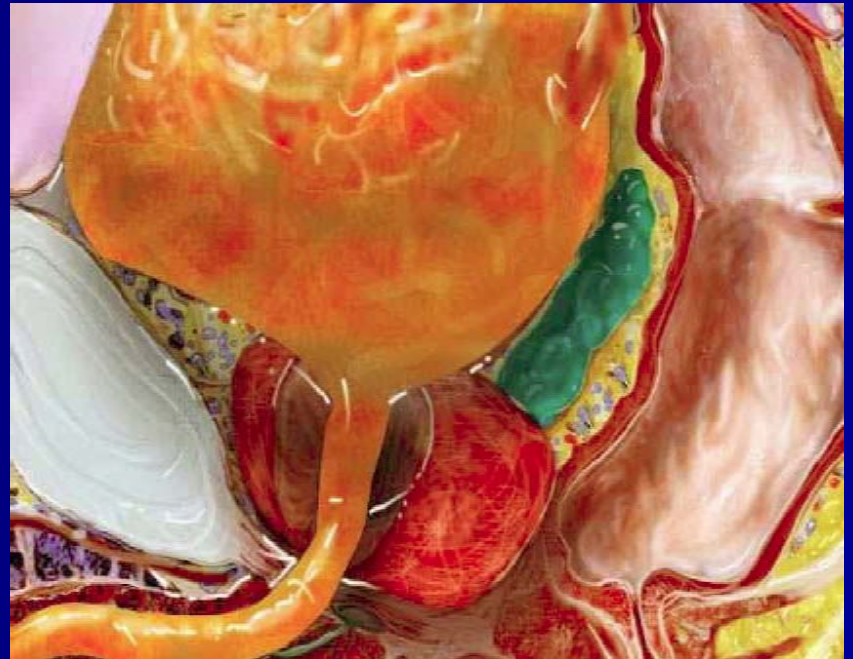


CÁNCER DE PRÓSTATA

**DR. ESTUARDO POLANCO G.
URÓLOGO**

Cáncer próstata

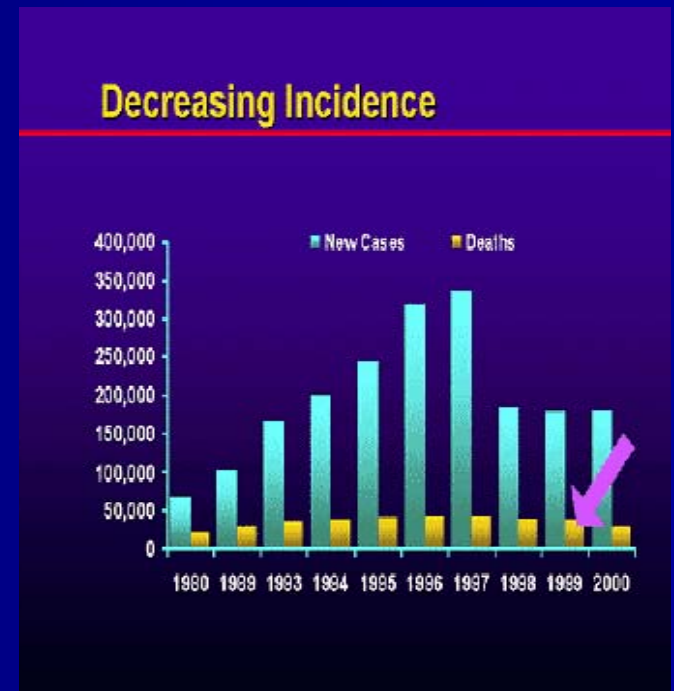
- Malignidad más común.
- 2° Ca causa de muerte EEUU.
- Andrógeno dependiente.
- 31 % nuevos casos de CA.



Walsh PC, Partin, Jama 2005

Incidencia

- Año 2005 195,000 nuevos casos y 30,500 muertes de CaP.
- 31,000 causas de muerte 2005.
- < muertes por Ca 10% últimos 15 años.
 - Screening ó tamizaje.



Incidencia

- Edad.
 - > 50 años.
 - Jóvenes en Afro-americanos.
 - Necropsias: 30% en > 50 años.
 - > 70% en 8ª década.



Etiología

- Hx Familiar:
 - Doble Riesgo en 1° y 2° grado.
 - Cromosoma 1,17 y X.



Etiología

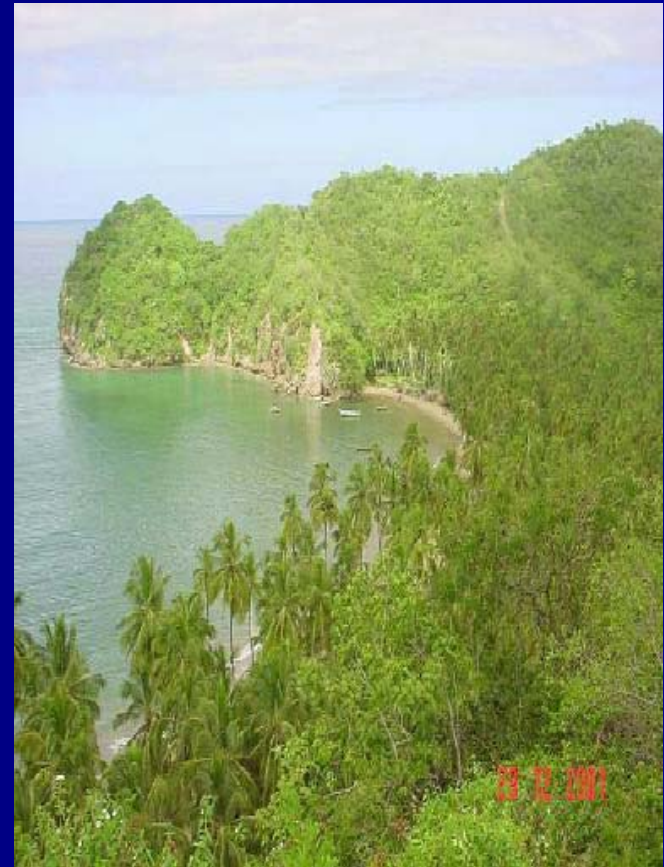
- Dieta:
 - Grasa animal, ingesta Calcio.
 - Isoflavenoides, fitoestrógenos, Vit. E, selenium, carotenoides (licopenos), nueces.



Zincke H. J. Urol 2005

Etiología

- Raza:
 - Afroamericanos--
----blancos-----
asiáticos.
- Ambientales:
 - Exposición
Cadmio.
- Fx crecimiento:
IGF-1 insulina



Etiología

- Geografía:
 - Inversamente proporcional latitud:
 - Area norte.
 - Vitamina D.
 - Radiación ultravioleta.



Etiología

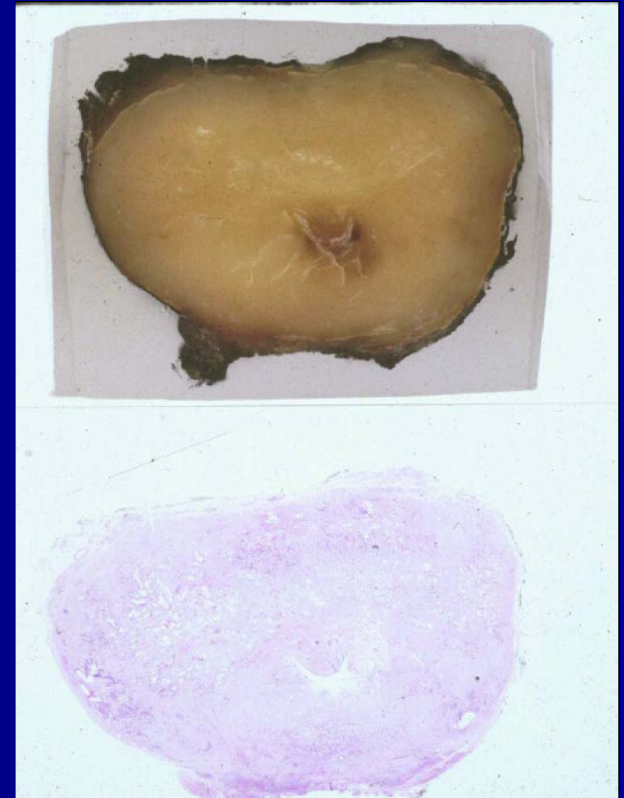
- Actividad sexual.
- Vasectomía.
- Andrógenos:
 - > niveles dihidro, testosterona .
 - Afroamericanos.
 - Mutación receptores.



Zincke H. J. Urol 2005

Patología

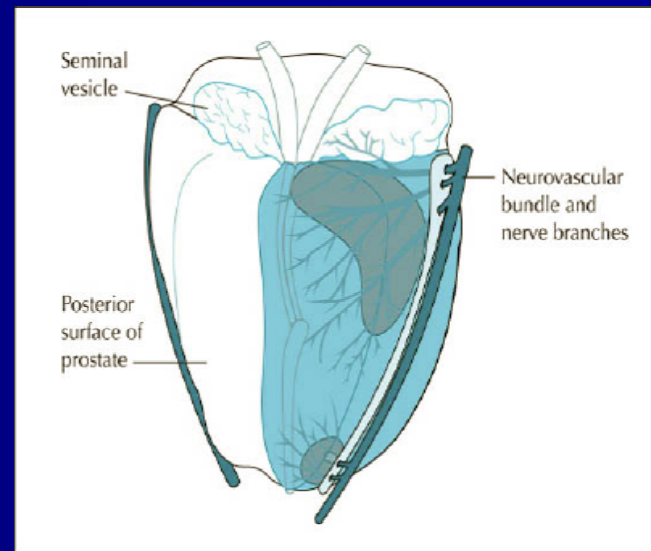
- Adenocarcinoma
95-97%
 - Ductal o endometroide.
 - Mucinoso.
 - Celulas pequeñas.
 - Escamoso.
- Trancisional,sarcomas, metastásicos.



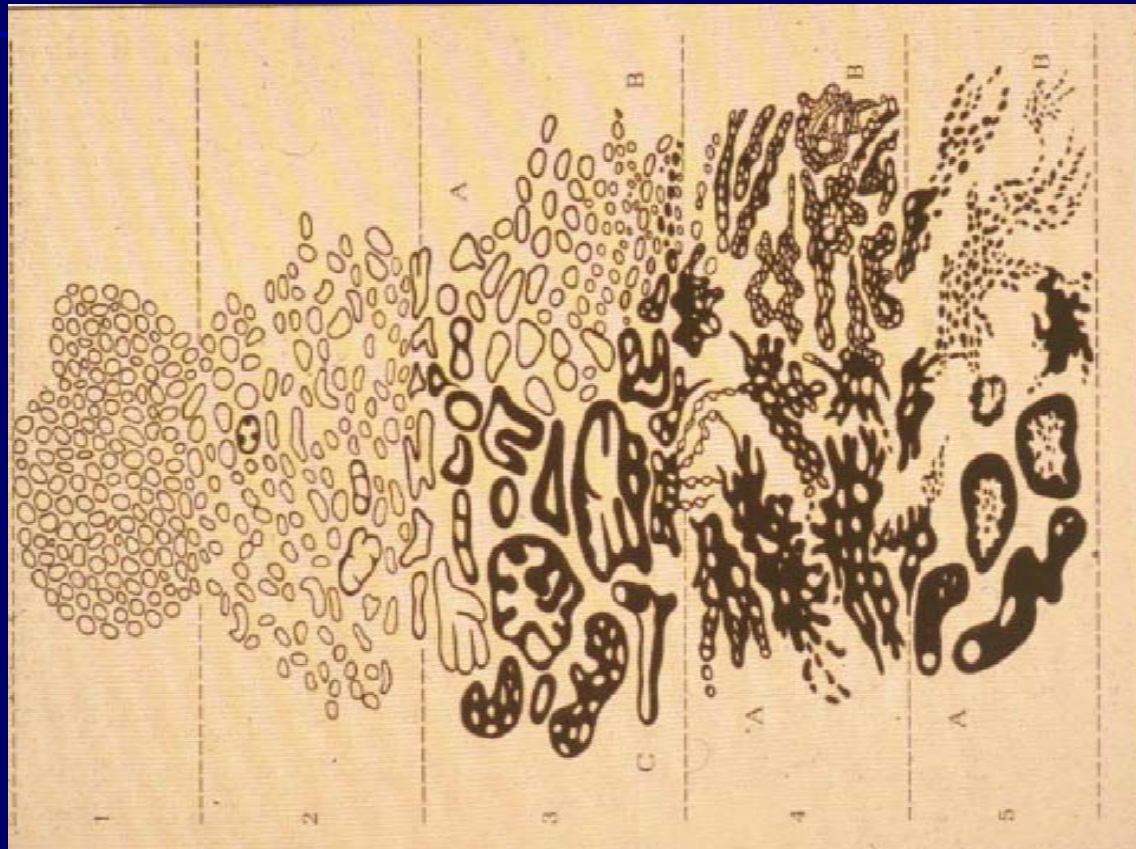
polascikTJ. J.Urol 2004

Patología

- Diseminación:
 - Extensión: vesículas seminales....
 - Linfática.
 - Metástasis:
 - Óseas: 90%
 - Visceral: hígado, pulmón, adrenales.



Estadíos y grados Gleason:



1

2

3

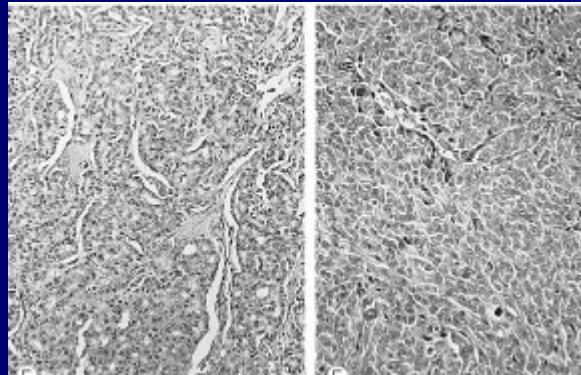
4

5

Gleason

1

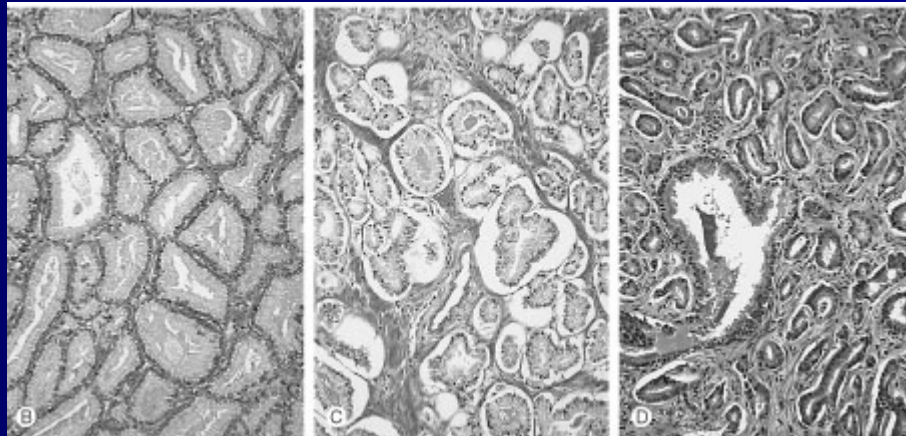
2



3

4

5



Estadío: TNM

Table 88-3. PROSTATE CANCER STAGING SYSTEMS

TNM		Description	Whitmore-Jewett	Description
1997	1992			
TX	TX	Primary tumor cannot be assessed	None*	None
T0	T0	No evidence of primary tumor	None	None
T1	T1	Nonpalpable tumor not evident by imaging	A	Same as TNM
T1a	T1a	Tumor found in tissue removed at TUR; 5% or less is cancerous with histological grade ≤ 7	A1	Same as TNM
T1b	T1b	Tumor found in tissue removed at TUR; >5% is cancerous or histological grade >7	A2	Same as TNM
T1c	T1c	Tumor identified by prostate needle biopsy owing to elevation in PSA	None	None
T2	T2	Palpable tumor confined to the prostate	B	Same as TNM
T2a	T2a	Tumor involves one lobe or less	B1	Same as TNM
	T2a	Tumor involves less than half of one lobe	B1N	Tumor involves half of lobe surrounded by normal tissue on all sides
T2b		Tumor involves more than one lobe	B2	Same as TNM
	T2b	Tumor involves more than half of a lobe but not both lobes	B1	Same as TNM
None	T2c	Tumor involves more than one lobe	B2	Same as TNM
T3	T3	Palpable tumor beyond prostate	C1	Tumor <6 cm in diameter
T3a	T3a	Unilateral extracapsular extension	C1	Same as TNM
T3b	T3b	Bilateral extracapsular extension	C1	Same as TNM
T3c	T3c	Tumor invades seminal vesicle(s)	C1	Same as TNM
T4	T4	Tumor is fixed or invades adjacent structures (not seminal vesicles)	C2	Same as TNM
T4a	T4a	Tumor invades bladder neck, external sphincter, and/or rectum	C2	Same as TNM
T4b	T4b	Tumor invades levator muscle and/or is fixed to pelvic wall	C2	Same as TNM
N(+)	N(+)	Involvement of regional lymph nodes	D1	Same as TNM
None	None	None	D0	Elevated prostatic acid phosphatase
NX	NX	Regional lymph nodes cannot be assessed	None	None
N0	N0	No lymph node metastases	None	None
N1	N1	Metastases in single regional lymph node, ≤ 2 cm in dimension	D1	Same as TNM
N2	N2	Metastases in single (>2 but ≤ 5 cm) or multiple nodes with none <5 cm	D1	Same as TNM
N3	N3	Metastases in regional lymph node >5 cm in dimension	D1	Same as TNM
M(+)	M(+)	Distant metastatic spread	D2	Same as TNM
MX	MX	Distant metastases cannot be assessed	None	None
M0	M0	No evidence of distant metastases	None	None
M1	M1	Distant metastases	D2	Same as TNM
M1a	M1a	Involvement of nonregional lymph nodes	D2	Same as TNM
M1b	M1b	Involvement of bones	D2	Same as TNM
M1c	M1c	Involvement of other distant sites	D2	Same as TNM
None	None	None	D3	Hormonal refractory disease

TNM, tumor, node, metastasis; TUR, transurethral resection.

2a



TNM

2c



2b



3

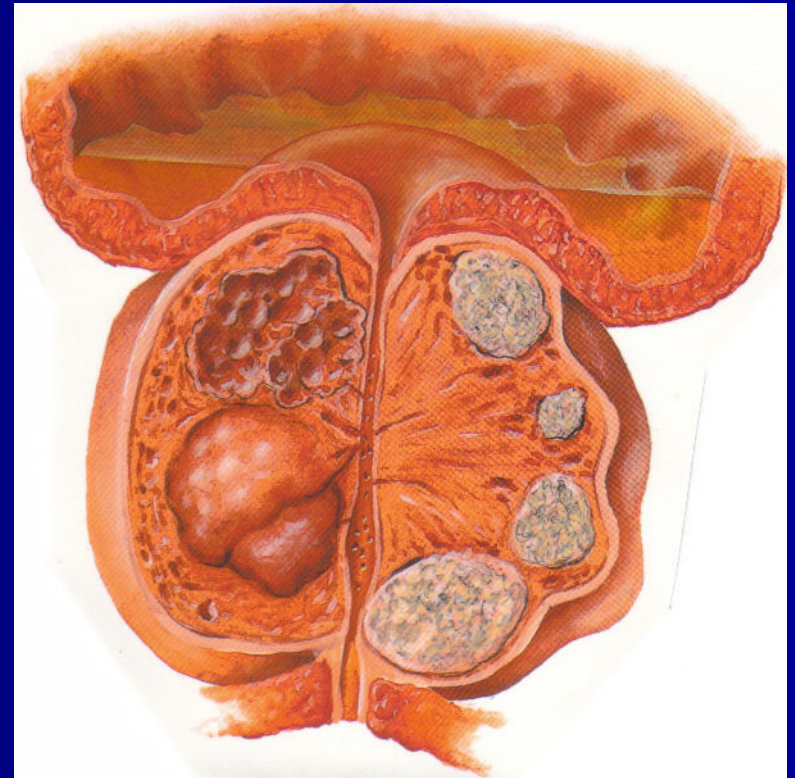


4



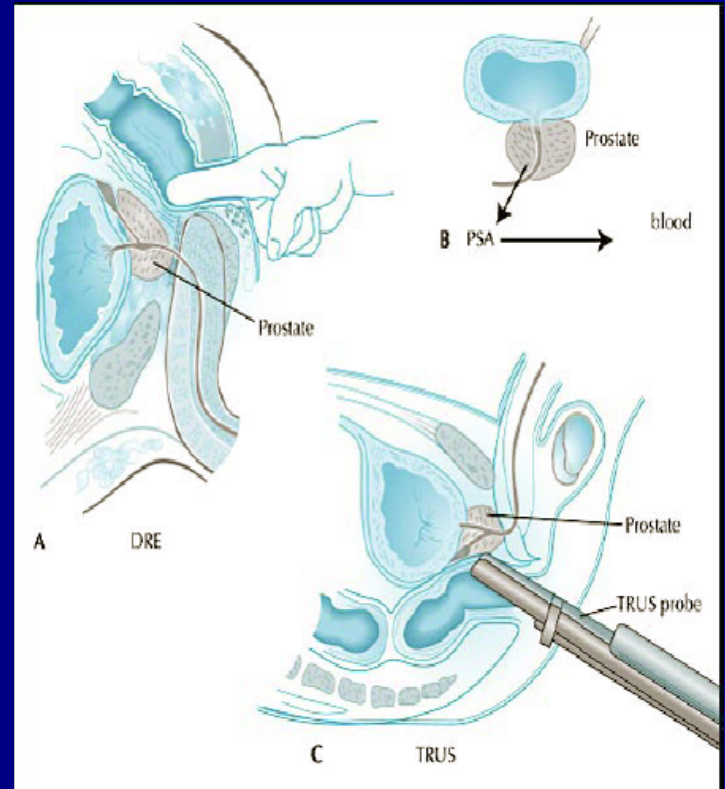
Síntomas y signos

- Estadios temprano:
 - Asintomático.
 - Obstructivos.
- Avanzado:
 - Dolor.
 - IRC.
 - Anemia.
 - Fracturas.



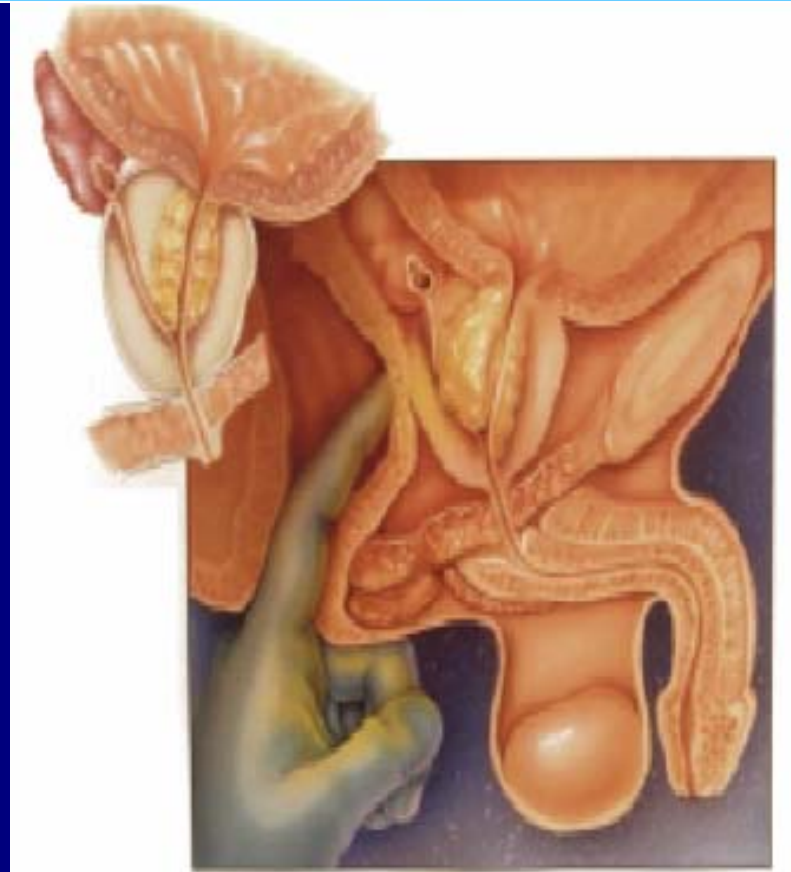
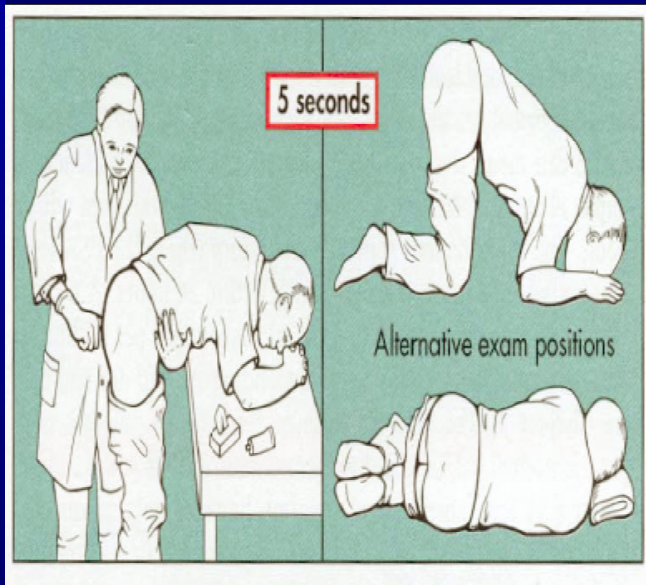
Diagnóstico

- Tacto rectal.*
- APE. *
- USG transrectal.
- TAC
- Scan óseo.
- RMN endorectal..



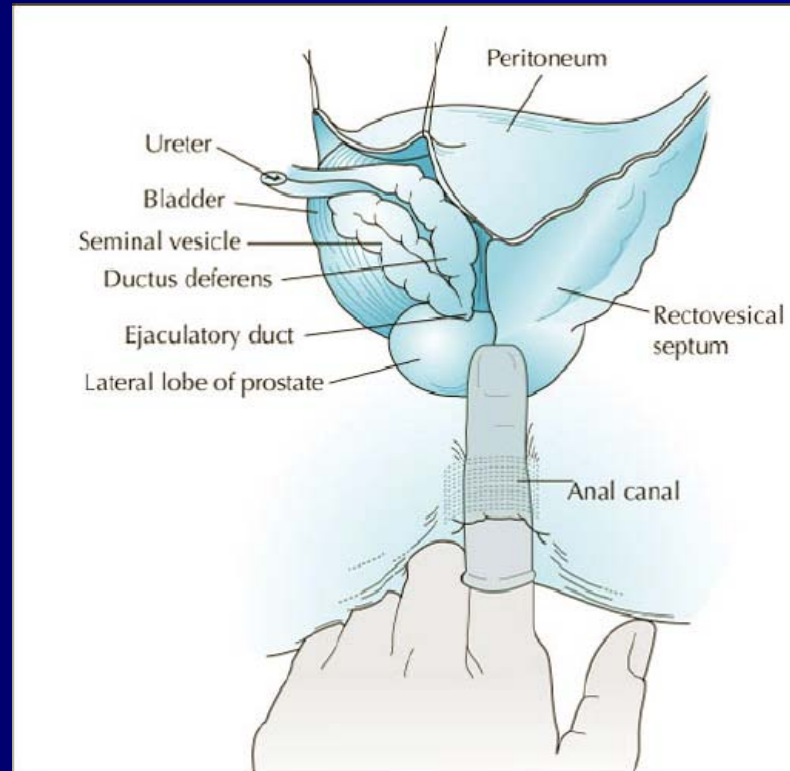
Diagnóstico

- Tacto rectal:
 - Positivo: 50%
 - Nódulos



polascikTJ. J.Urol 2004

Tacto rectal



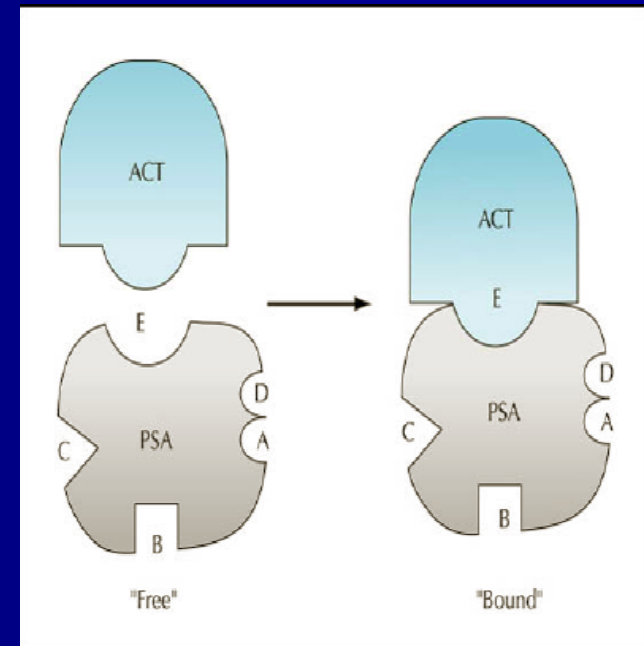
Antígeno prostático específico.

■ APE:

- elevado: 70% extracapsular y metastásico.

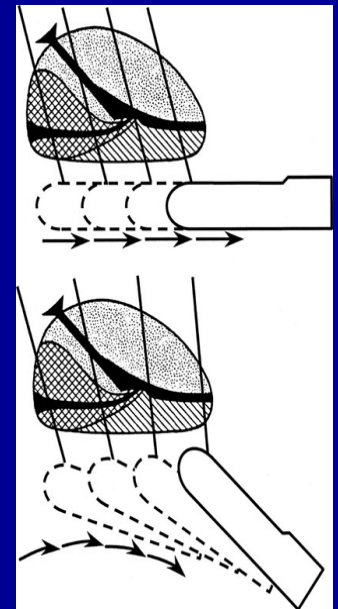
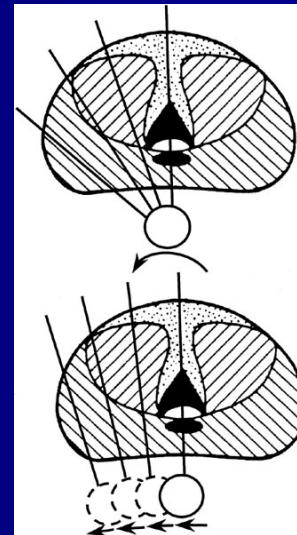
■ Total

- 2.5---4.0-----10ngr
- Frac. Libre.
 - A1 antitripsina
 - A2 macroglobulin.
- Complex APE.

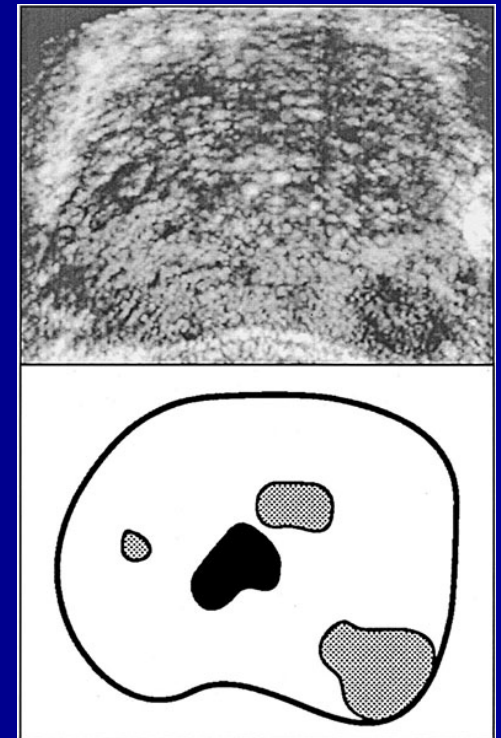
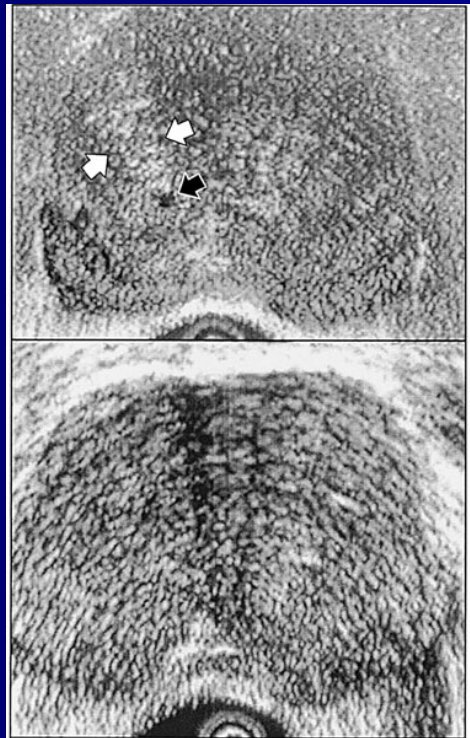
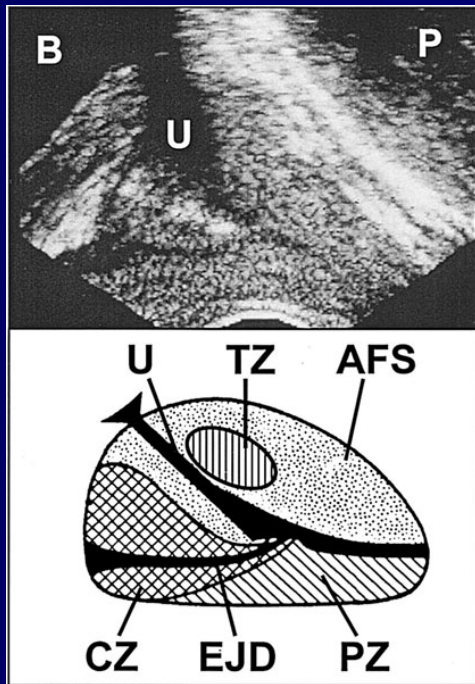


USG Transrectal

- USG trans-rectal:
 - Sensible pero NO específico.
 - Positivo (zona hipoecoica) 30% Ca.

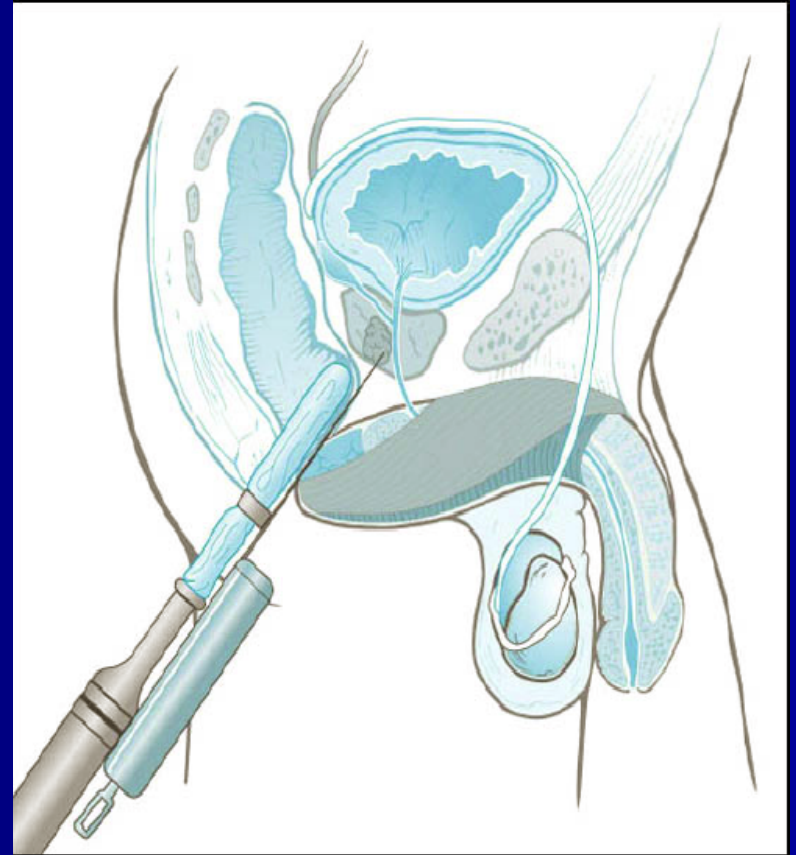


USG Transrectal

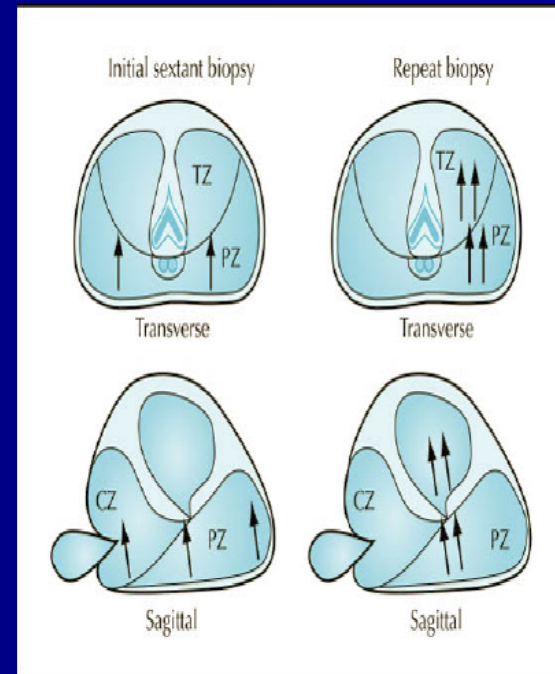
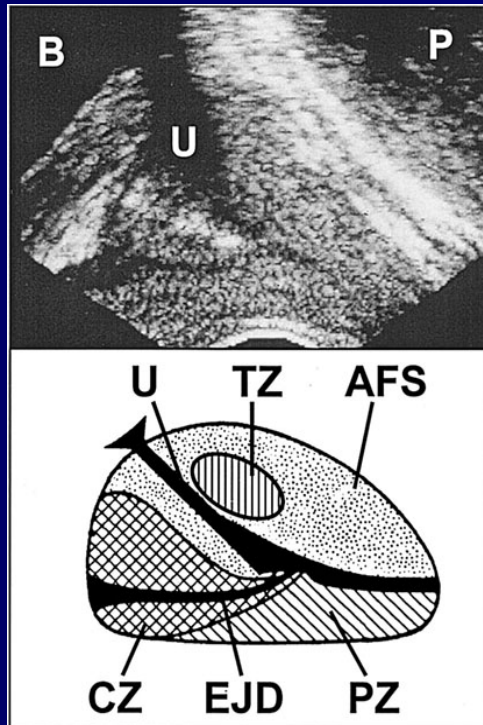


Bx próstata sextante eco-dirigida

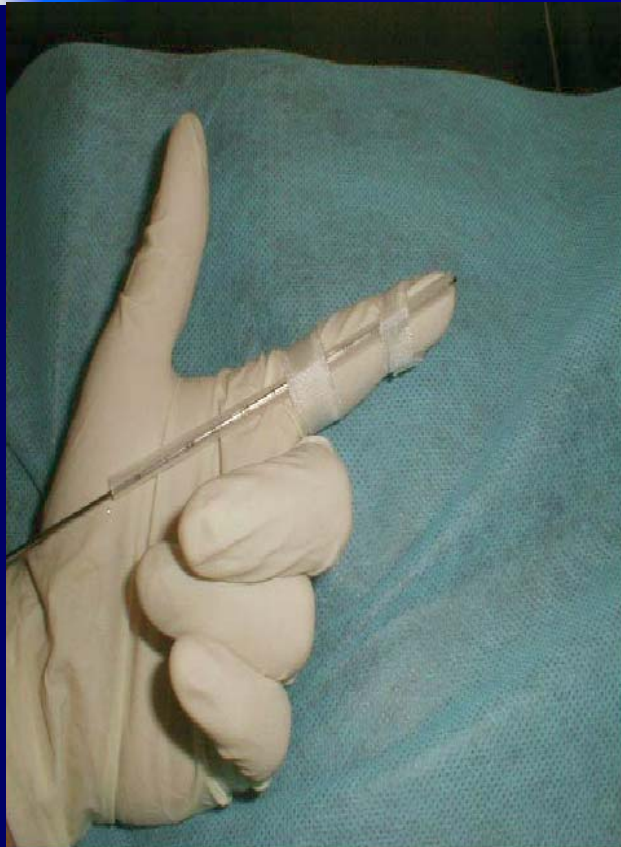
- Indicaciones:
 - Tacto rectal.*
 - APE. *
 - USG transrectal
- Expectativa vida > 10 años.



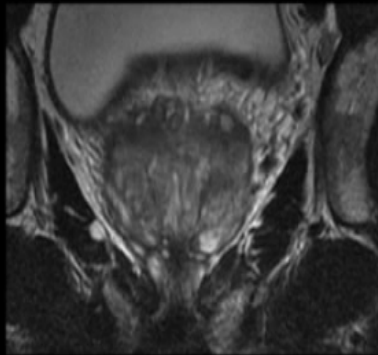
Bx próstata sextante



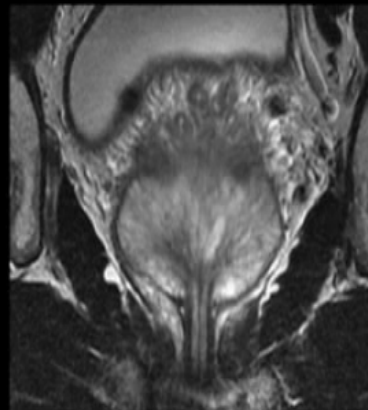
Bx próstata



RMN Y SCAN



Endorectal MRI
(Coronal View)

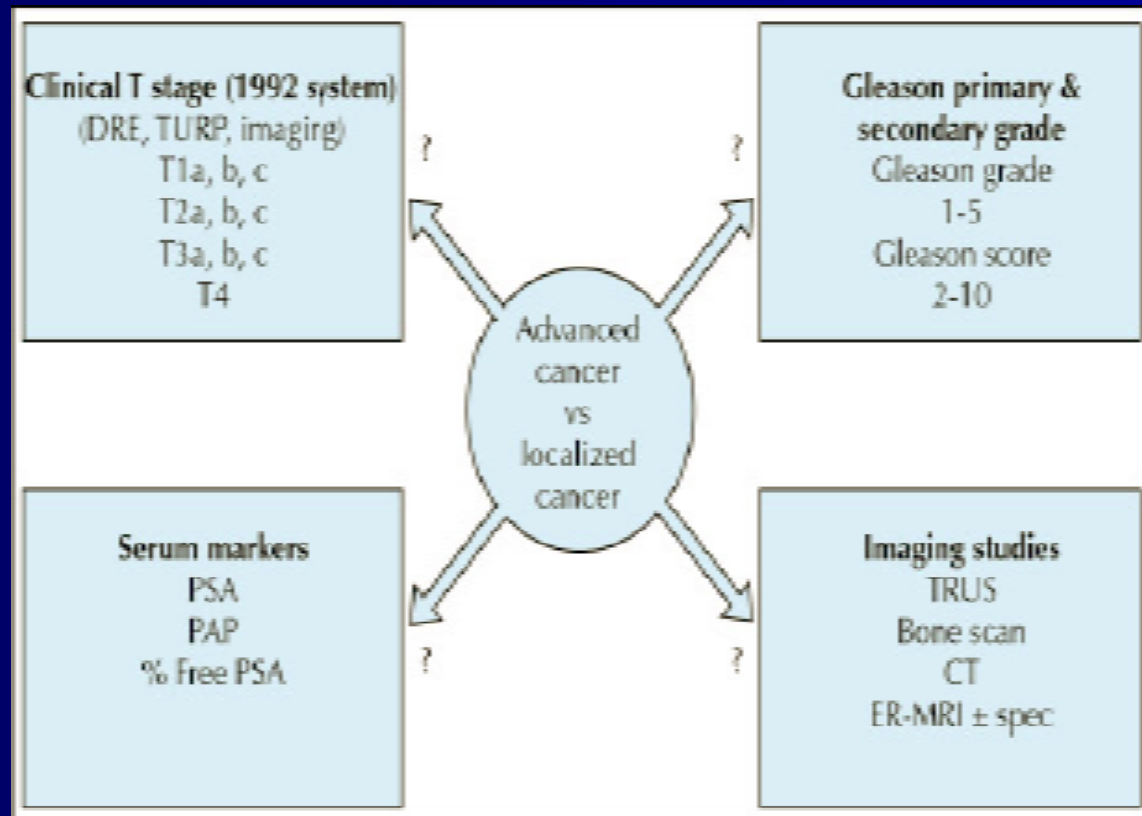


Metastatic Bone Disease

37

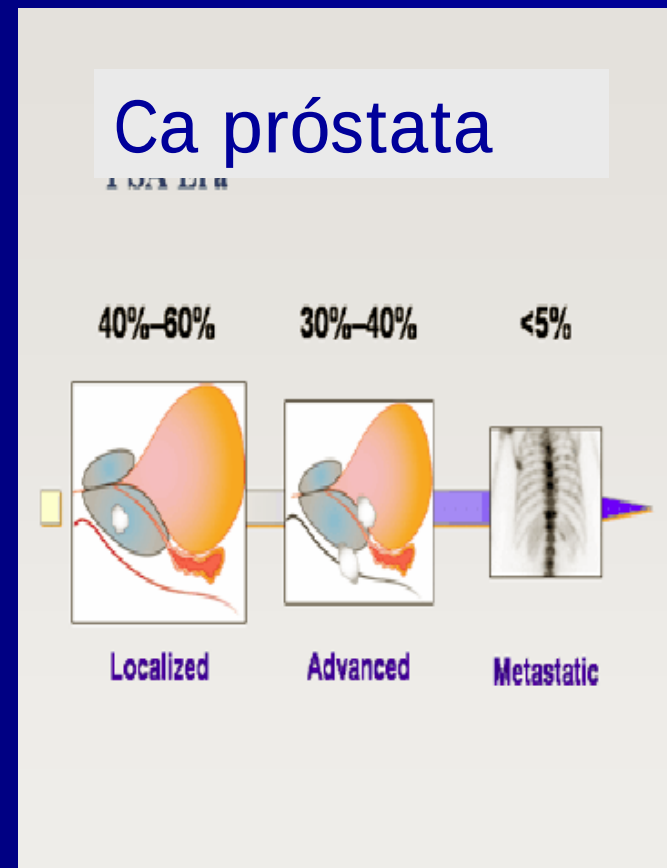


Estadiaoje



Hx Enfermedad

- Bajo grado: < 10% mortalidad a 10 años.
- Alto grado: 60%
- Metastásico:
 - 30-33 m. sobrevida.
 - 75% a 5 año mortalidad.
 - 90% a 10 años.

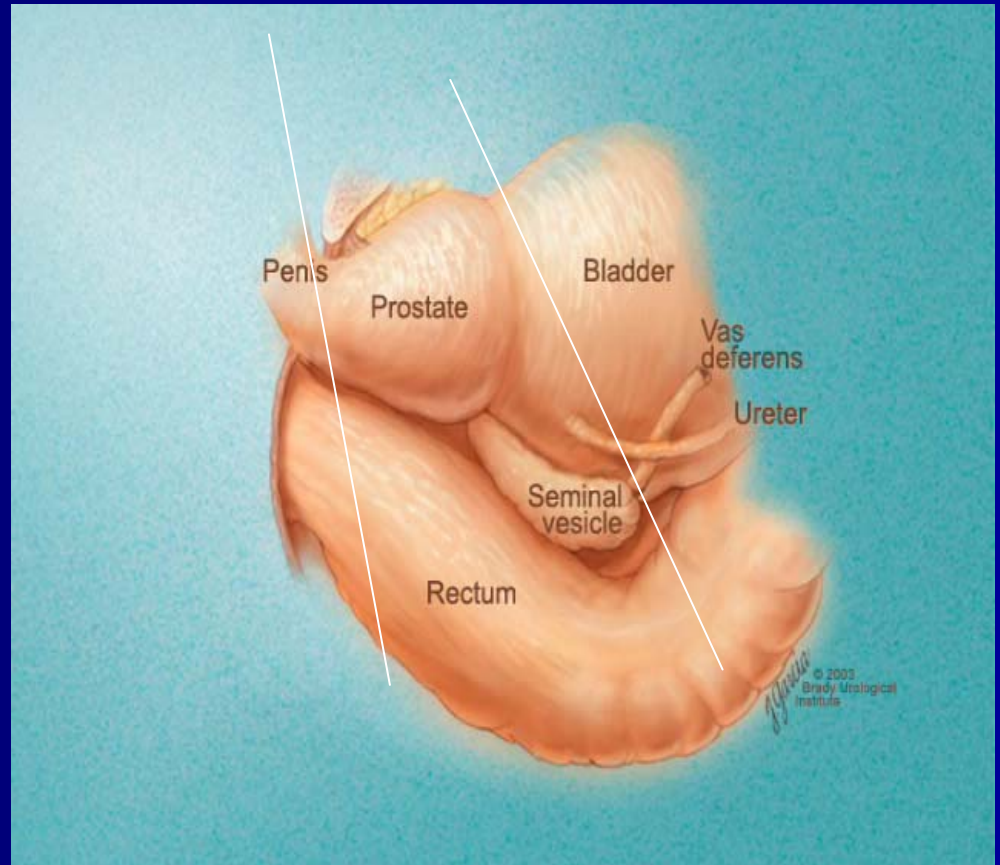


TRATAMIENTO

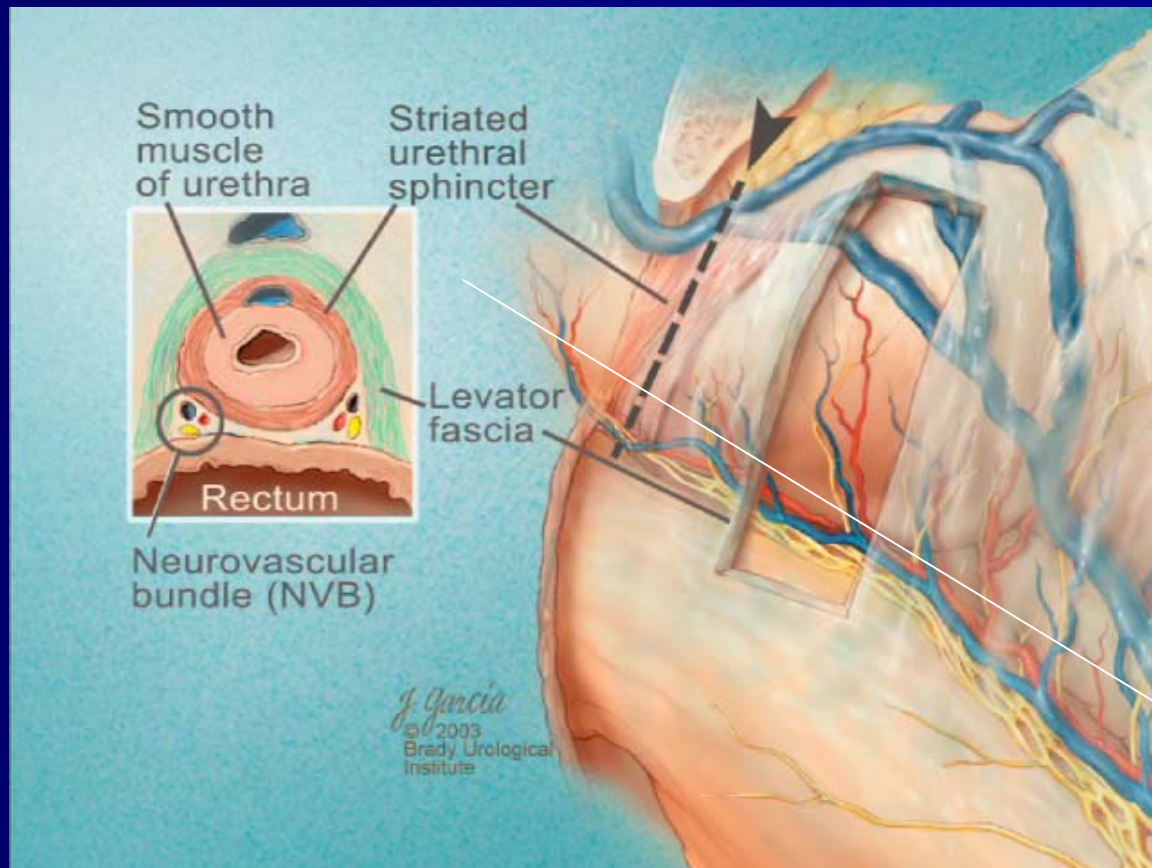
Ca Próstata localizado.

- Observación:
 - Etapas temprana:
 - Bajo grado.
 - <T2a.
 - Expectativa vida < 10 años.
- Finasteride.

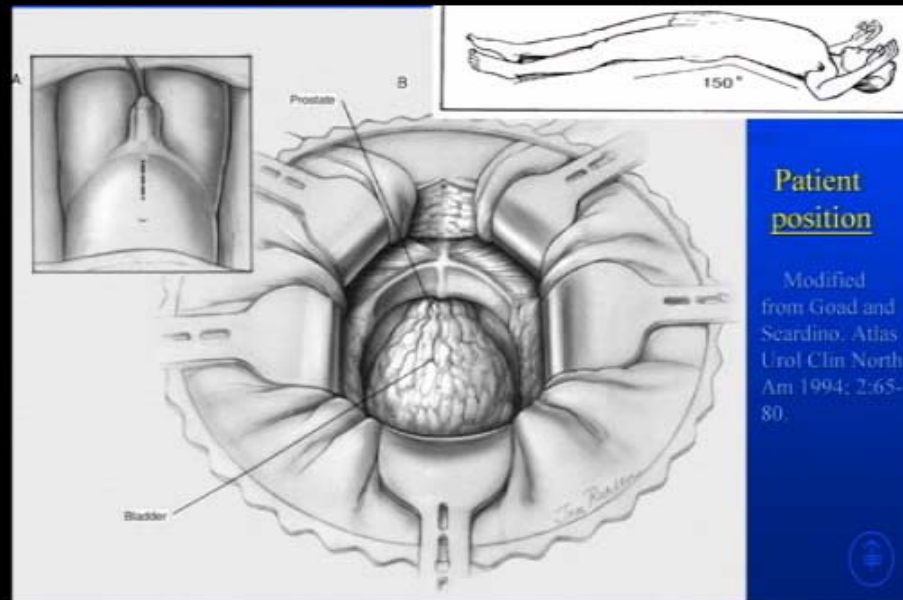
Prostatectomía Radical:



Prostatectomía Radical:



Prostatectomía Radical:

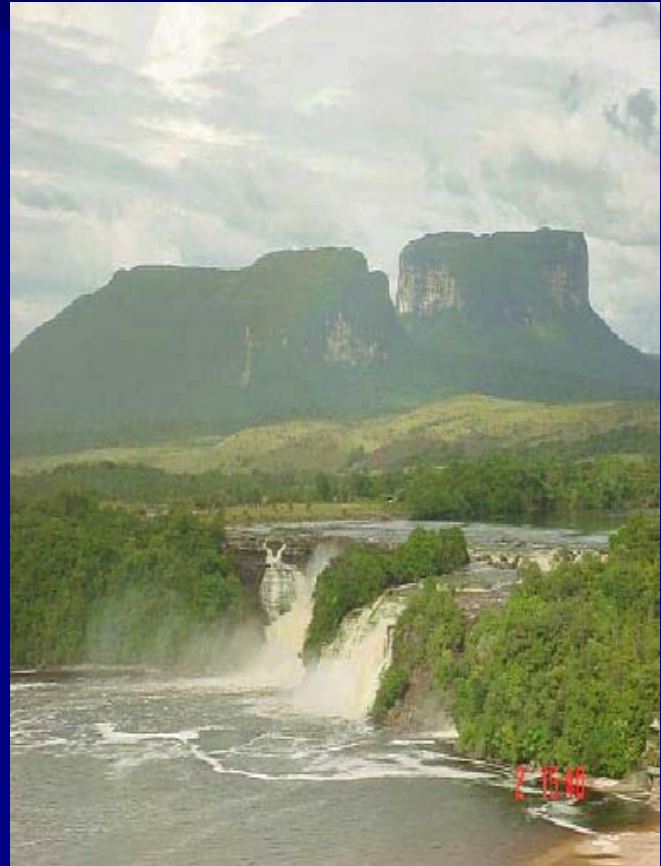


OBJETIVO PR

- Excisión completa de la próstata y vesículas seminales con ganglios pélvicos.
- Morbilidad mínima perioperatoria, sin transfusiones, y retorno temprano a actividades.
- Márgenes quirúrgicos negativos.
- Conservación de potencia y continencia.

Radioterapia:

- Externa:
 - T3
 - Dosis 70-80 gy.
 - 3-5% eventos adversos.
- Braquiterapia:
 - I 125 y paladium.
 - 144 gy.
- 3D

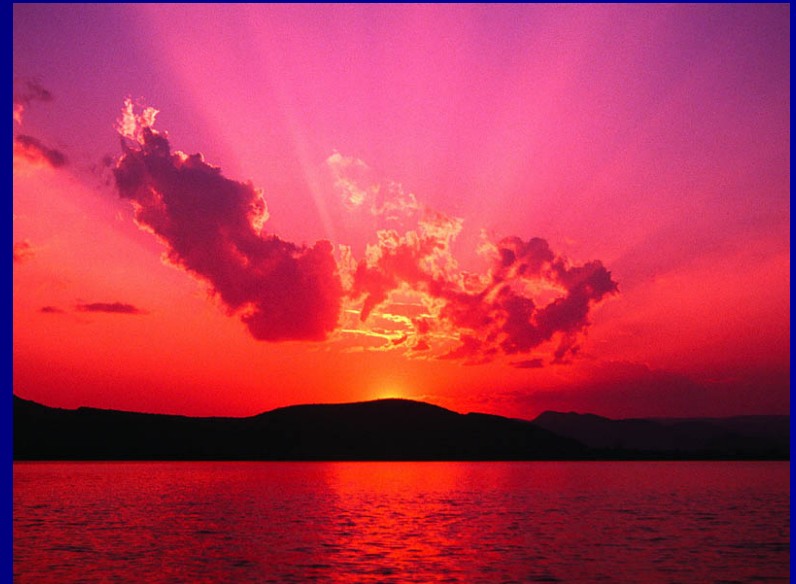


Crioterapia



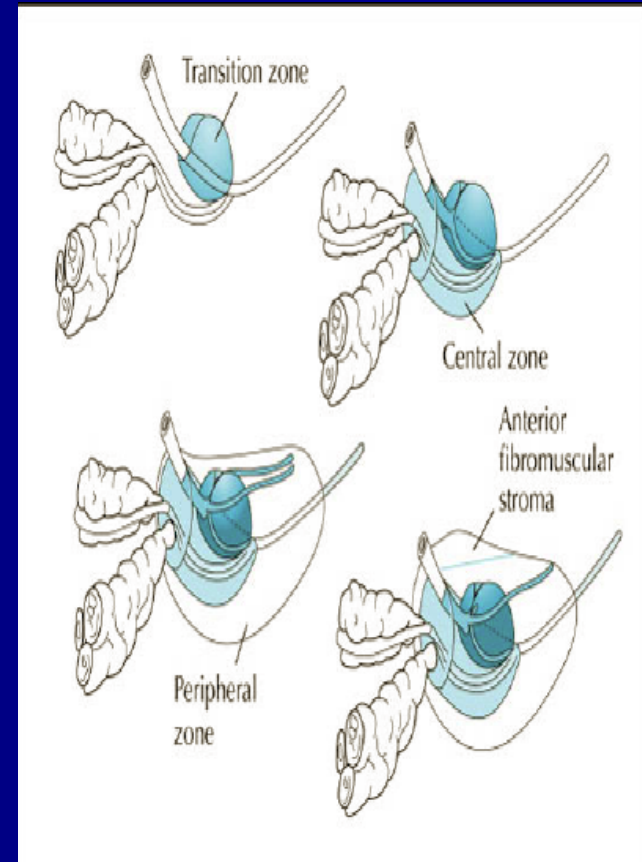
Seguimiento:

- APE:
 - Recurrencia.
 - Progresión.
- Bx próstata.
- TAC.
- Scan óseo.



Tx Adyuvante:

- Radioterapia externa post PR.
- Prostatectomía radical Post-radioterapia.
- Bloqueo androgénico periférico:
 - Bicalutamida 150mgr.

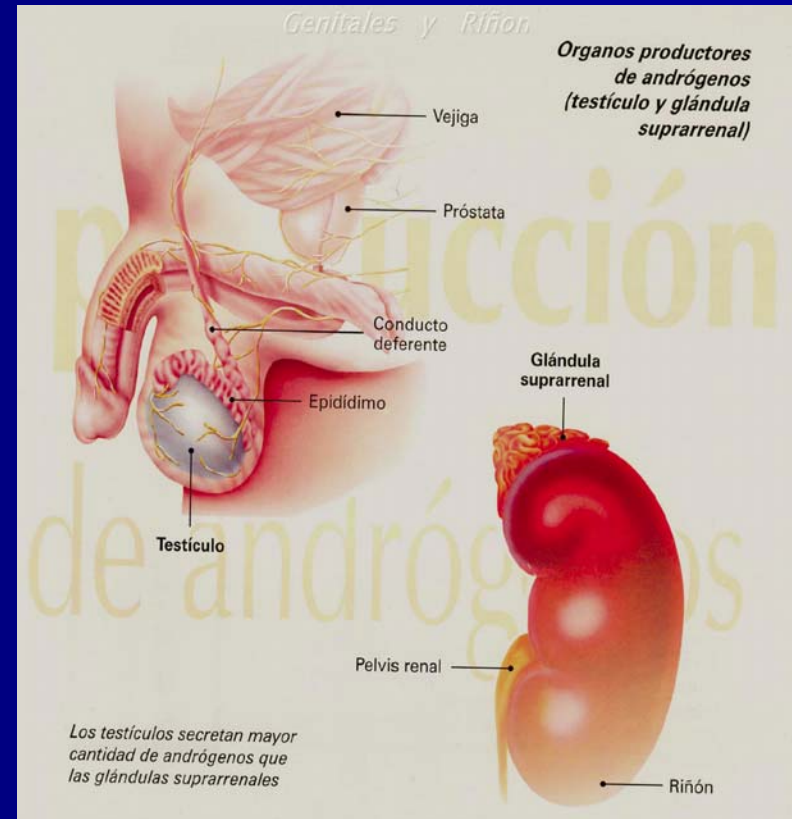


Progresión....

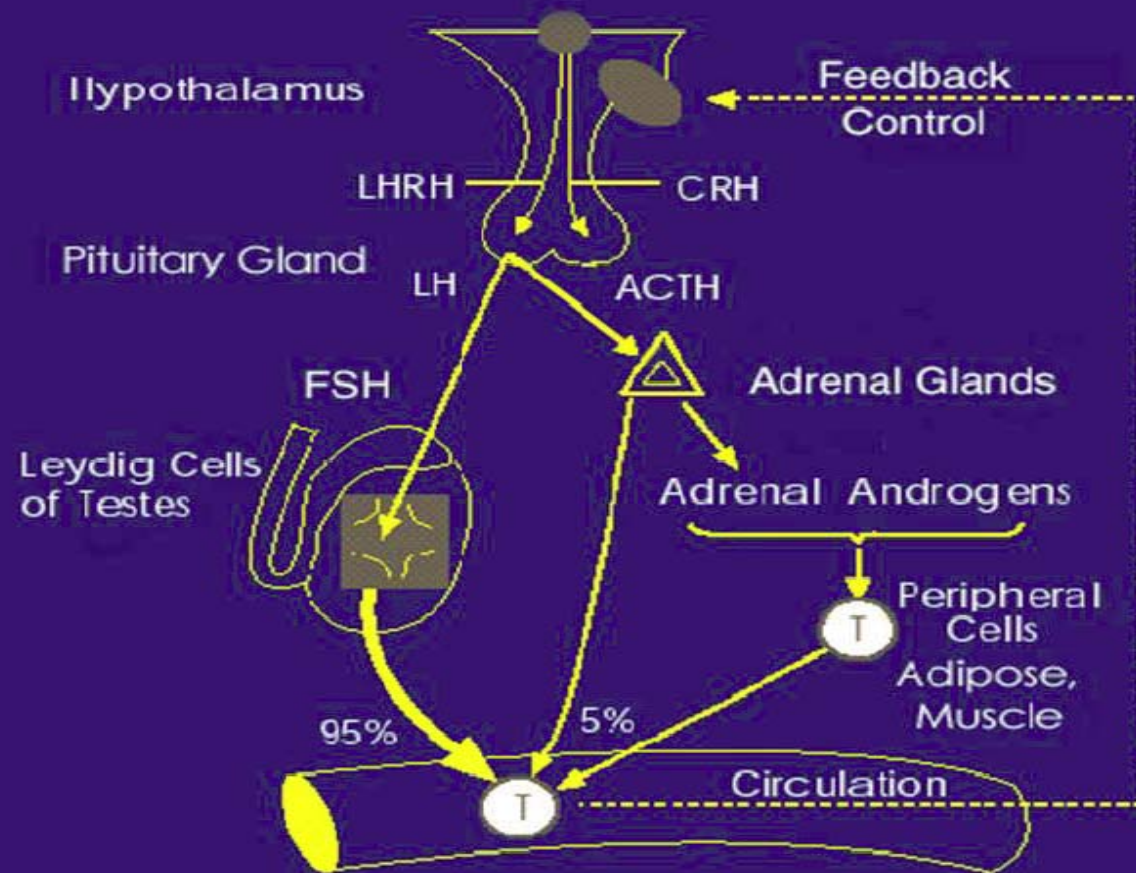
CUANDO SE INICIA TRATAMIENTO

Ca Próstata metastásico.

- Castración.
- LHRH agonistas:
 - Ac. Zoledronico.
 - Ac. Leuprolide.
- LHRH antagonista:
 - Abaralix.
- Antiandrógenos.
 - Flutamida, bicalutamida, nilutamida.



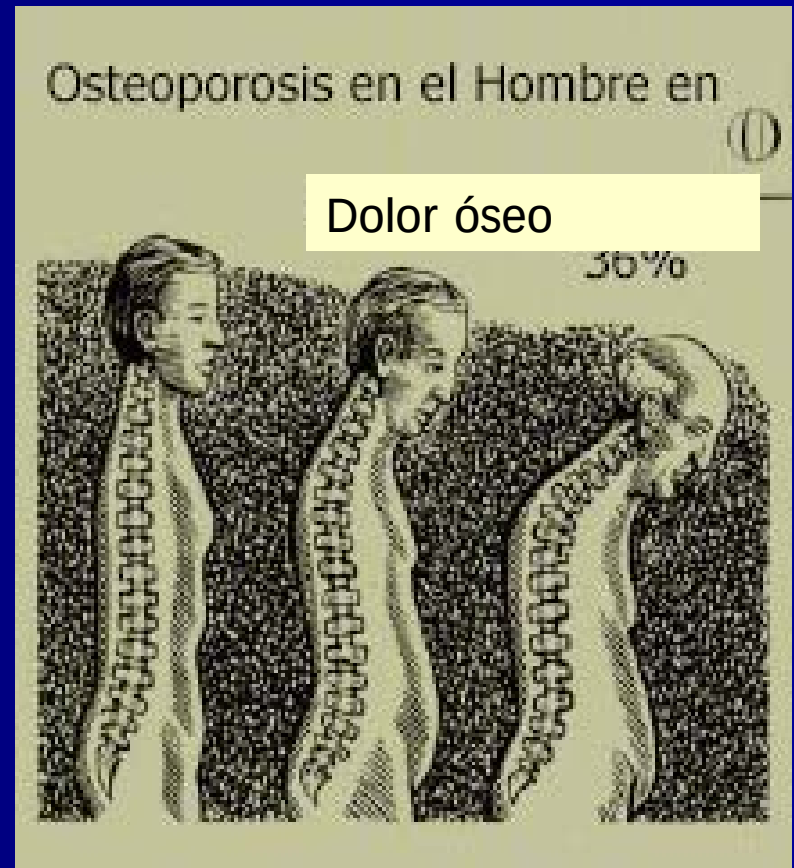
LHRH agonistas



CRH = Corticotrophin-releasing hormone
ACTH = Adrenocorticotrophic hormone
LH = Luteinizing hormone
LHRH = Luteinizing hormone-releasing hormone
FSH = Follicle-stimulating hormone

Metástasis óseas

- Ac. Zoledrónico, alendronato.
- Bifosfonatos.
- Suramin.
- Radioterapia.



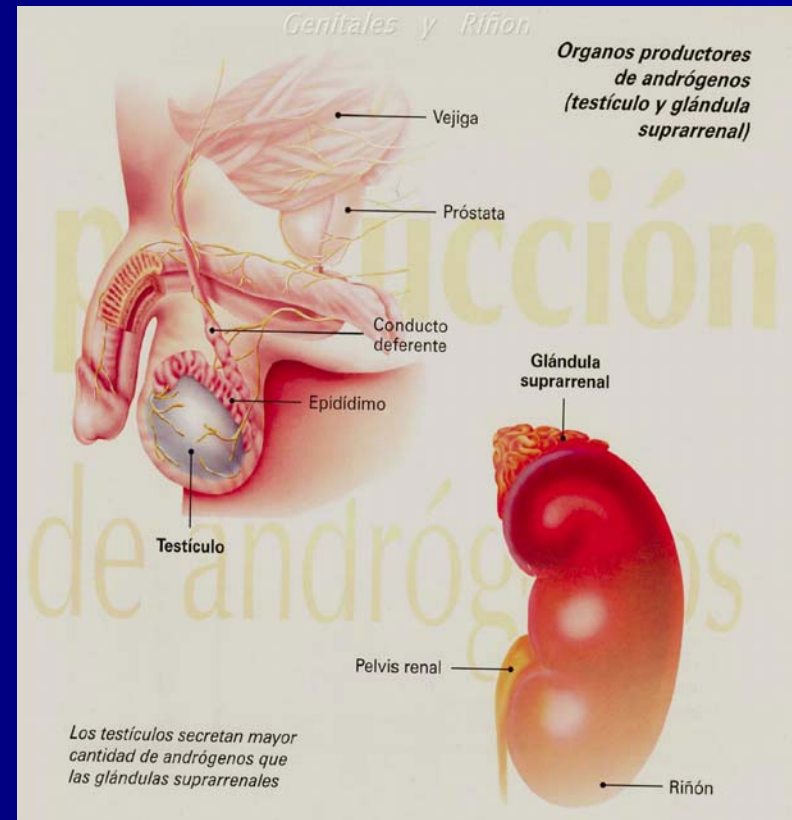
Ca Hormono-refractario

■ Tx segunda línea:

- Withdrawal.
- Ketoconazol.
- Ciproterona.
- Aminoglutetimida.
- DES
- Esterioides.
- PC-SPES.
- Calcitrol

■ Quimioterapia:

- Mitoxantrona
- Docetaxel.
- Tamoxifen
- Estramustin



GRACIAS