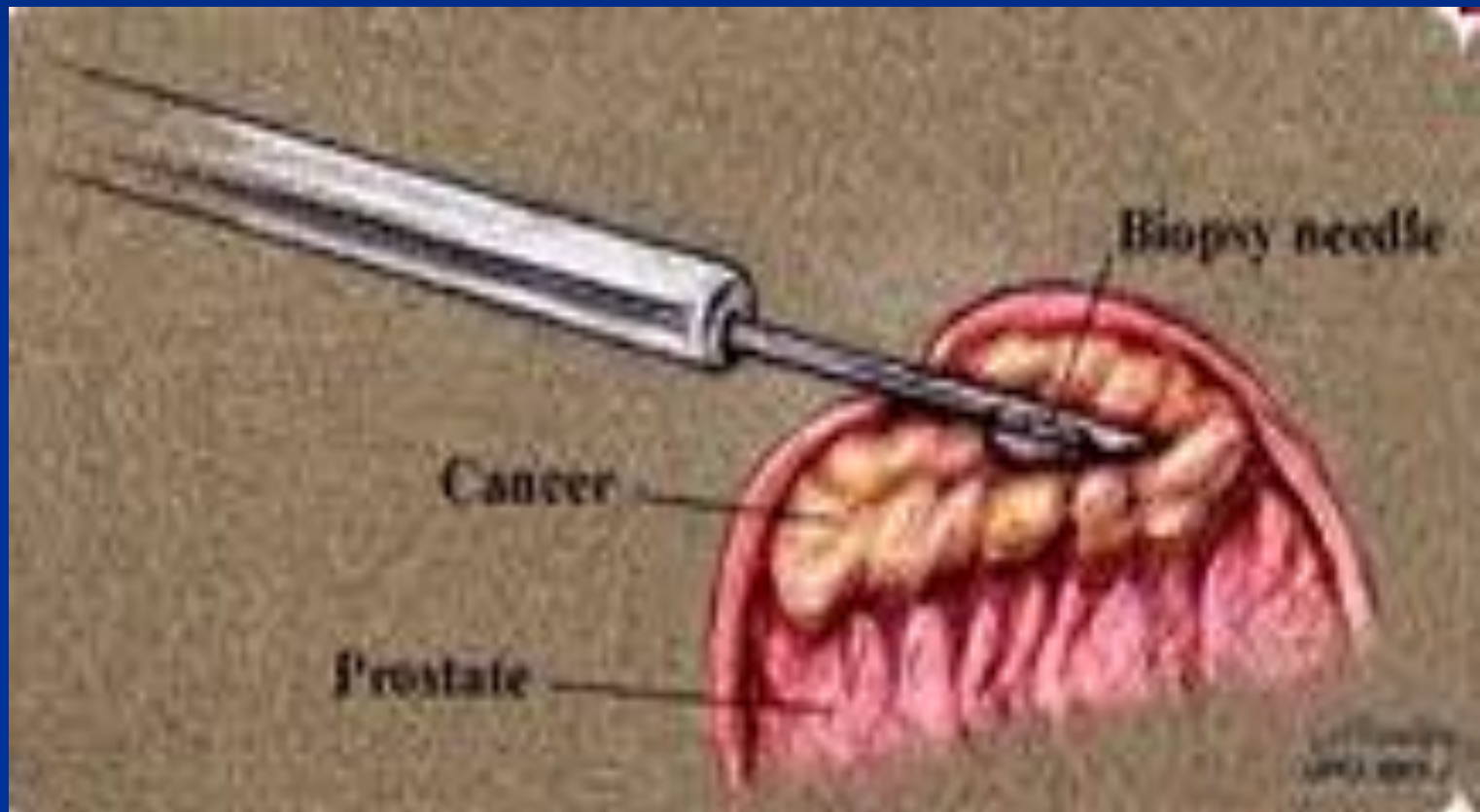
Prostate Biopsy ?



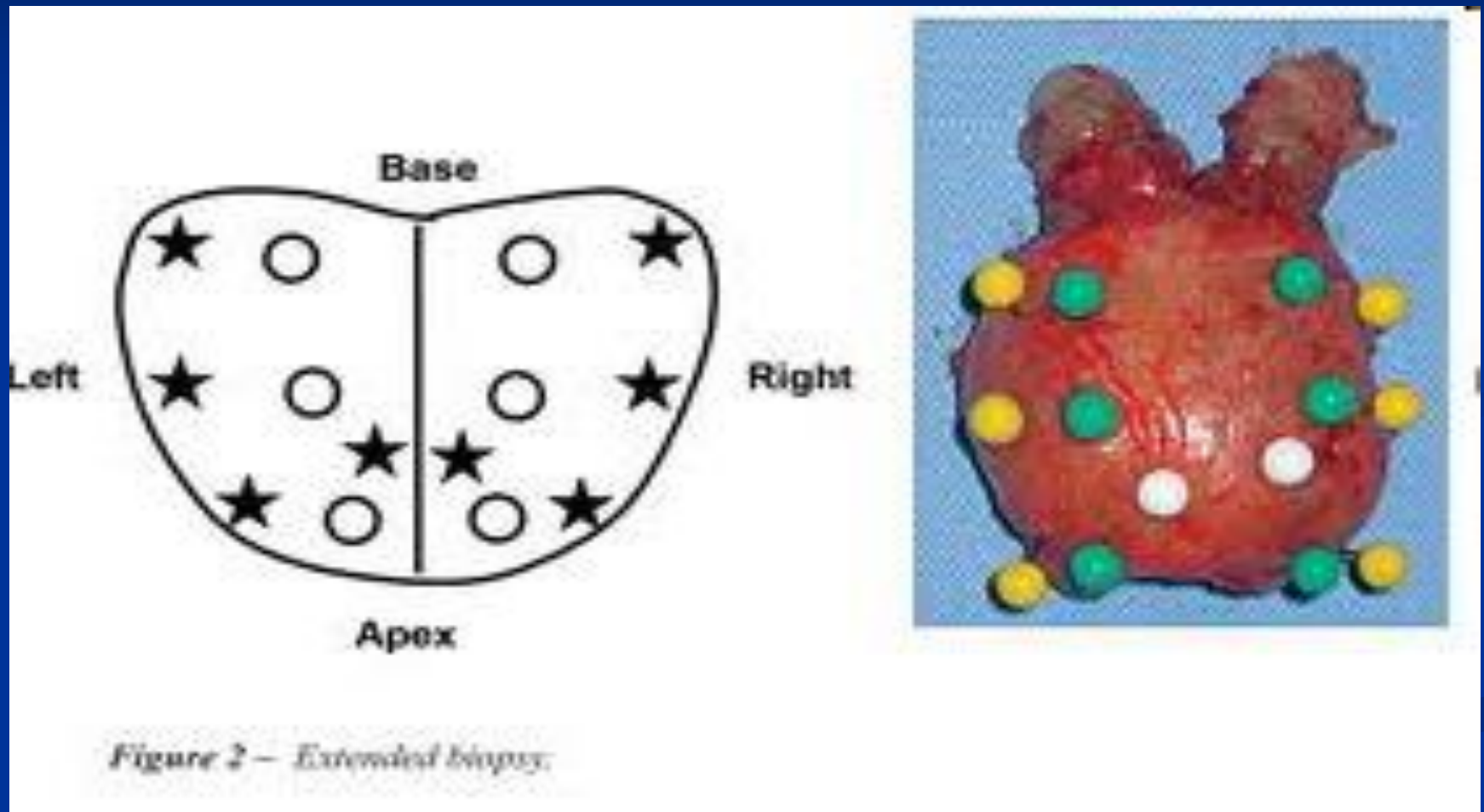
Puncția biopsie prostatică (PBP)



PBP

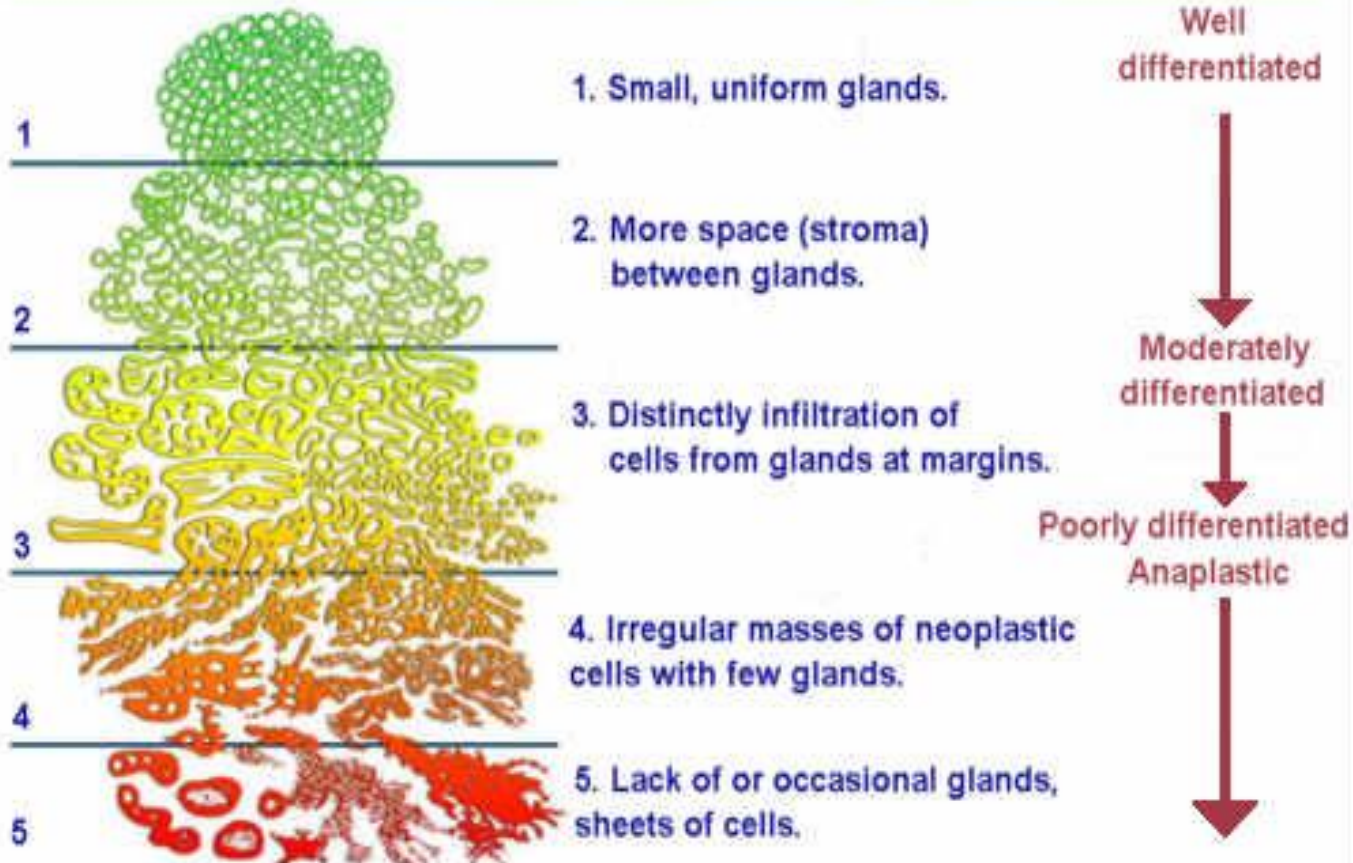


PBP



Scorul Gleason

Gleason's Pattern Scale



Scorul Gleason - semnificație

- Scor Gleason = suma celor două aspecte histologice predominante (pattern primar+pattern secundar)
- 2 – 4 = bine diferențiate
- 5 -7 = mediu diferențiate
- 8 – 10 = slab diferențiate

Stadializare

T1



T1 Clinically inapparent; tumor not palpable or visible by imaging

T1a Incidental finding during transurethral resection of prostate; < 5% of tissue resected

T1b Incidental finding during transurethral resection of prostate; > 5% of tissue resected

T1c Tumor identified by needle biopsy (e.g. because of elevated PSA)

T2



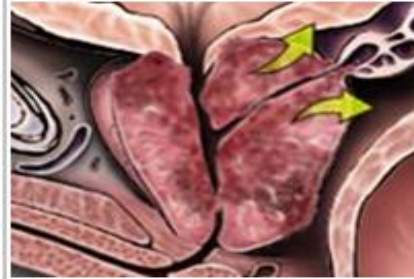
T2 Tumor confined within prostate (palpable or visible on TRUS)

T2a Involves half of a lobe or less

T2b Involves more than half of a lobe one lobe but not both lobes

T2c Tumor involves both lobes

T3



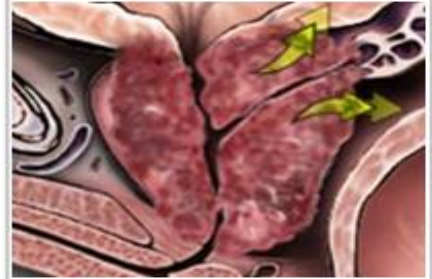
T3 Tumor extends through prostatic capsule, bladder neck or seminal capsule

T3a Unilateral extracapsular extension

T3b Bilateral extracapsular extension

T3c Tumor invades seminal vesicle(s)

T4

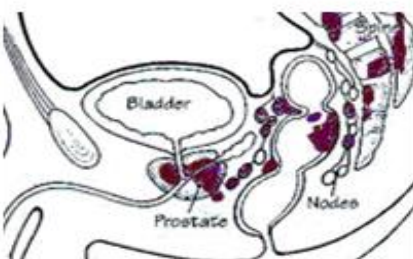


T4 The tumor has spread or attached to tissues next to the prostate (other than the seminal vesicles).

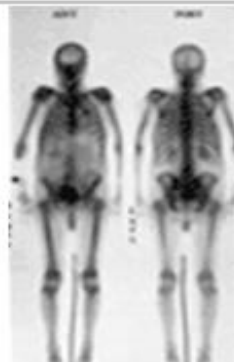
T4a The tumor has spread to the neck of the bladder, the external sphincter (muscles that help control urination), or the rectum.

T4b The tumor has spread to the floor and/or the wall of the pelvis.

N0-3



M0-1



N0 Cancer has not spread to any lymph nodes.

N1 Cancer has spread to a single regional lymph node (inside the pelvis) and is not larger than 2 centimeters

N2 Cancer has spread to one or more regional lymph nodes and is larger than 2 centimeters (¾ inch), but not larger than 5 centimeters

N3 Cancer has spread to a lymph node and is larger than 5 centimeters

M0 The cancer has not metastasized (spread) beyond the regional lymph nodes

M1 The cancer has metastasized to distant lymph nodes (outside of the pelvis), bones, or other distant organs such as lungs, liver, or brain

Tratament

- Cancer de prostată localizat
- Cancer de prostată local-avansat
- Cancer de prostată metastatic

Cancer de prostată localizat

- T1 N0 M0

- Obiectiv: **vindecarea** pacientului

- Mijloace:

- prostatectomia radicală** (deschisă/robotică)

- brahiterapia**

- RTE**

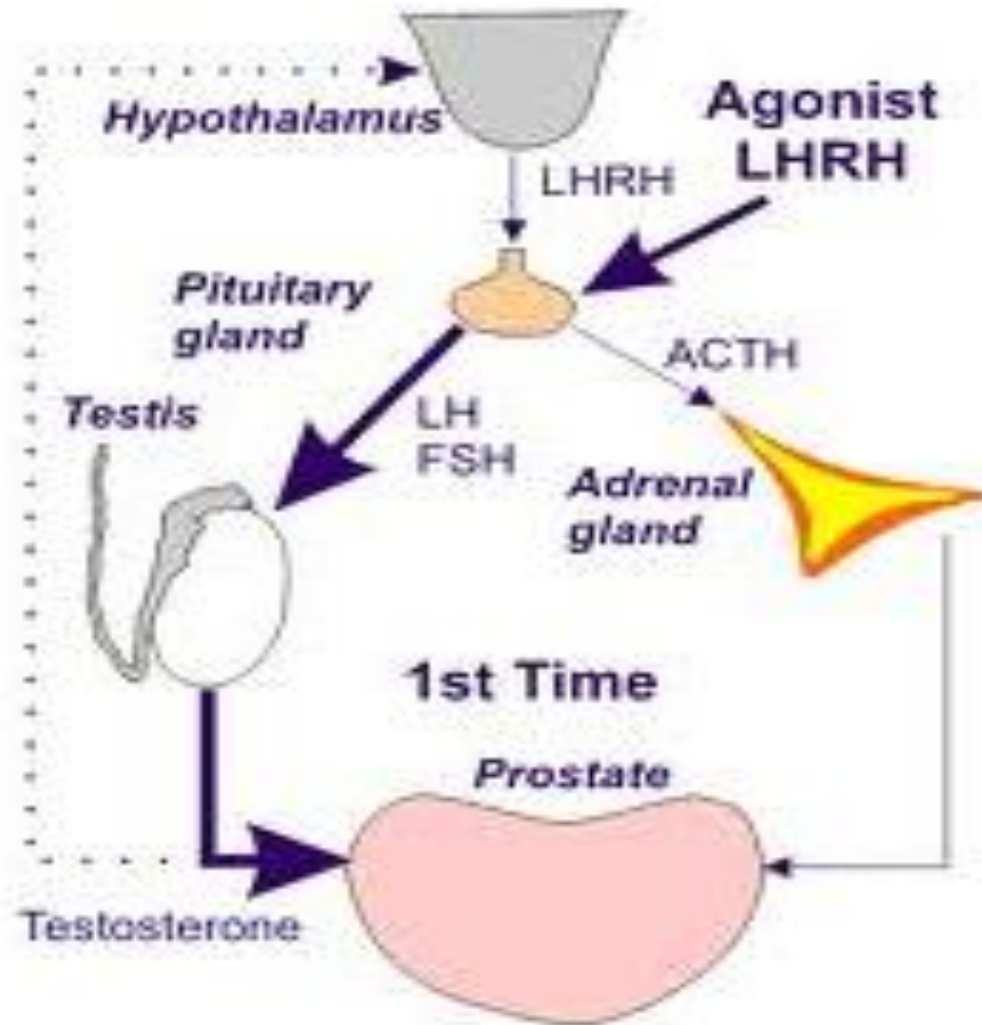
Cancer de prostată local avansat

- T1-2 N+ M0 și T3-T4 N0-N_x M₀
- Obiectiv : prelungirea supraviețuirii în condiții de confort
- Mijloace:
 - RTE ± tratament hormonal
 - prostatectomie ± tratament hormonal
 - radioterapie combinată

Cancer de prostată metastatic

- Orice T, orice N , M+
- Obiectiv: prelungirea supraviețuirii
- Mijloace: tratament hormonal
 - castrare medicală
 - castrare chirurgicală
 - antiandrogeni
 - blocada androgenică maximală
 - estrogeni

Agoniști LH-RH



Antiandrogeni

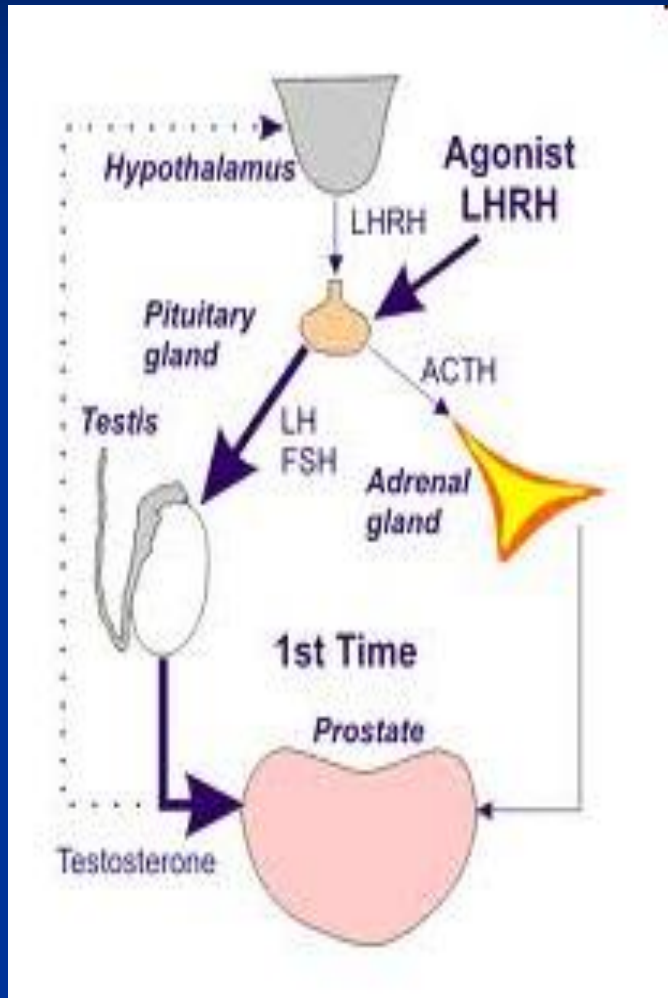
Puri:

- Flutamida
- Nilutamida (Anandron)
- Bicalutamida (Casodex)

Steroidieni:

- Ciproteron acetat (Androcur)
- Megestrol acetat

Blocada androgenică maximală



Puri:

Flutamida

Nilutamida (Anandron)

Bicalutamida (Casodex)

Steroidieni:

Ciproteron acetat
(Androcur)

Megestrol acetat