

**IN THE NAME OF GOD**

**RADICAL PROSTATECTOMY**

**BY; Dr HASSANZADEH**

# Ca.P

- Age
- Blacks
- Diet
- Androgen
- Vasectomy
- Cigarette
- Sexual

# Diagnosis

- DRE
- PSA
- Biopsy
- PSA density
- PSA velocity
- Free/total PSA

Table 94-5. 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 and histologic grade <7	A1	Same as TNM
T1b	T1b	Tumor found in tissue removed at TUR; >5% is cancerous or histologic grade >7	A2	Same as TNM
T1c	T1c	Tumor identified by prostate needle biopsy due 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 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 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

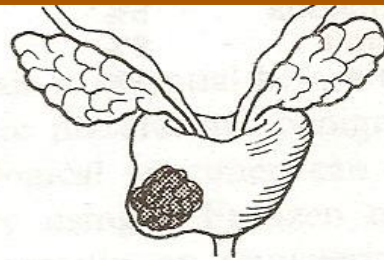
TNM, tumor, node, metastasis; TUR, transurethral resection.



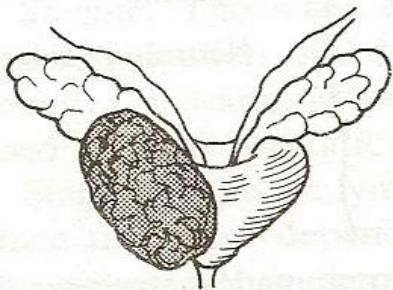
T<sub>0</sub> — No tumour palpable (incidental carcinoma)



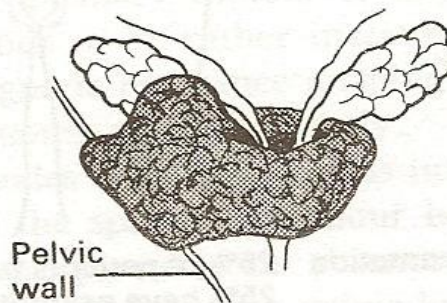
T<sub>1</sub> — Intracapsular nodule, surrounded by normal gland



T<sub>2</sub> — Intracapsular nodule that deforms the gland



T<sub>3</sub> — Extension beyond the capsule



Pelvic wall

T<sub>4</sub> — Fixed to neighbouring structures

### INCIDENCE OF POSITIVE PELVIC LYMPH NODES

T Category	%
T <sub>0</sub> (focal)	0
T <sub>0</sub> (diffuse)	20
T <sub>1</sub>	15
T <sub>2</sub>	30
T <sub>3</sub>	50
T <sub>4</sub>	85

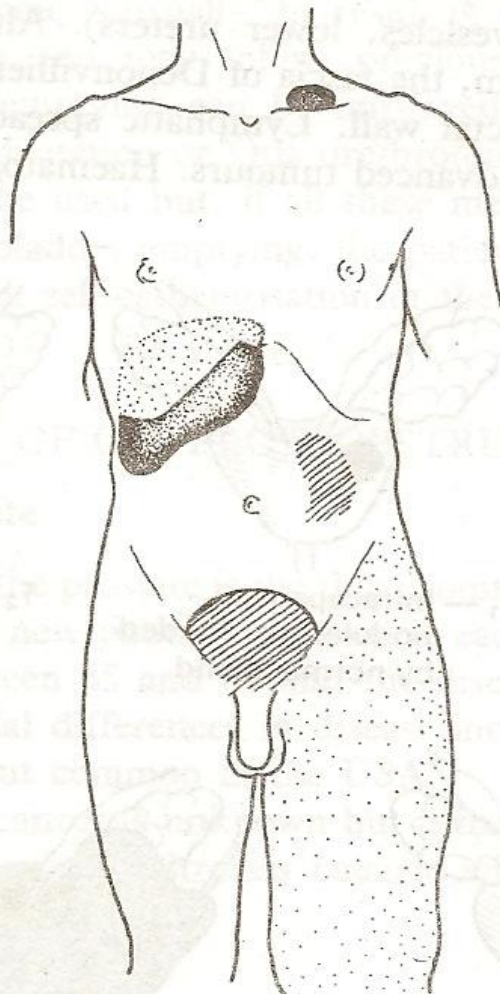
Fig. 17.9 T staging for carcinoma of prostate

Prostatic tumour spreads initially by direct local extension... involve penetration of the prostatic capsule and involvement of adjacent structures... Although tumour may... metastasis through the lymphatic system... nodes and is carried to distant sites...

**SYMPTOMS**

'Prostatism'	70%
Acute retention	25%
Back pain	15%
Haematuria	5%
Uraemia	5%
Anuria	1%

**Also:**  
 weight loss & fatigue  
 perineal pain  
 haemospermia  
 constipation  
 paraplegia



**EXAMINATION**

Anaemia  
 Supraclavicular nodes  
 Enlarged liver  
 Palpable hydronephrosis  
 Vertebral tenderness  
 Palpable bladder  
 PR — local extent of tumour (T-stage)

Swollen leg from iliac vein occlusion  
 Penile and scrotal oedema  
 Neurological signs

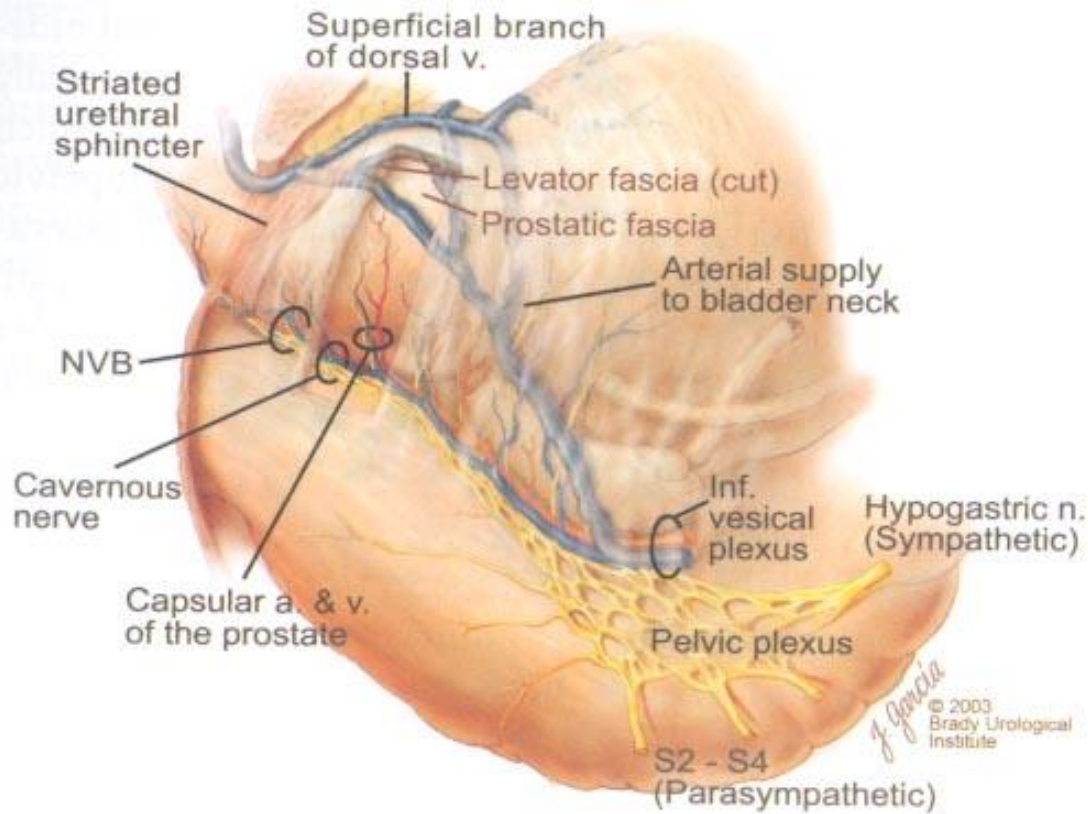
At presentation 25% of patients have symptomatic metastases  
 25% have asymptomatic metastases

**Fig. 17.10** Clinical features in carcinoma of the prostate

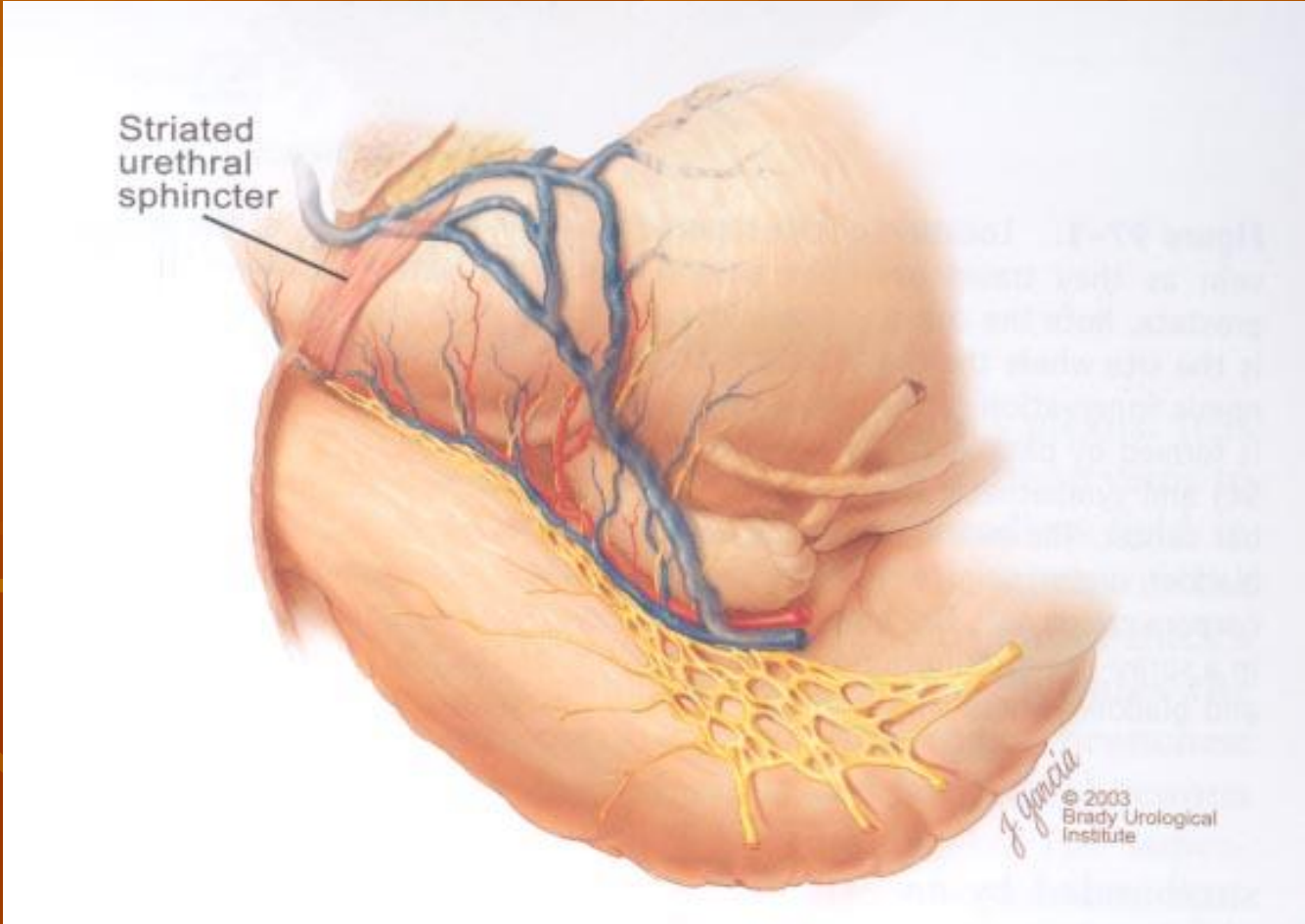
# TREATMENT

- Watchful waiting
- Radical prostatectomy
- Radiotherapy
- Androgen deprivation
  - castration
  - medical castration;strogen,LHRH agonist
  - block in target cell anti-androgens
  - MAB

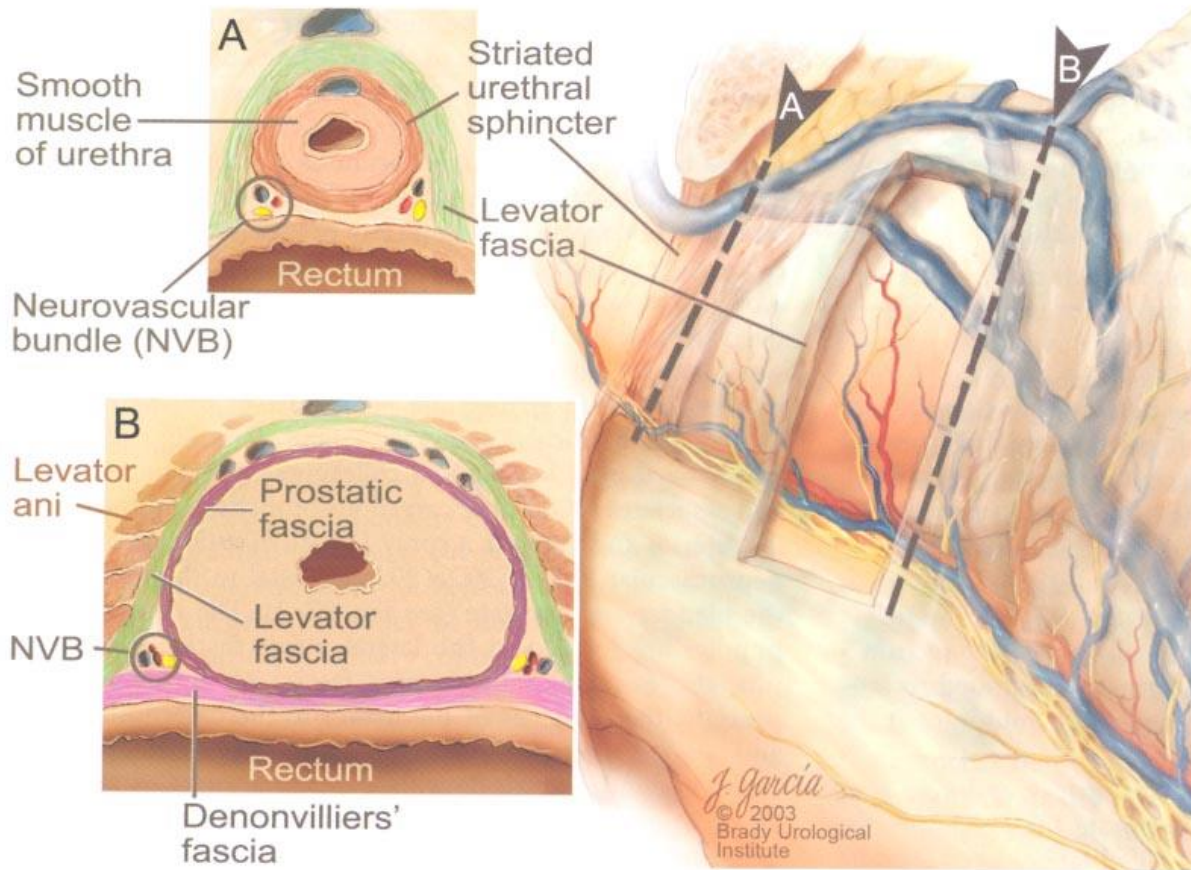
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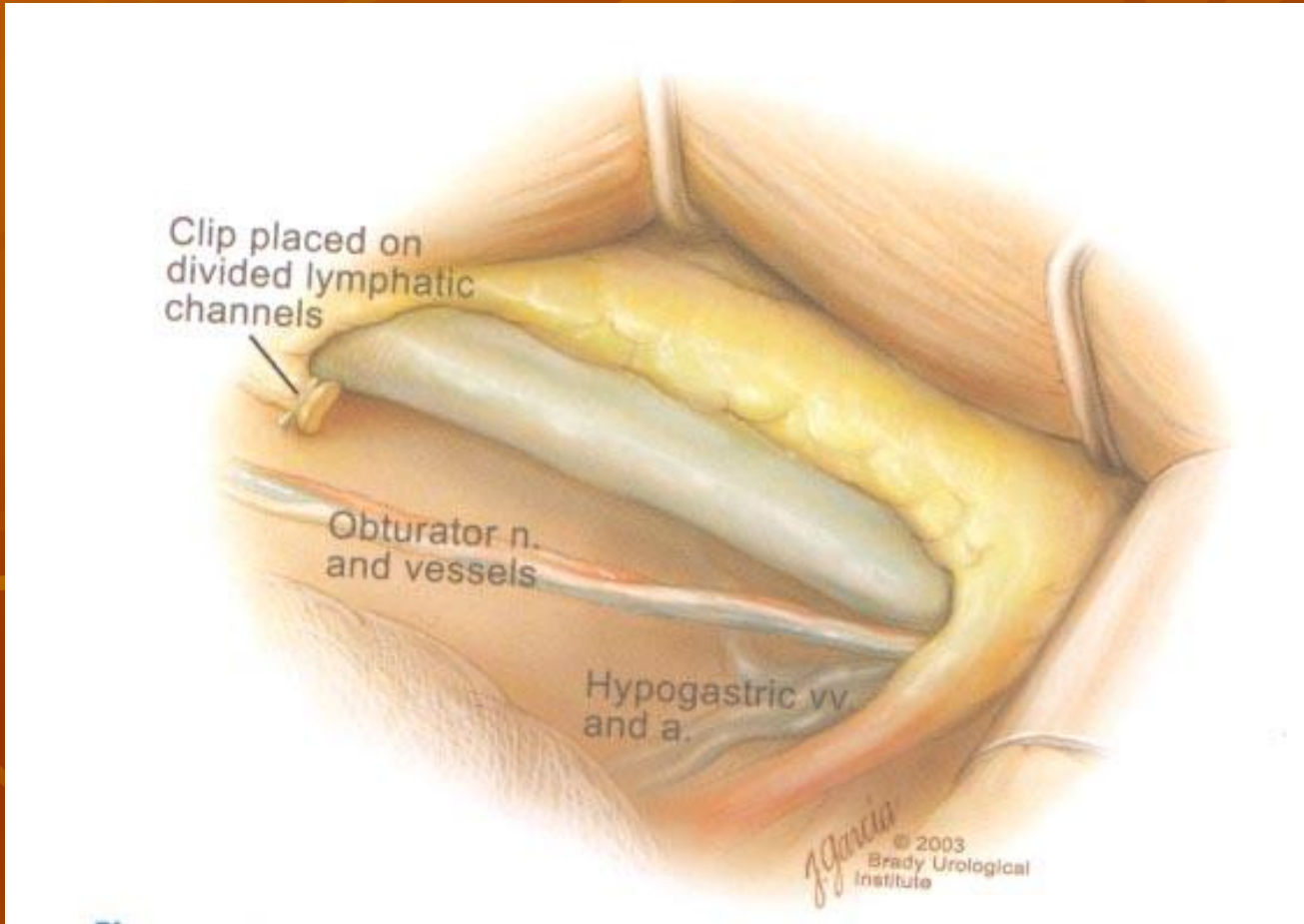




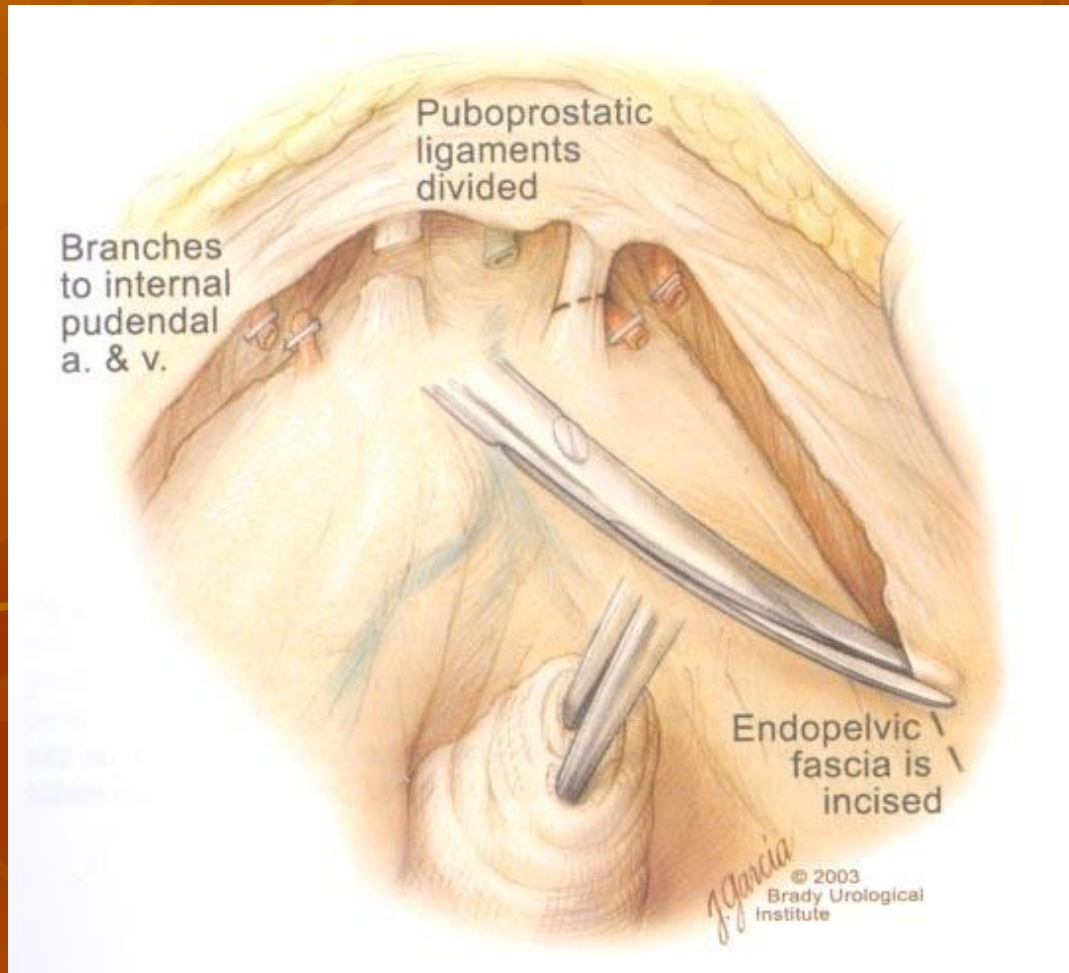
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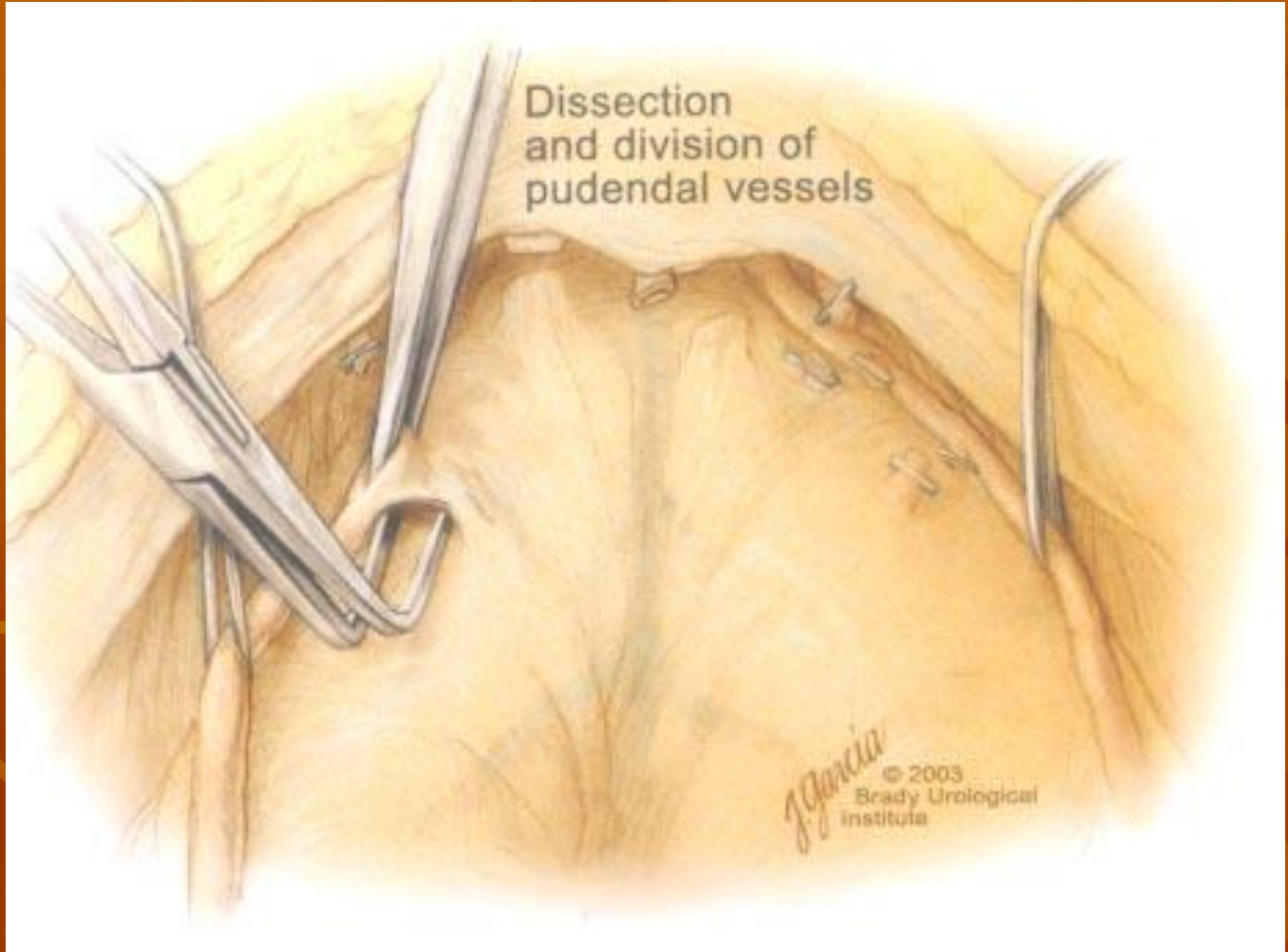
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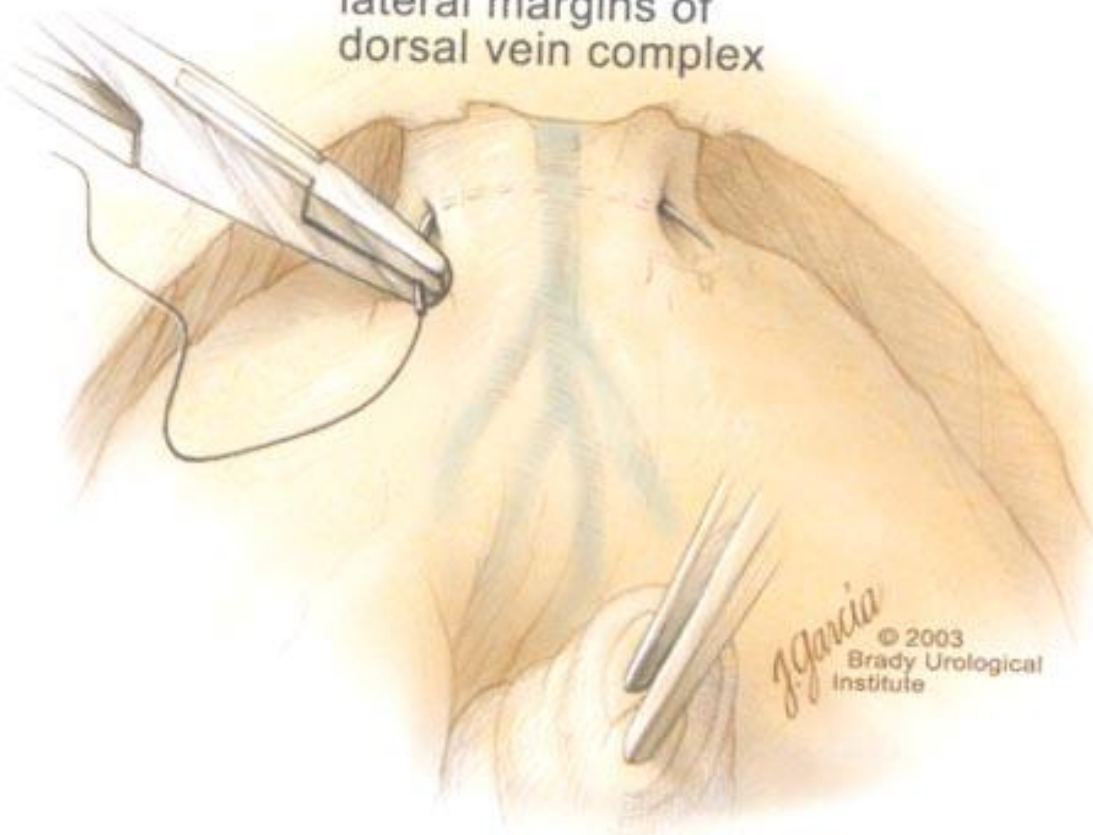


# 6



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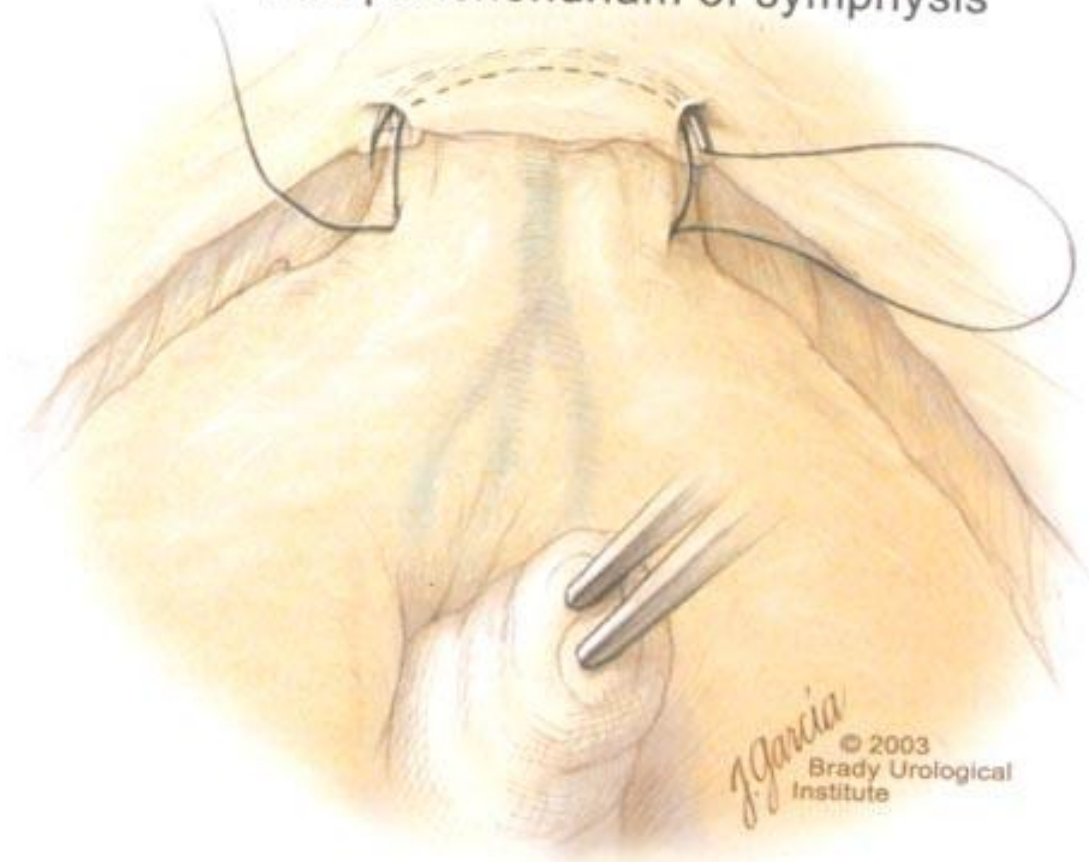
Suture encompasses lateral margins of dorsal vein complex

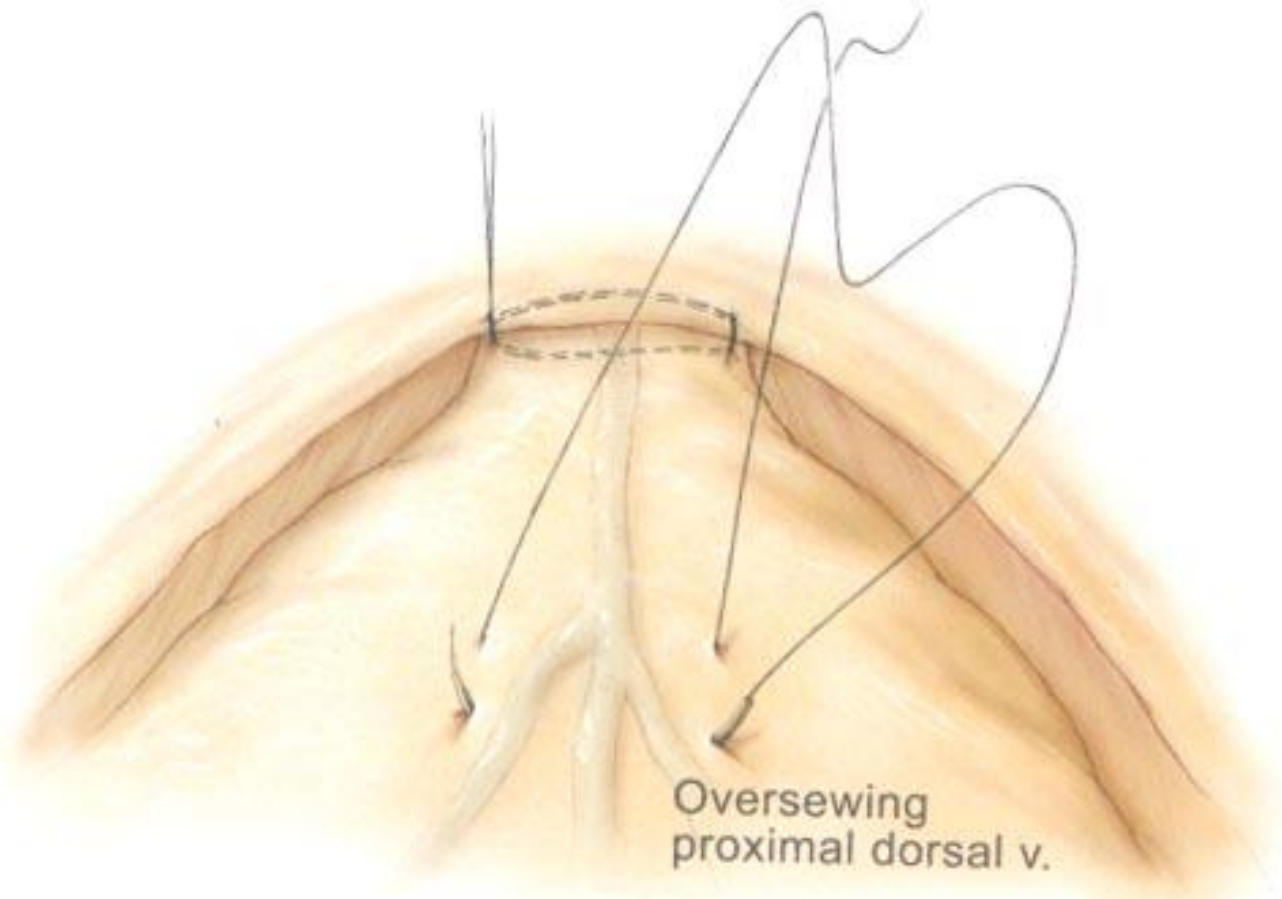


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# 8

Figure of 8 suture then passed into perichondrium of symphysis



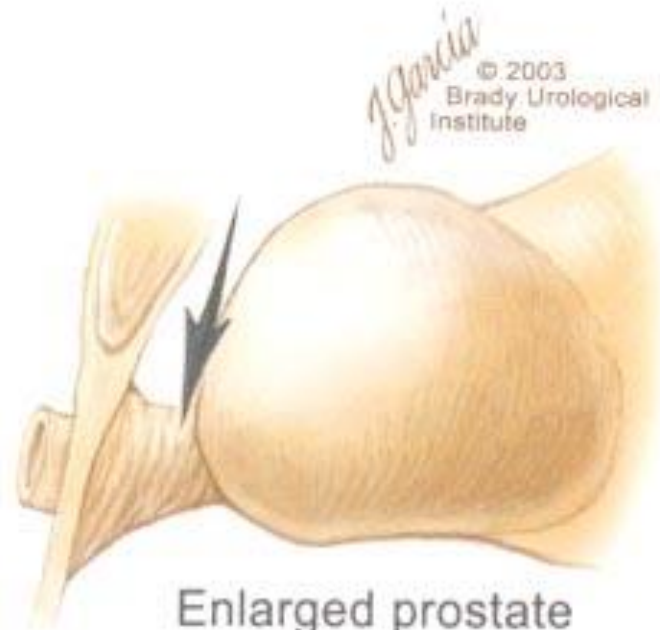




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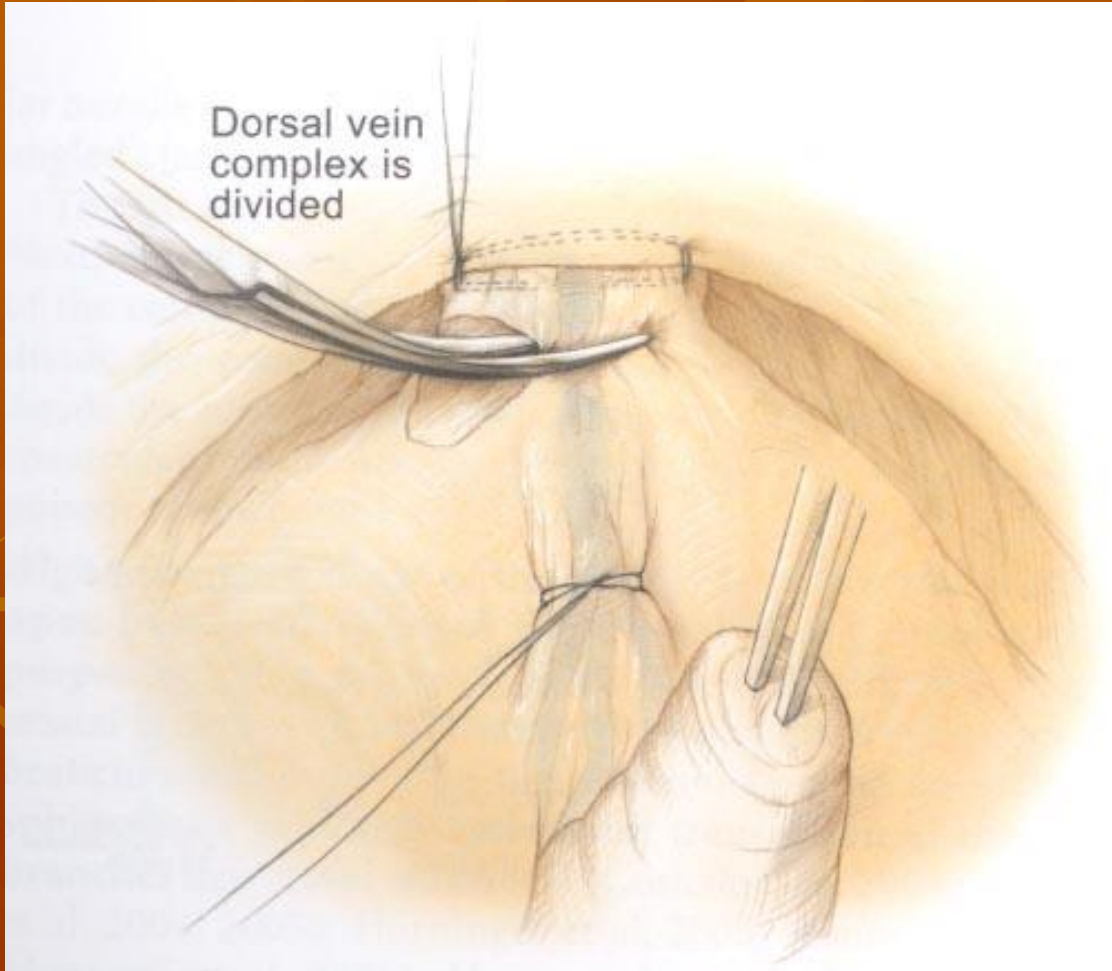


Small prostate



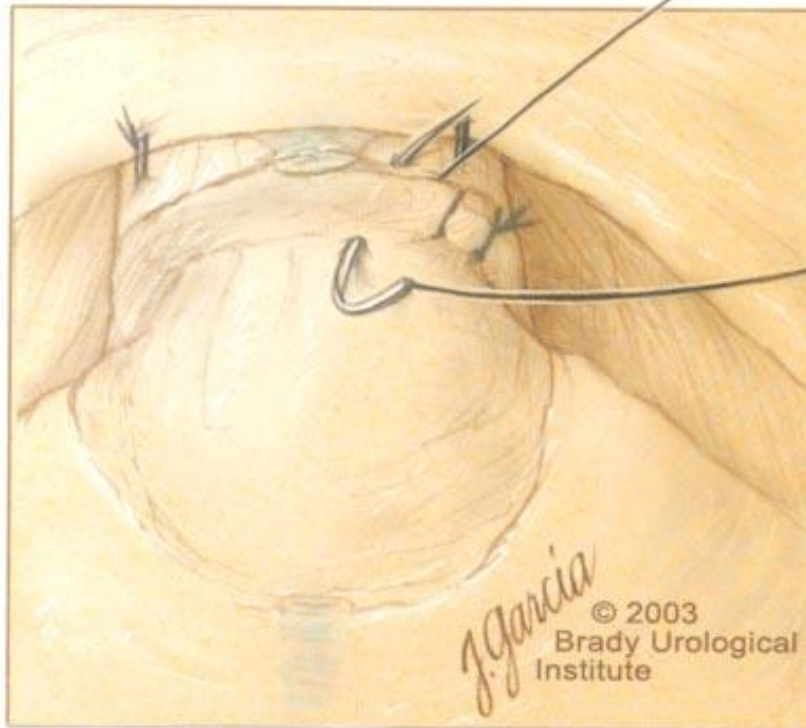
Enlarged prostate

# 11

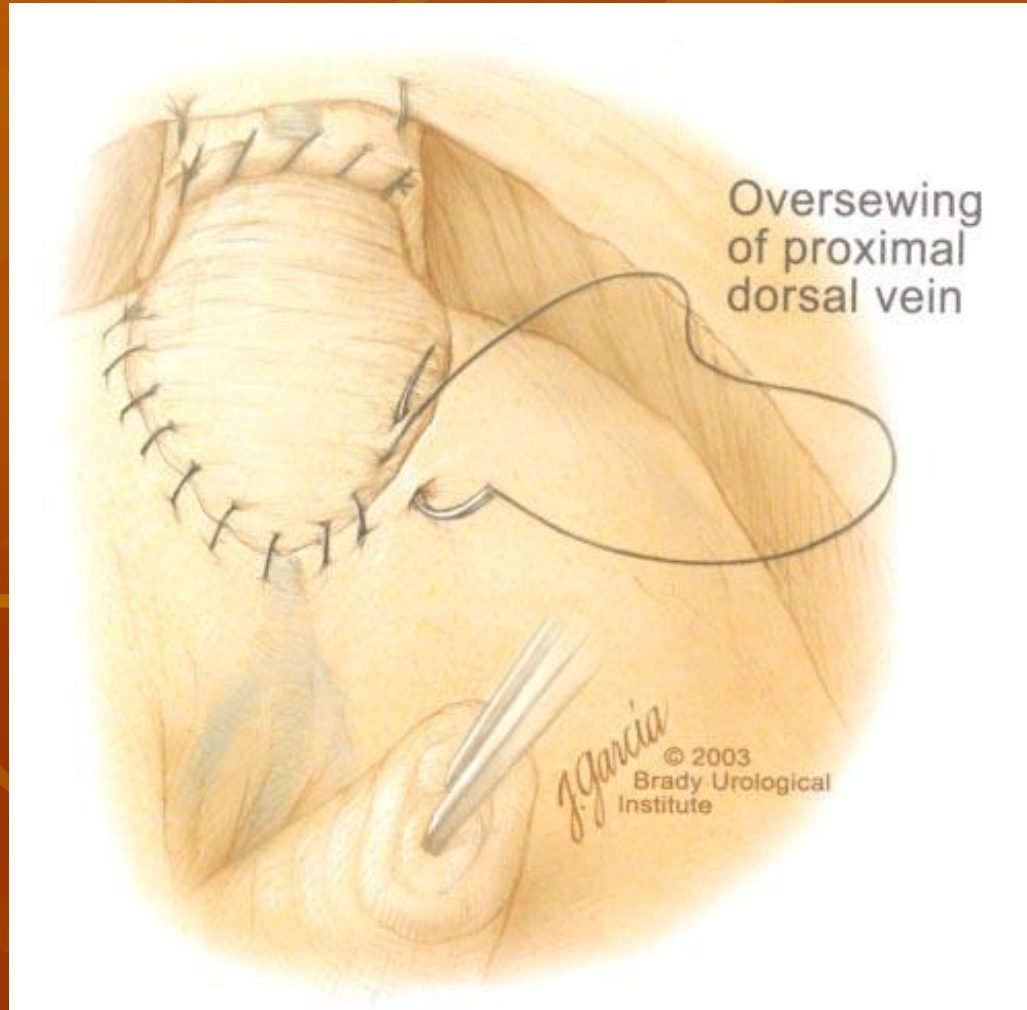


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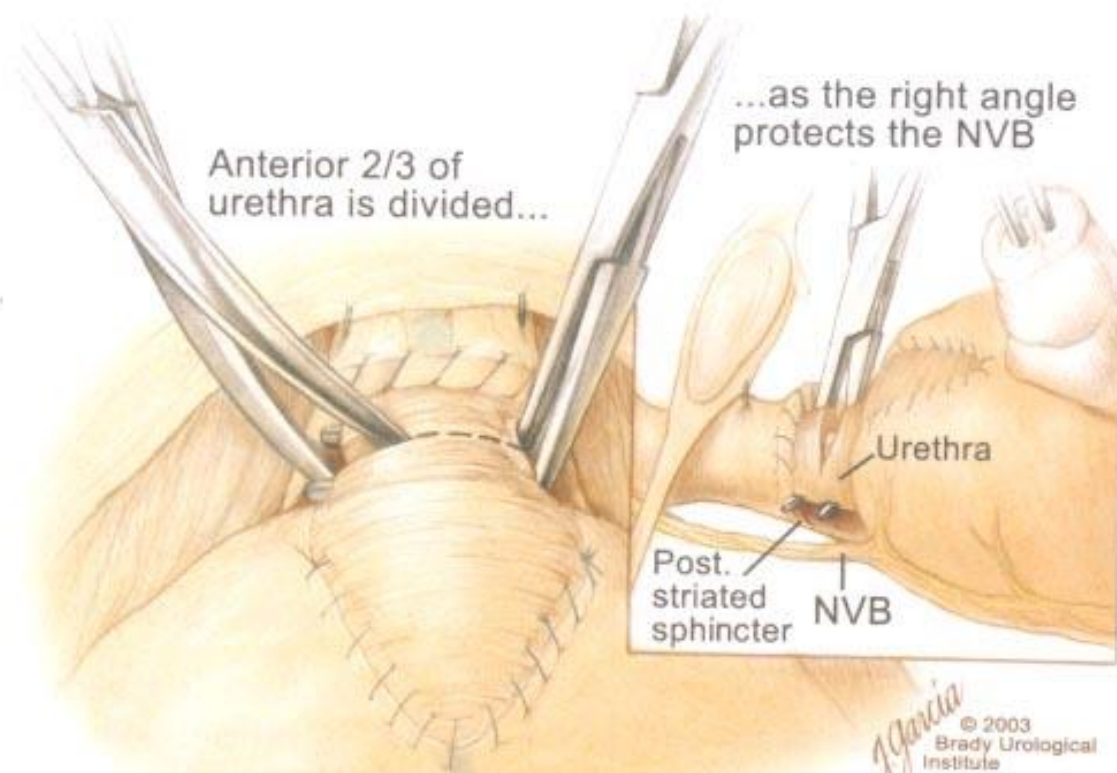
Oversewing of striated urethral sphincter and dorsal vein



# 13



# 14



# 15

Initial suture placed  
at 12 o'clock



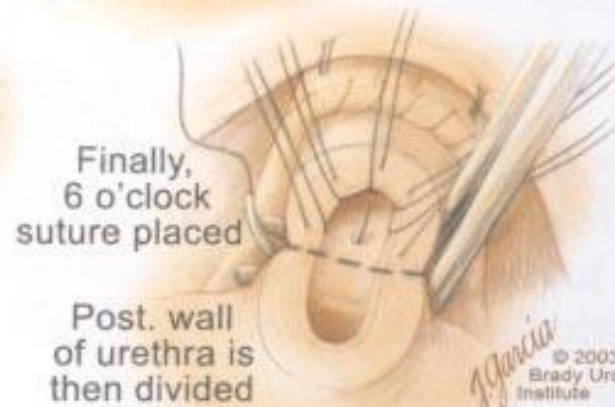
Followed by sutures at  
2, 10, 7 and 5 o'clock



Foley  
catheter  
then removed

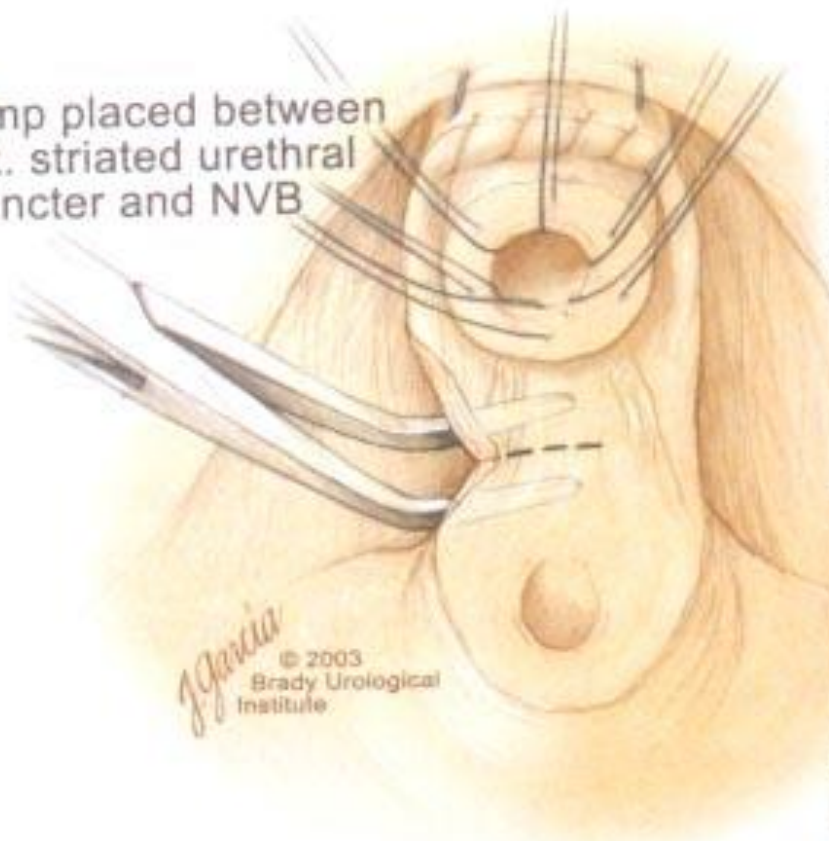
Finally,  
6 o'clock  
suture placed

Post. wall  
of urethra is  
then divided

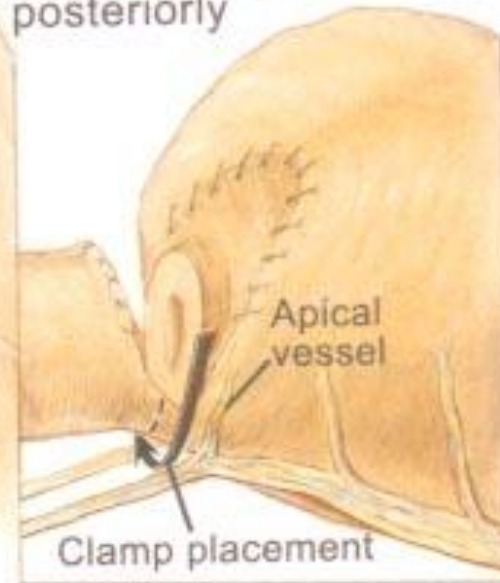


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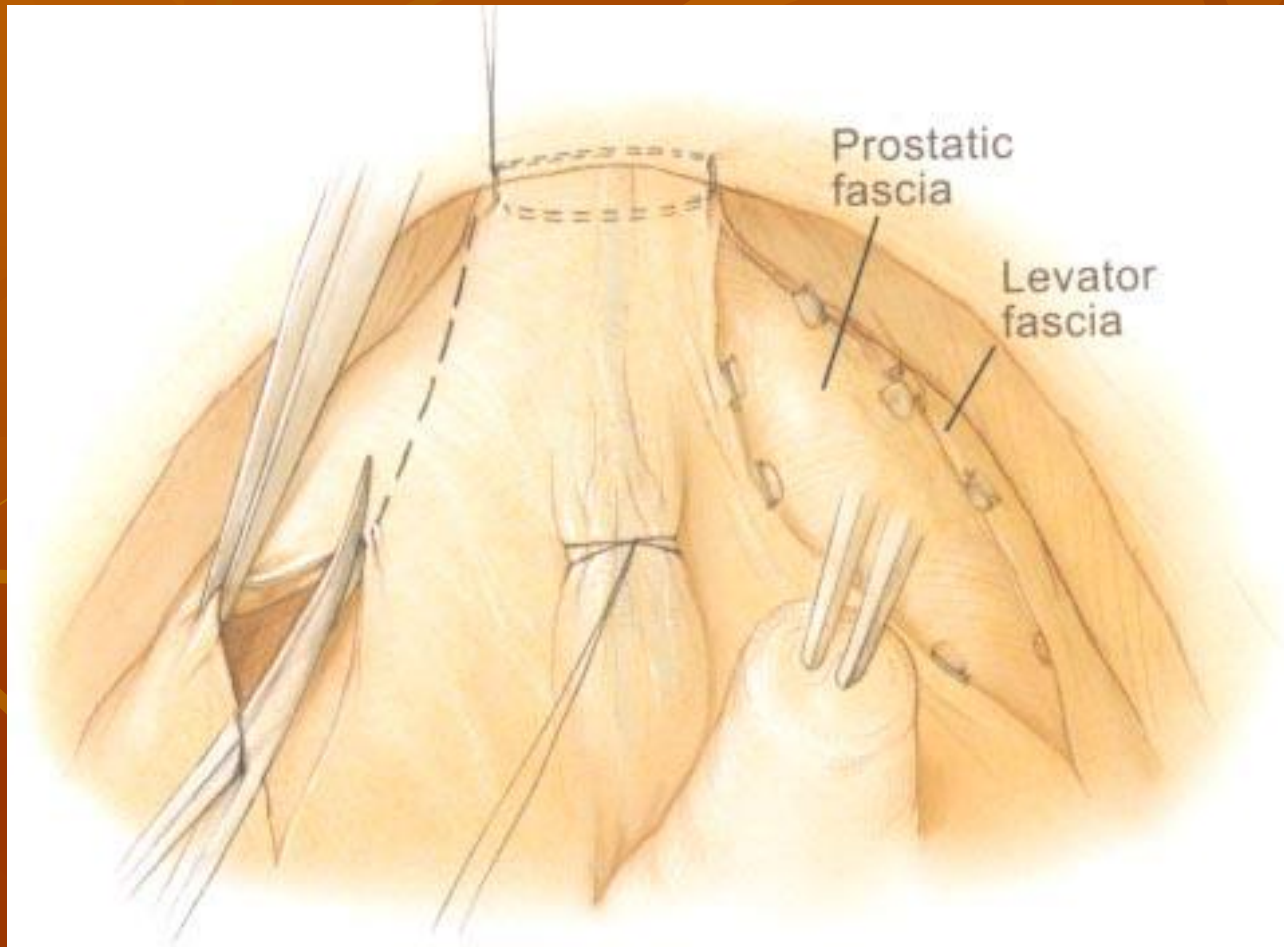
Clamp placed between post. striated urethral sphincter and NVB



Division of post. striated sphincter occurs where NVB is displaced posteriorly

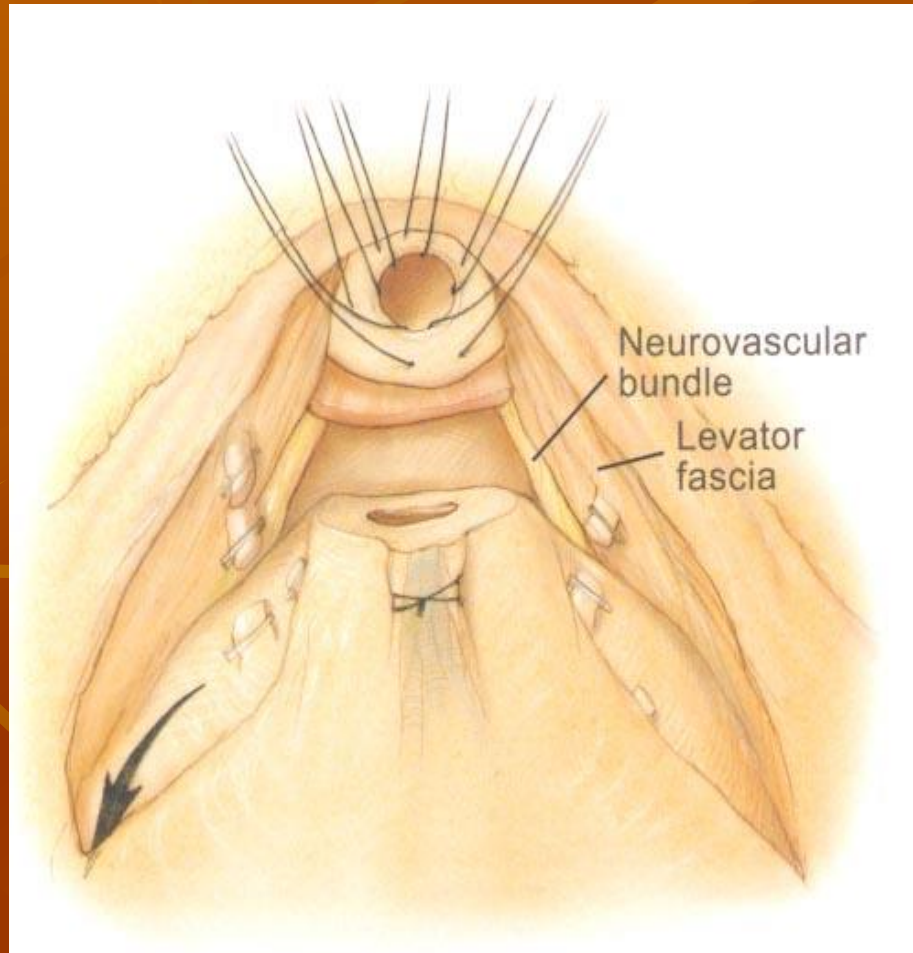


17



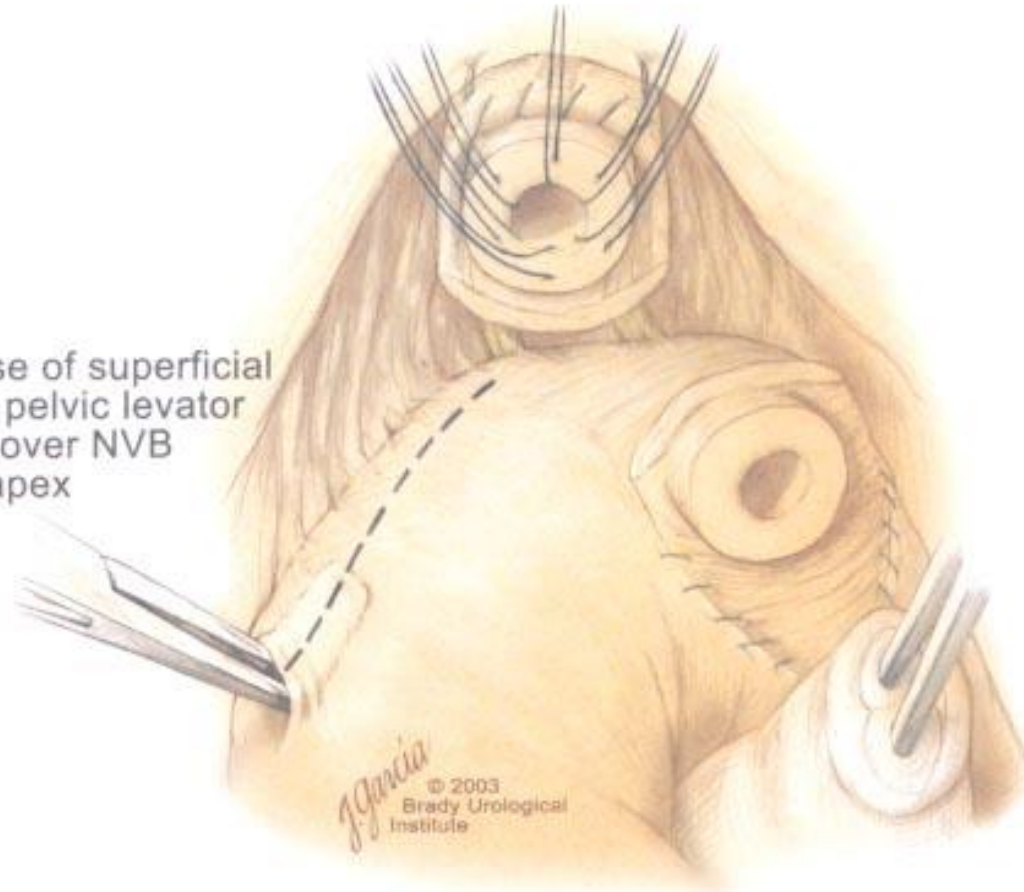


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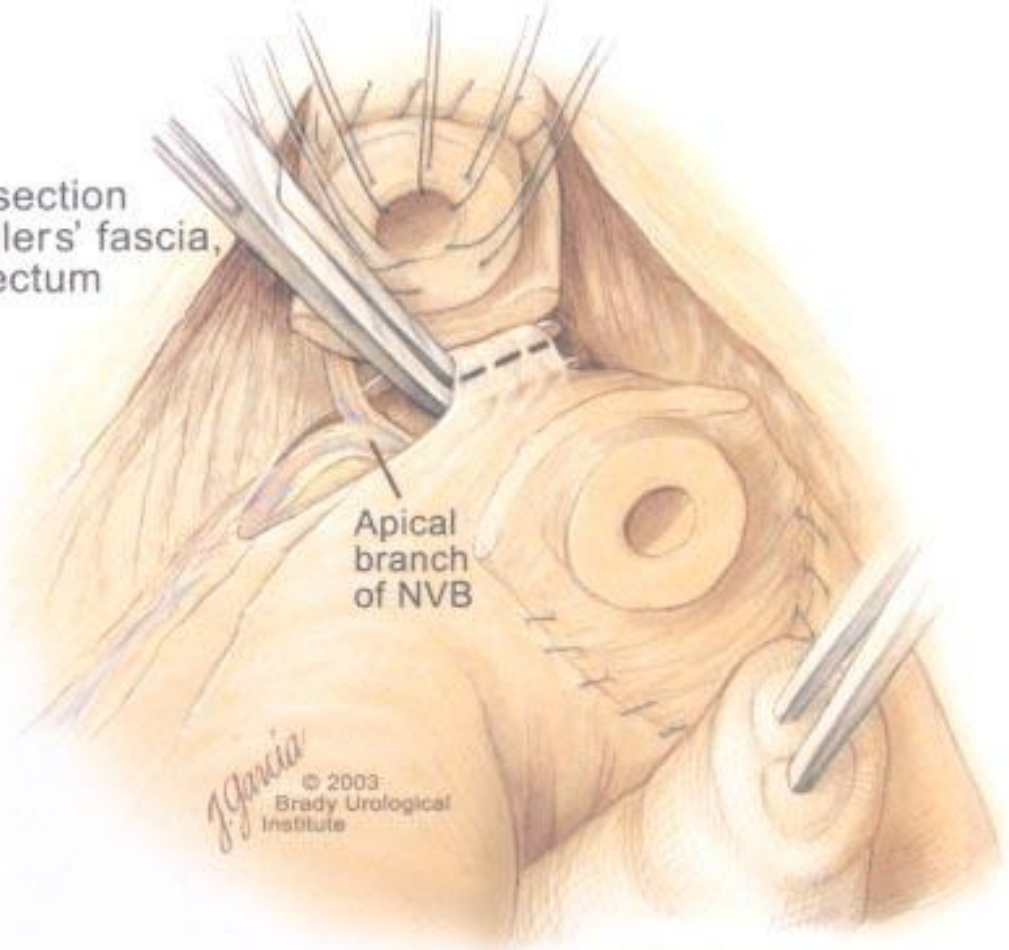
# 19

Release of superficial lateral pelvic levator fascia over NVB up to apex

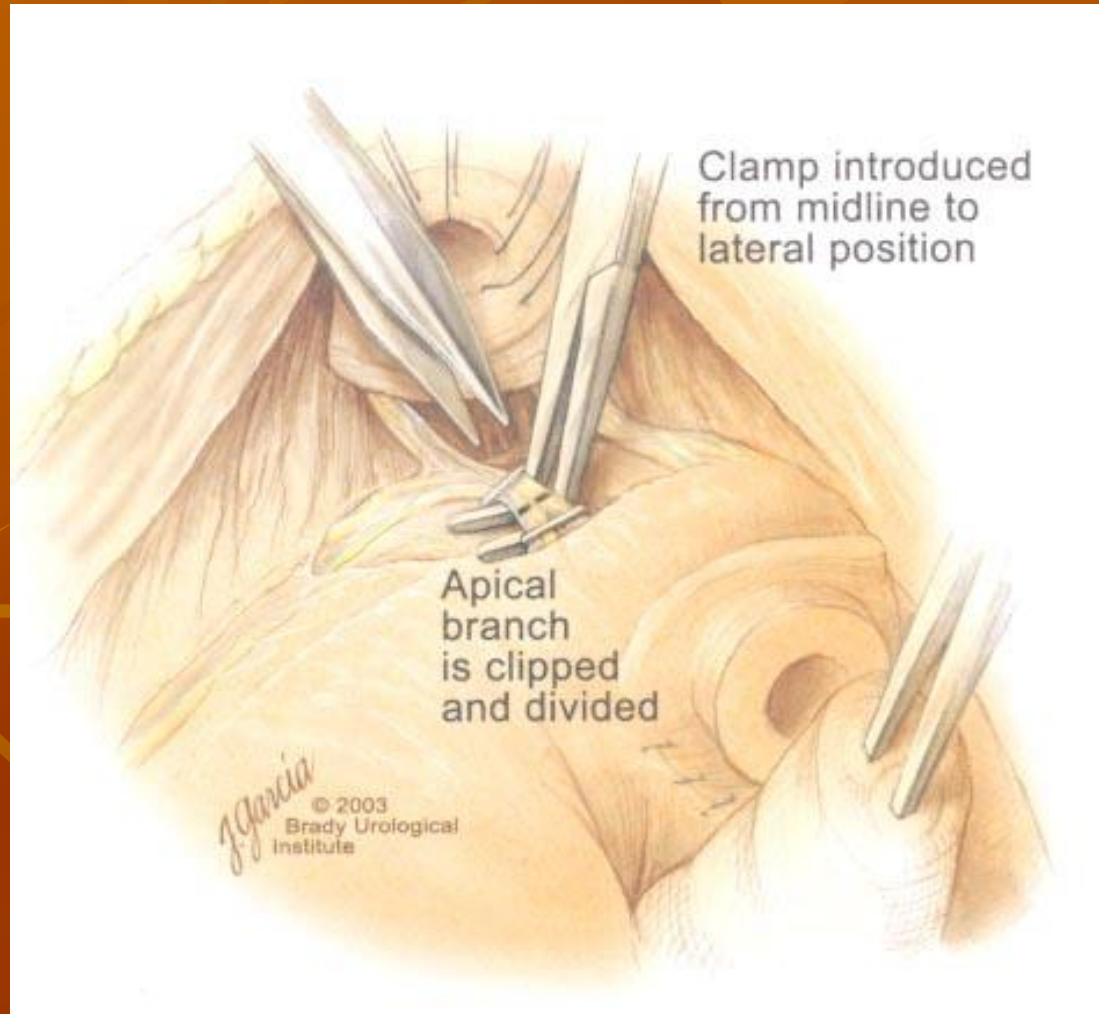


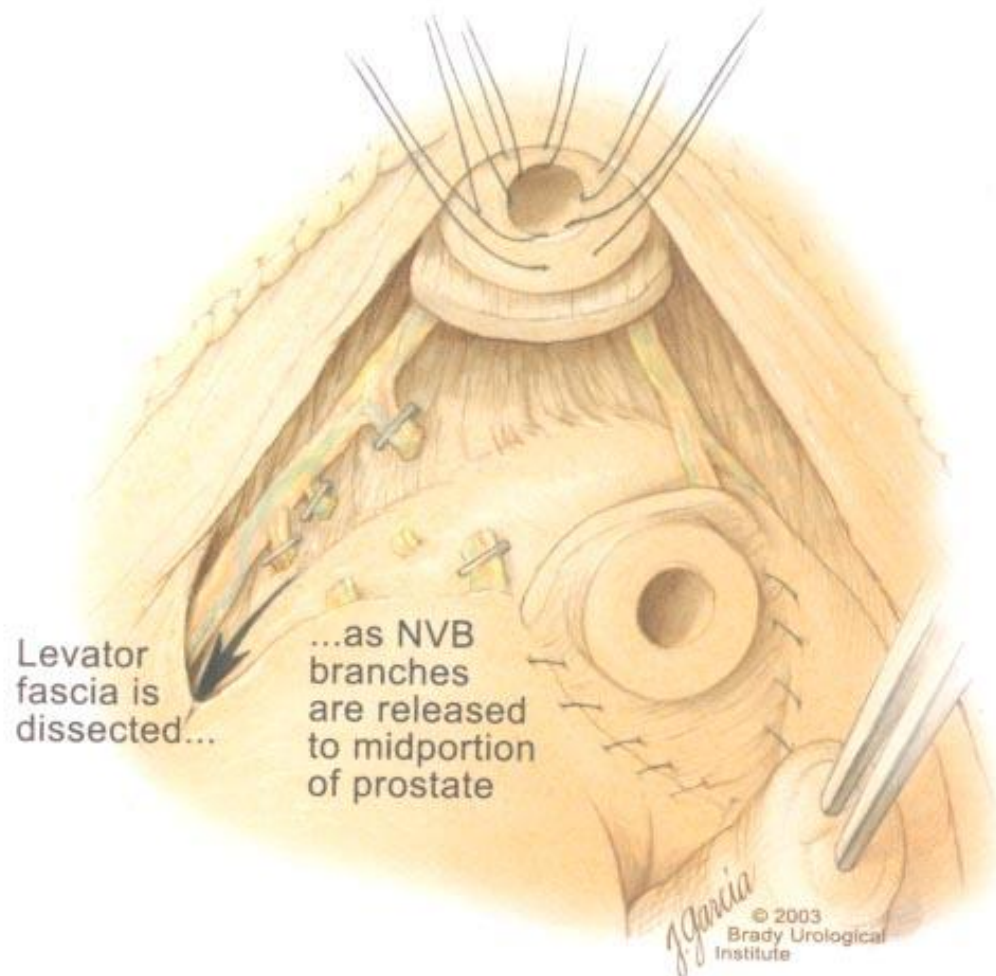
# 20

Midline dissection  
of Denonvillers' fascia,  
exposing rectum

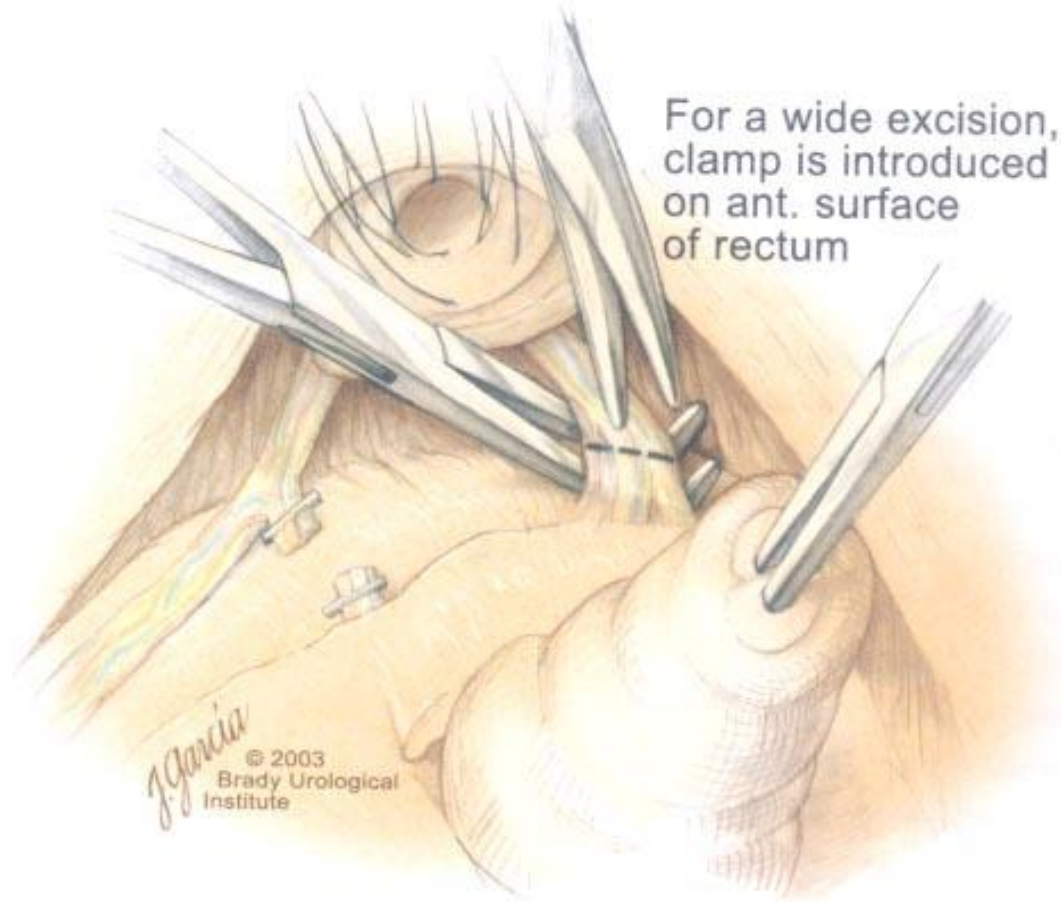


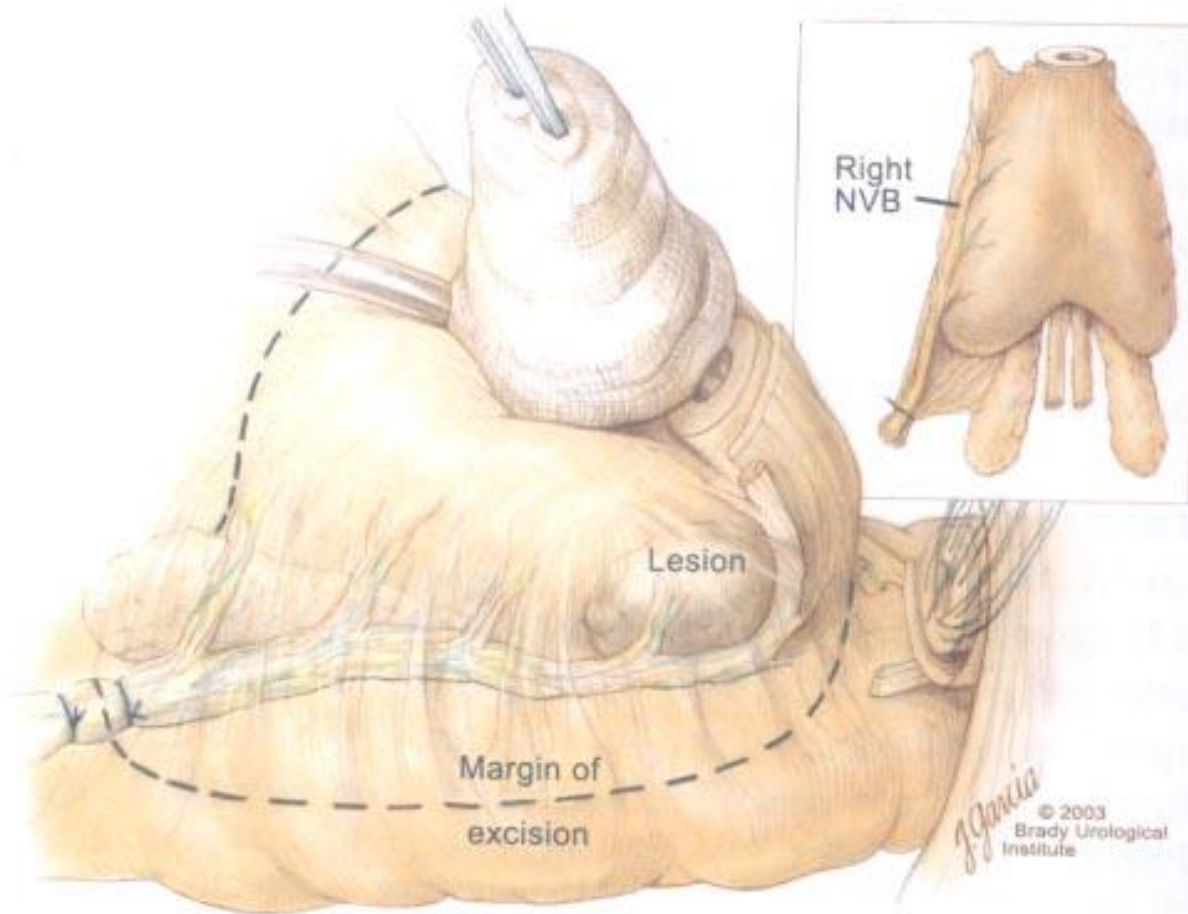
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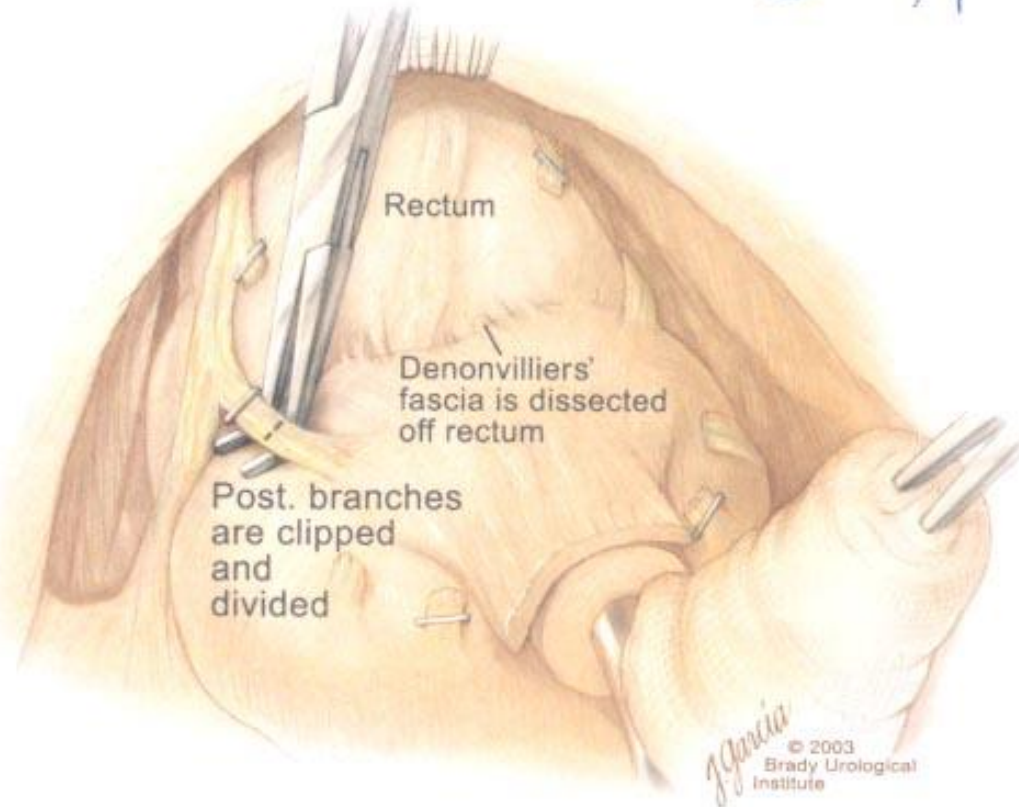


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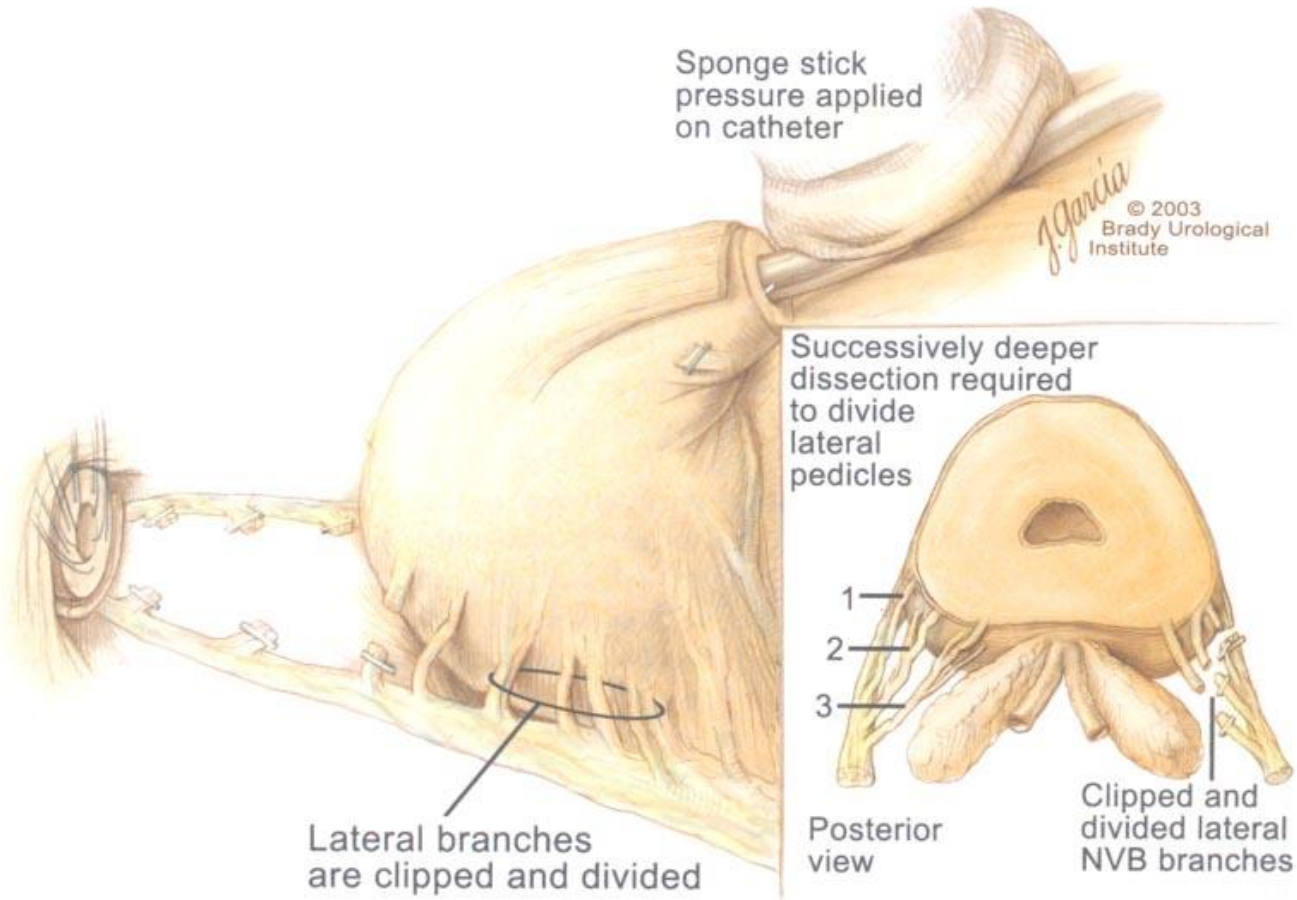


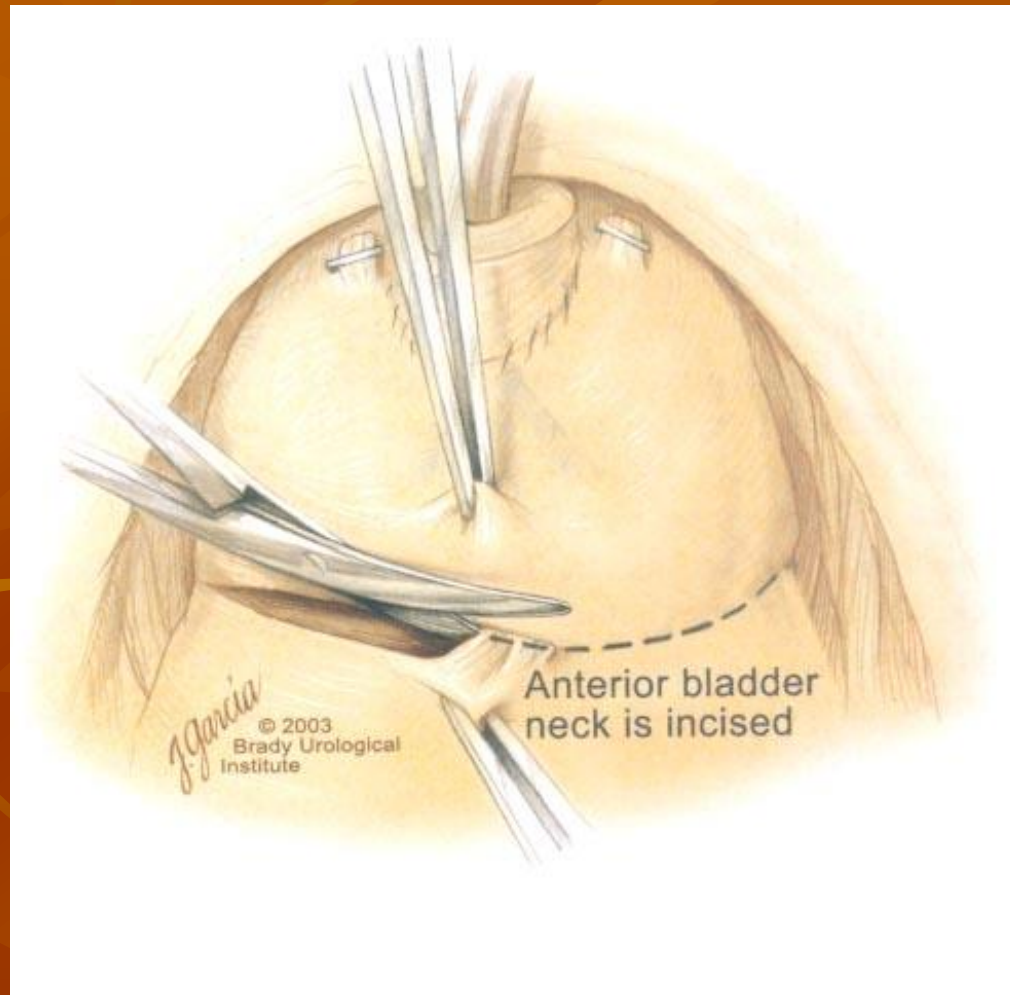
تمام لایه های دیواره رکتوم را جدا کرده و رکتوم را از بافت همبند جدا کنید.

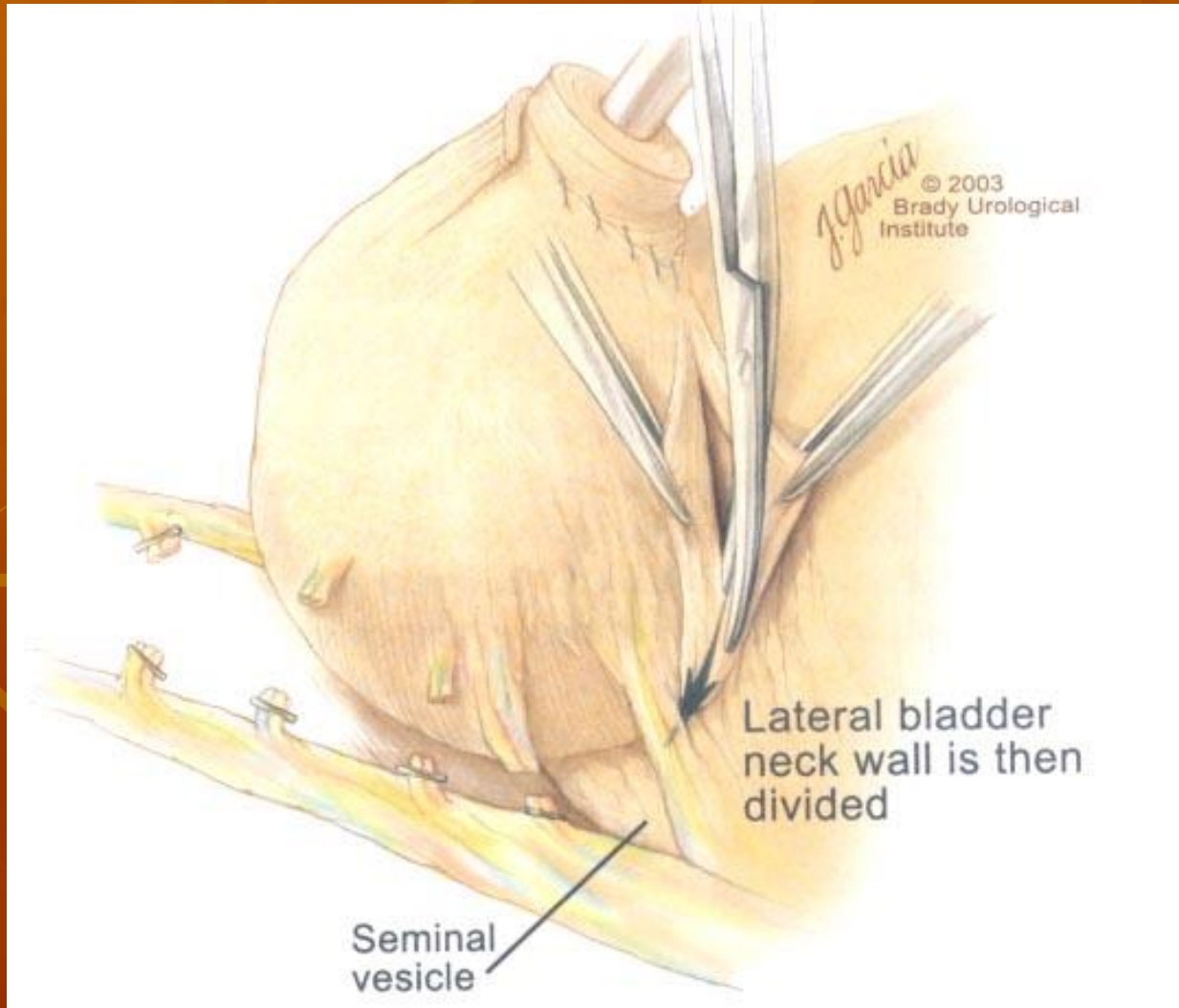


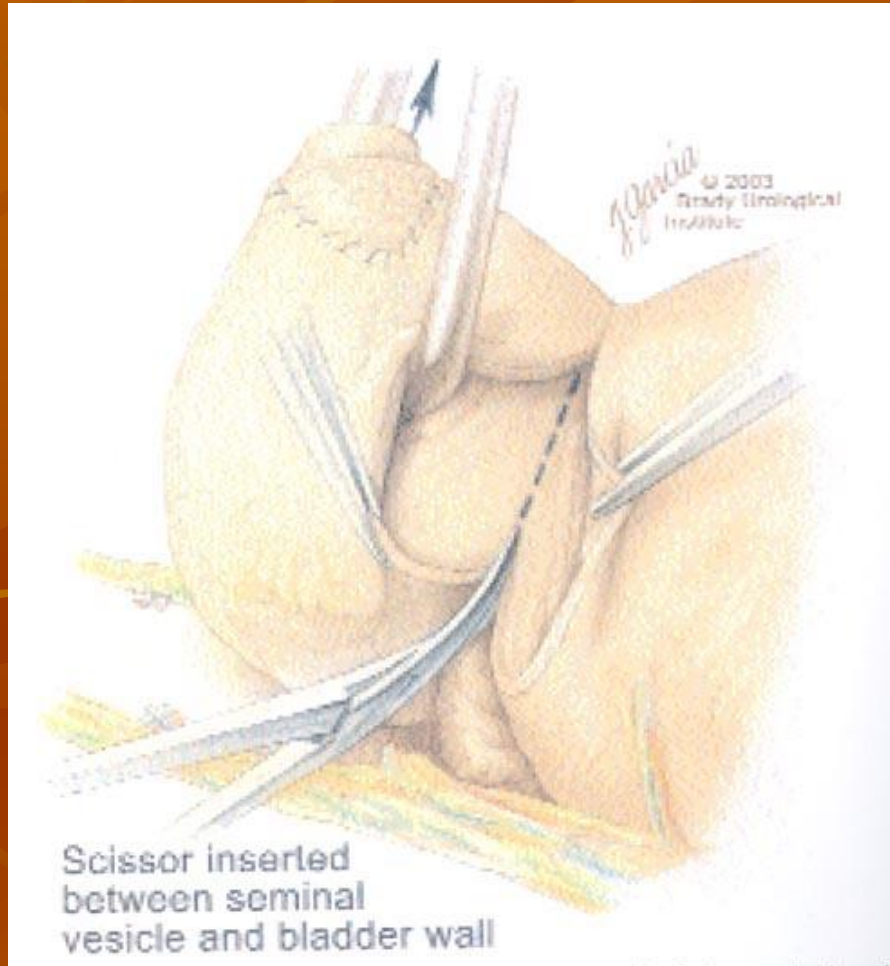
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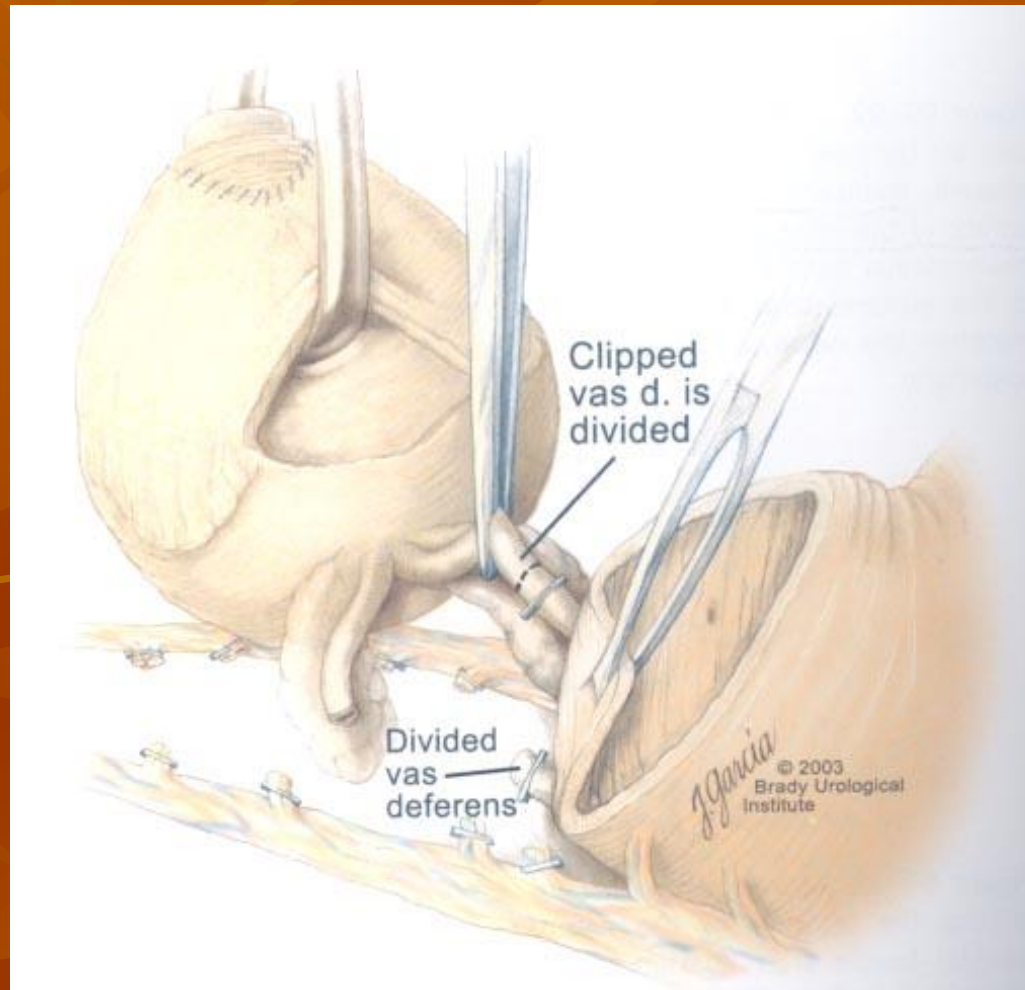




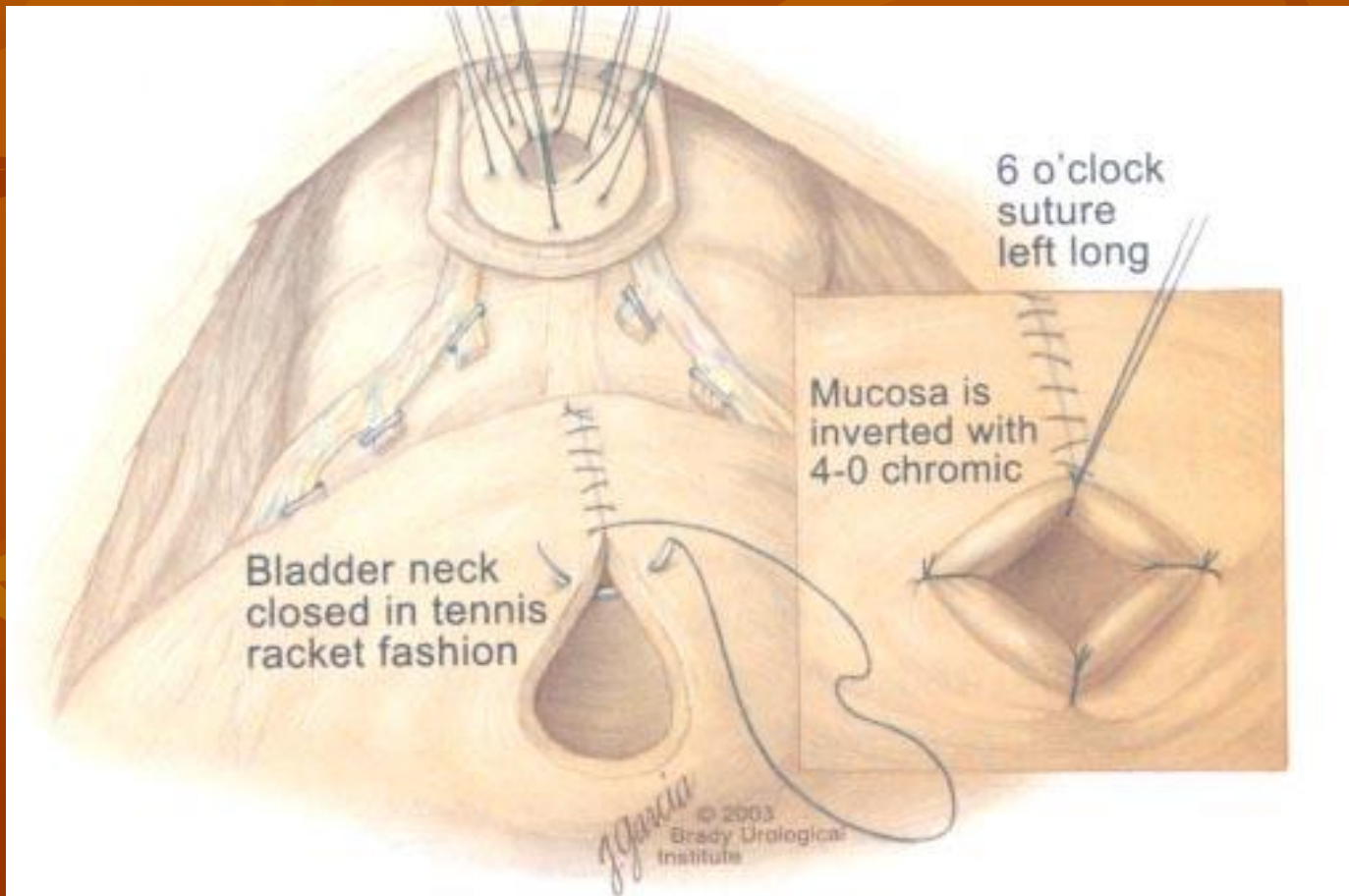




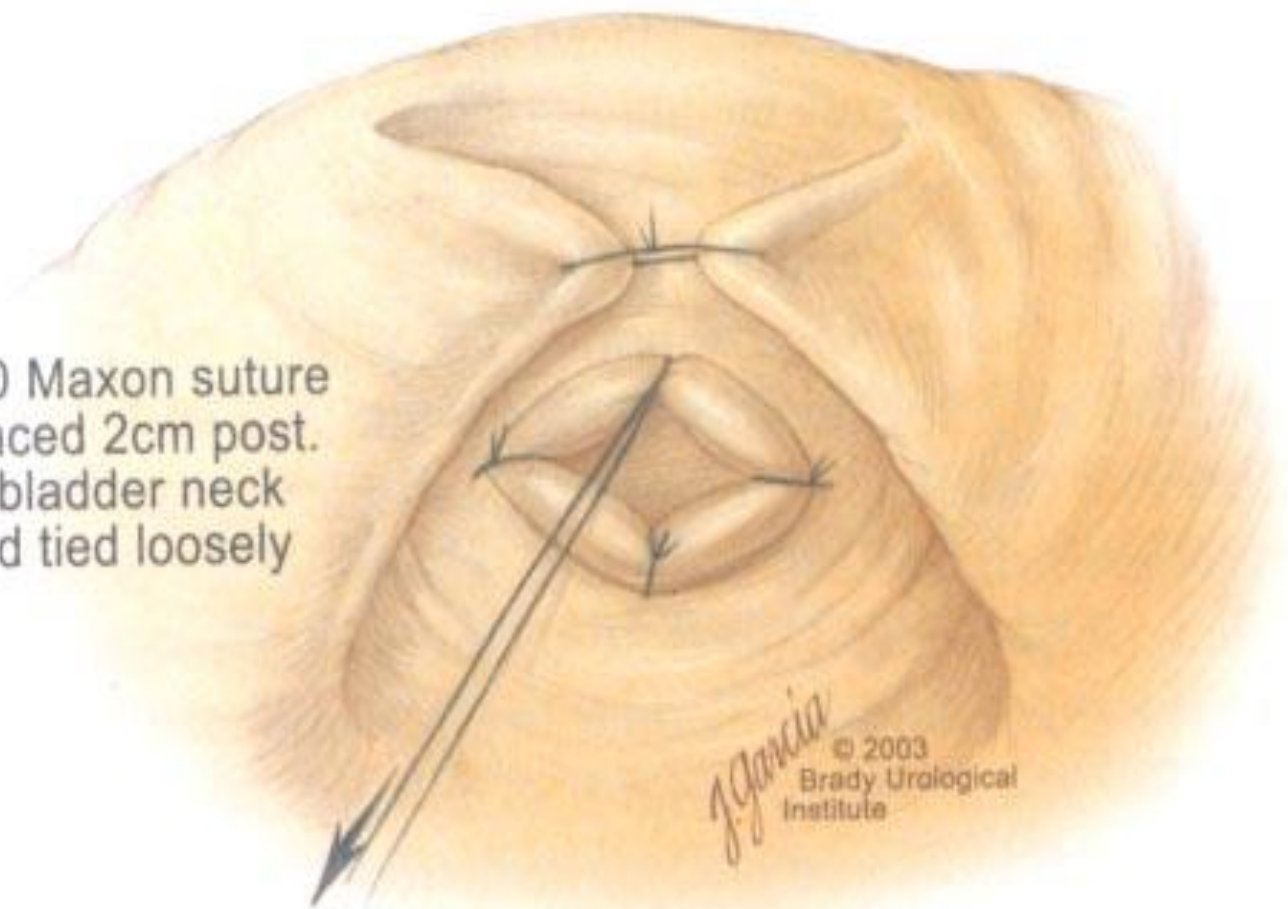
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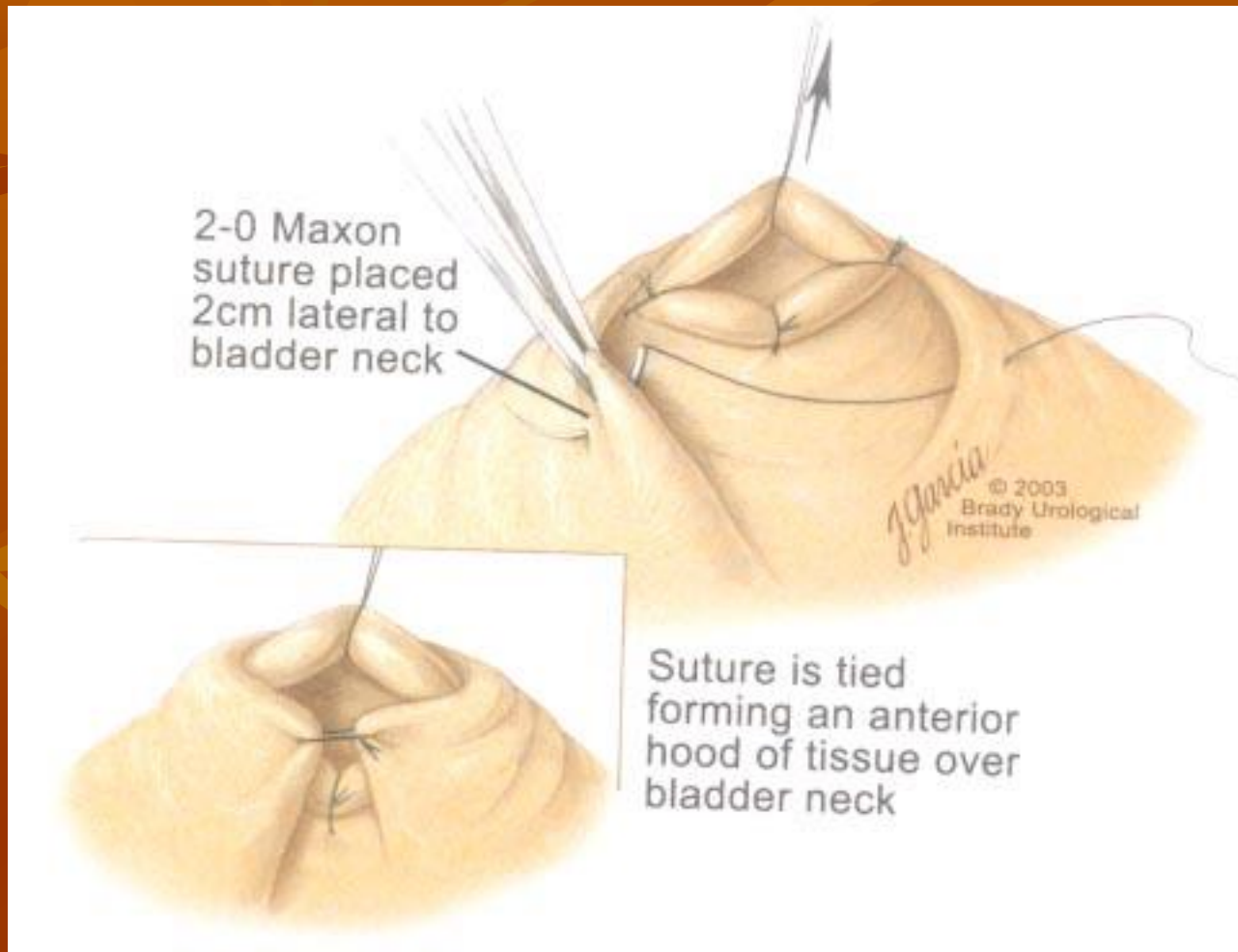
# 31



2-0 Maxon suture placed 2cm post. to bladder neck and tied loosely

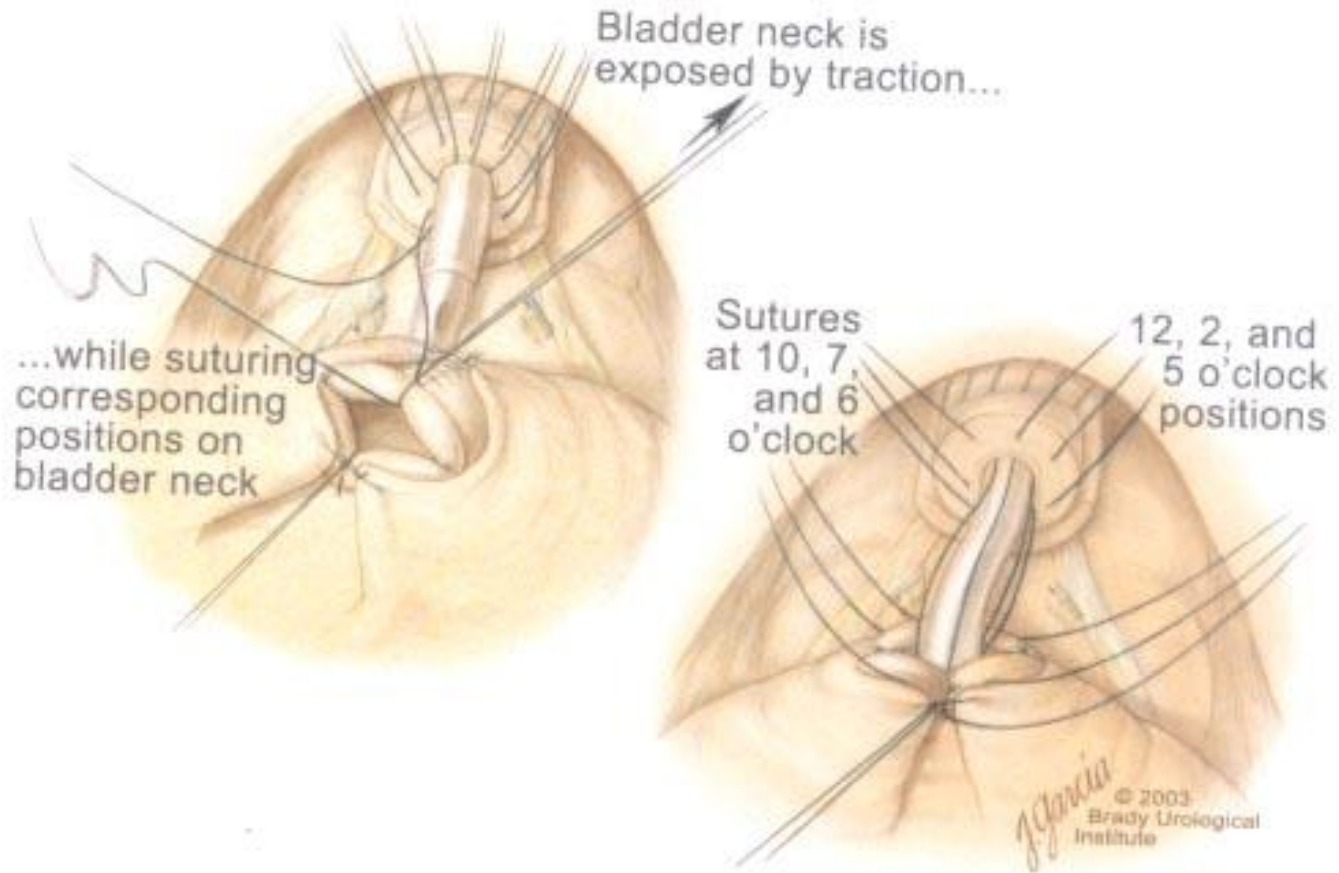


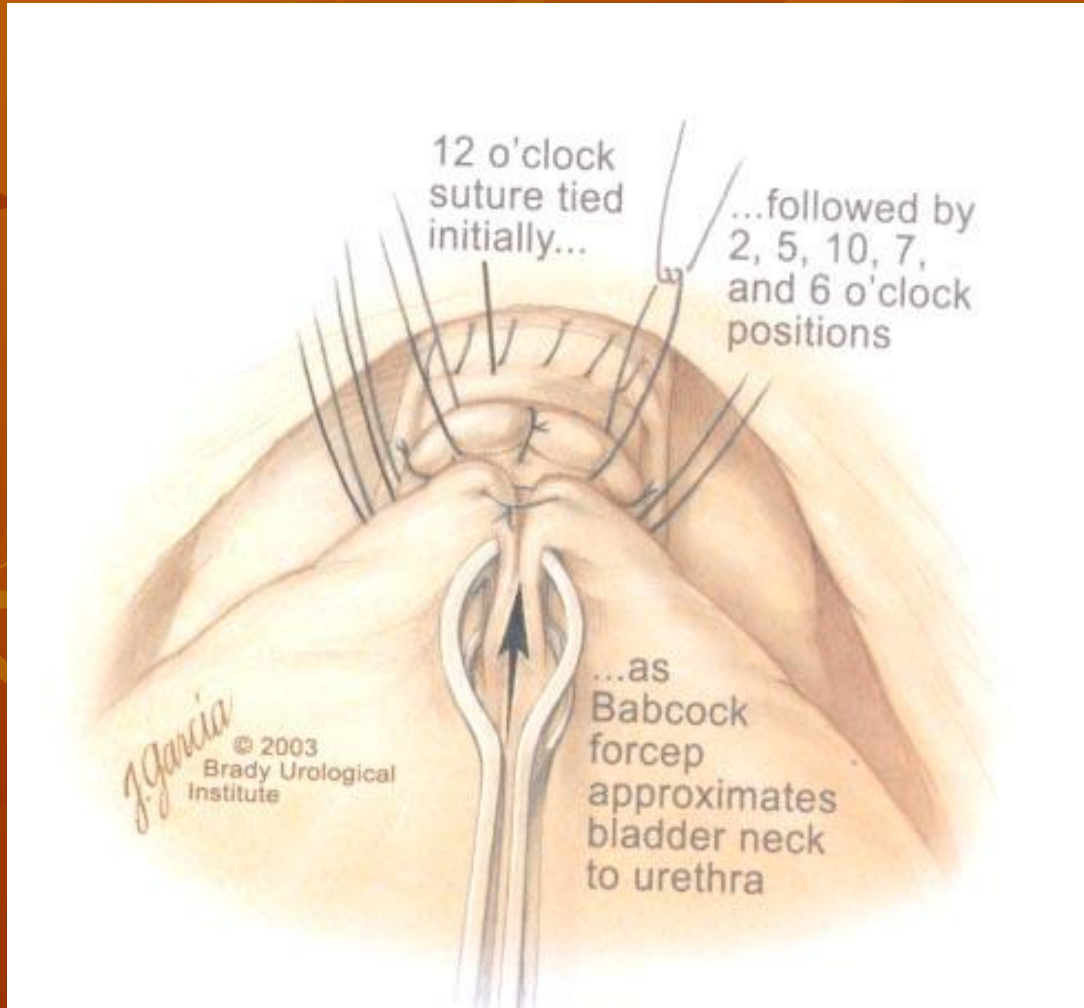
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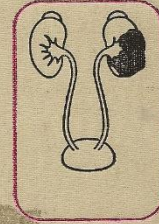
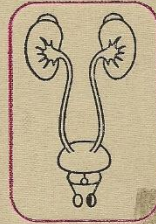
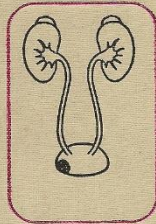
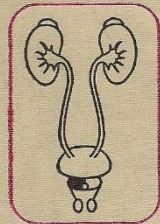


# 34





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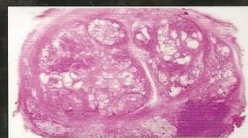


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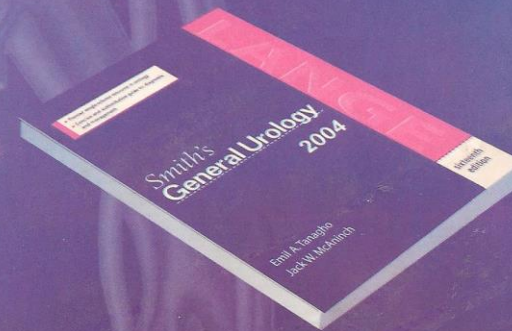
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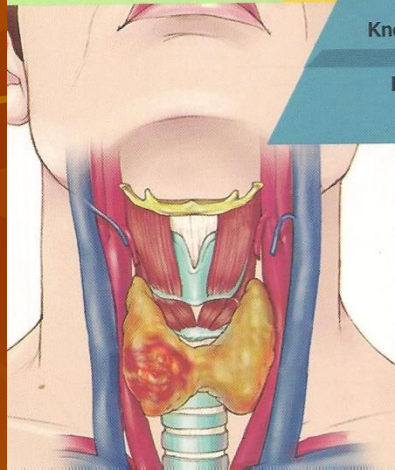
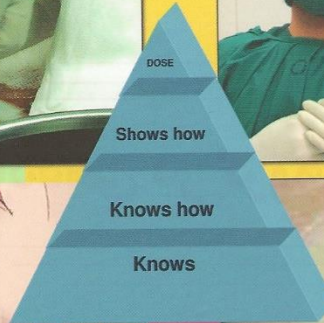
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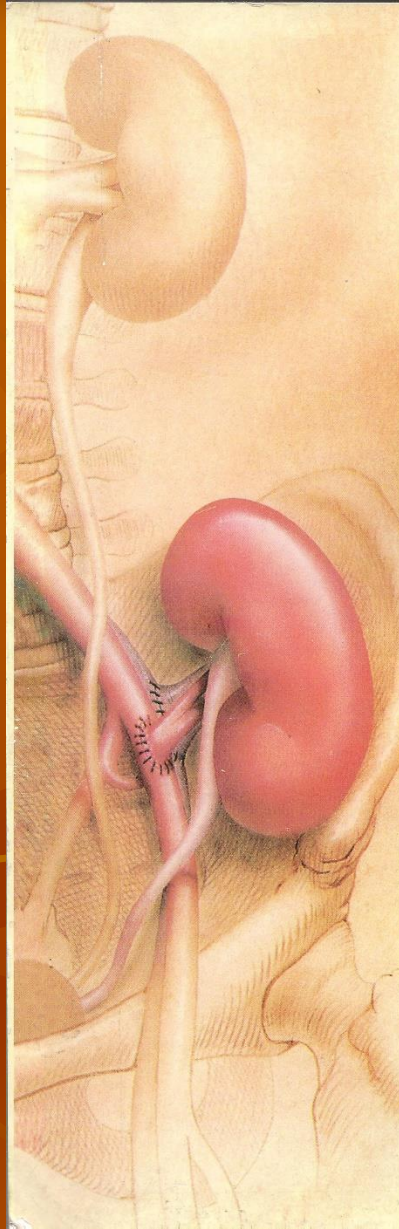
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- راهنمای آموزش و یادگیری مهارت‌های جراحی در حد تسلط



تهیه شده در:  
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مرکز مطالعات و توسعه آموزش علوم پزشکی  
واحد مهارت‌های بالینی

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ترجمه :

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- ۲- دکتر ابوالفضل بهلولی دانشیار ارولوژی
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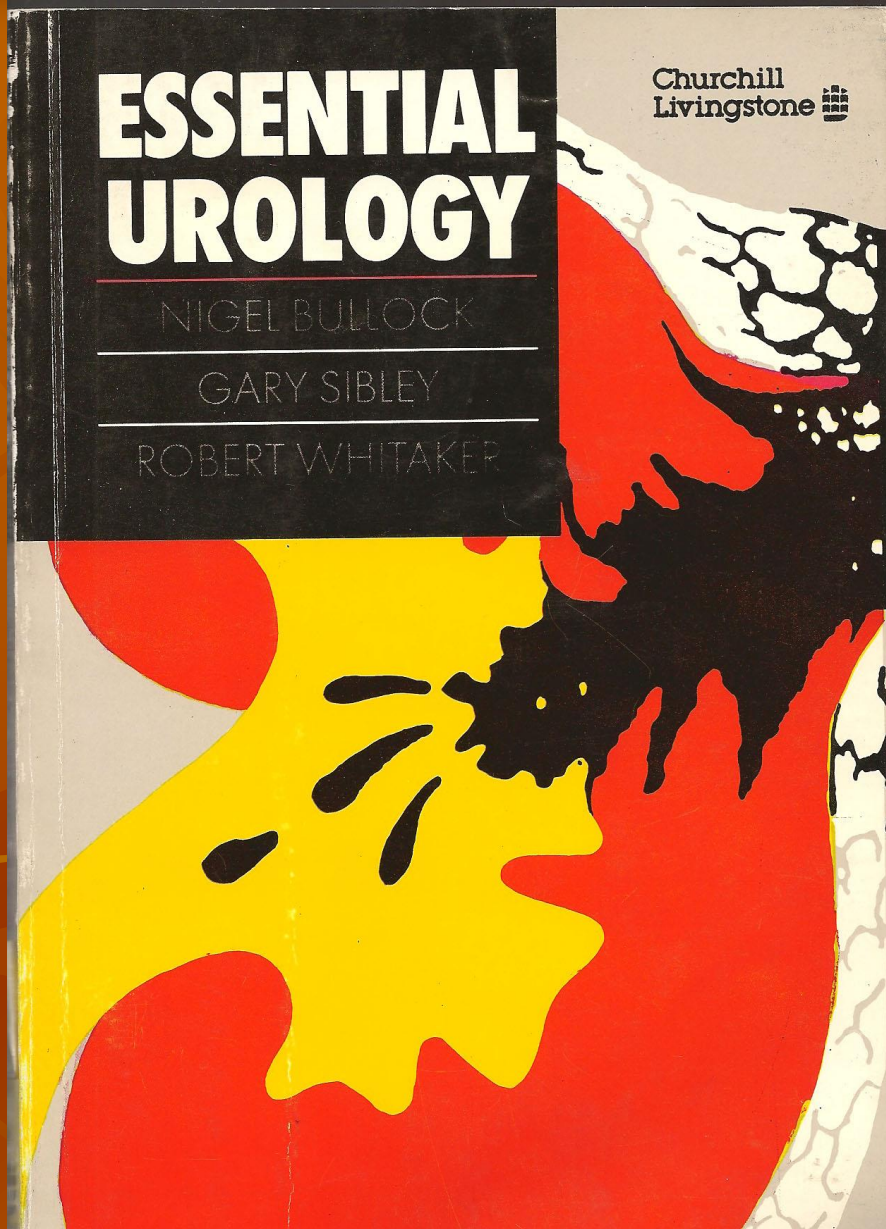
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