UROGYNAECOLOGY

DR HARPREET ARORA

CONSULTANT GYNAECOLOGY

UROGYNAECOLOGY AND LAPAROSCOPIC SURGEON

ROYAL PRINCE ALFRED HOSPITAL

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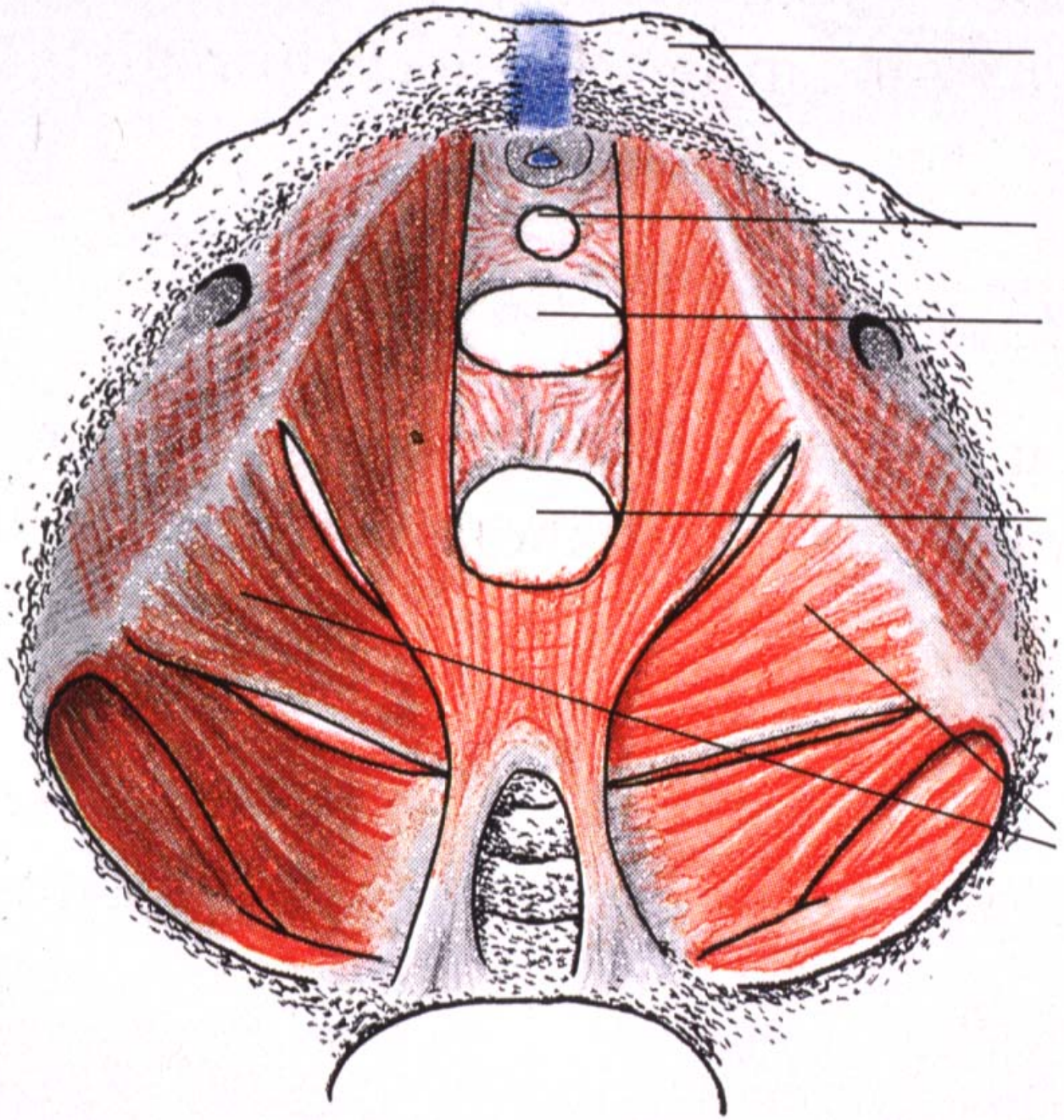
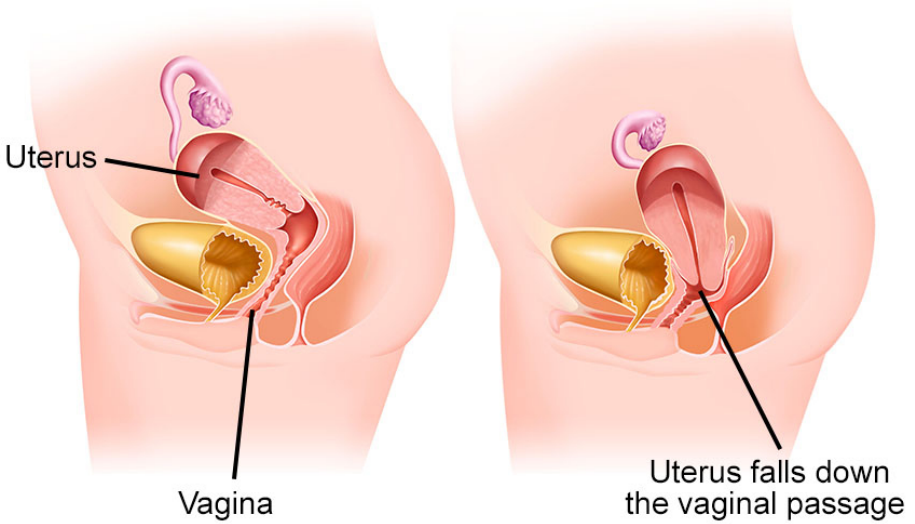


Outline of the female pelvic floor

Pelvic Floor Dysfunction

1. Lower urinary tract dysfunction
    - -urinary incontinence
    - -voiding dysfunction
2. Uterovaginal prolapse
3. Rectal prolapse / incontinence



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Pelvic Floor Dysfunction

Prevalence

- increases with age
- 30% in community
- 10% significant effect on QOL
- 1 million women in Australia

Burden of Incontinence

- prevalence expected to increase by 110% by 2030

- required expenditure projected to increase by 200% by 2030

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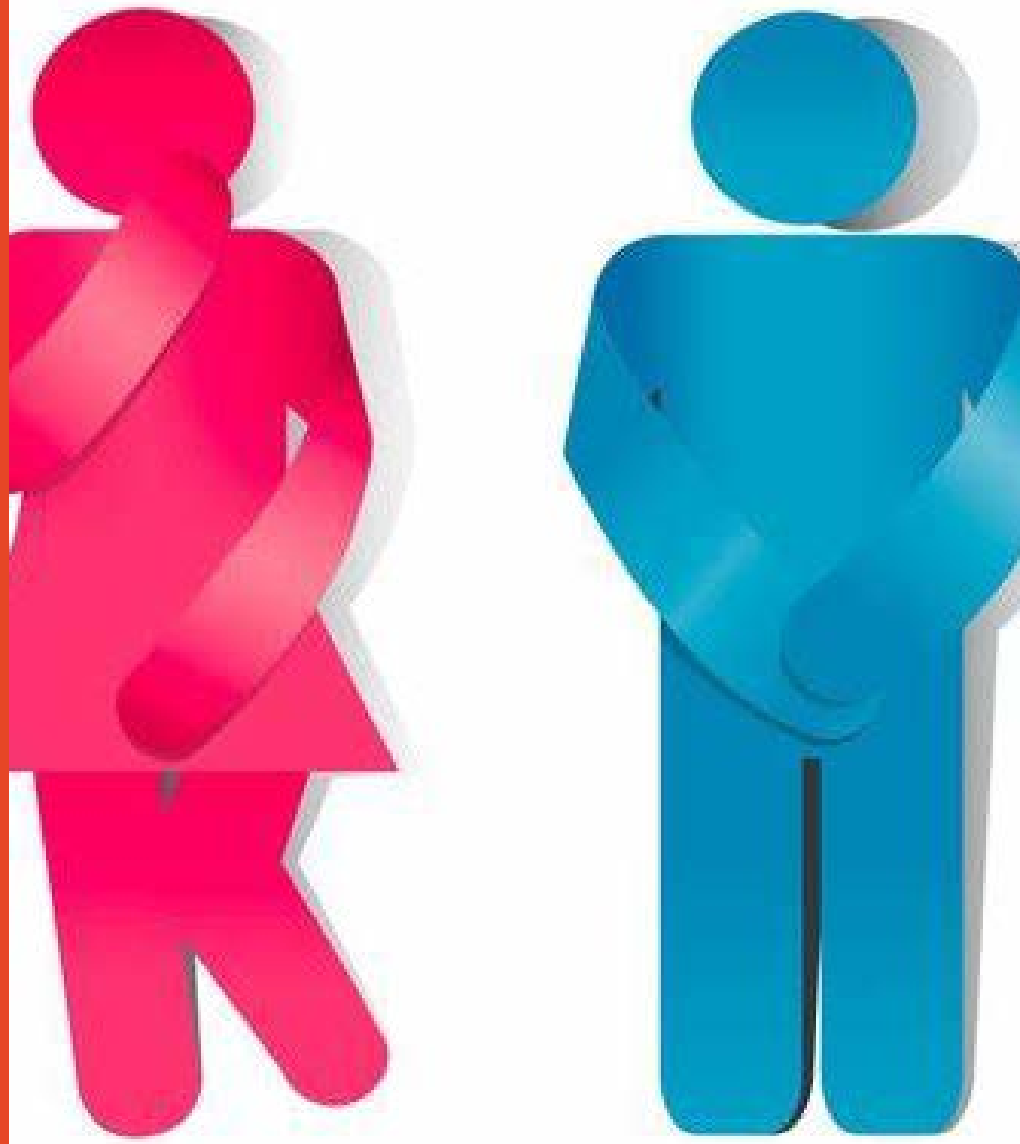

Urinary Incontinence

- Stress urinary Incontinence
- Urinary urgency Incontinence(OAB)
- Overflow incontinence
- Urinary tract fistulae
- Congenital causes : ectopic ureter
- Temporary causes : UTI

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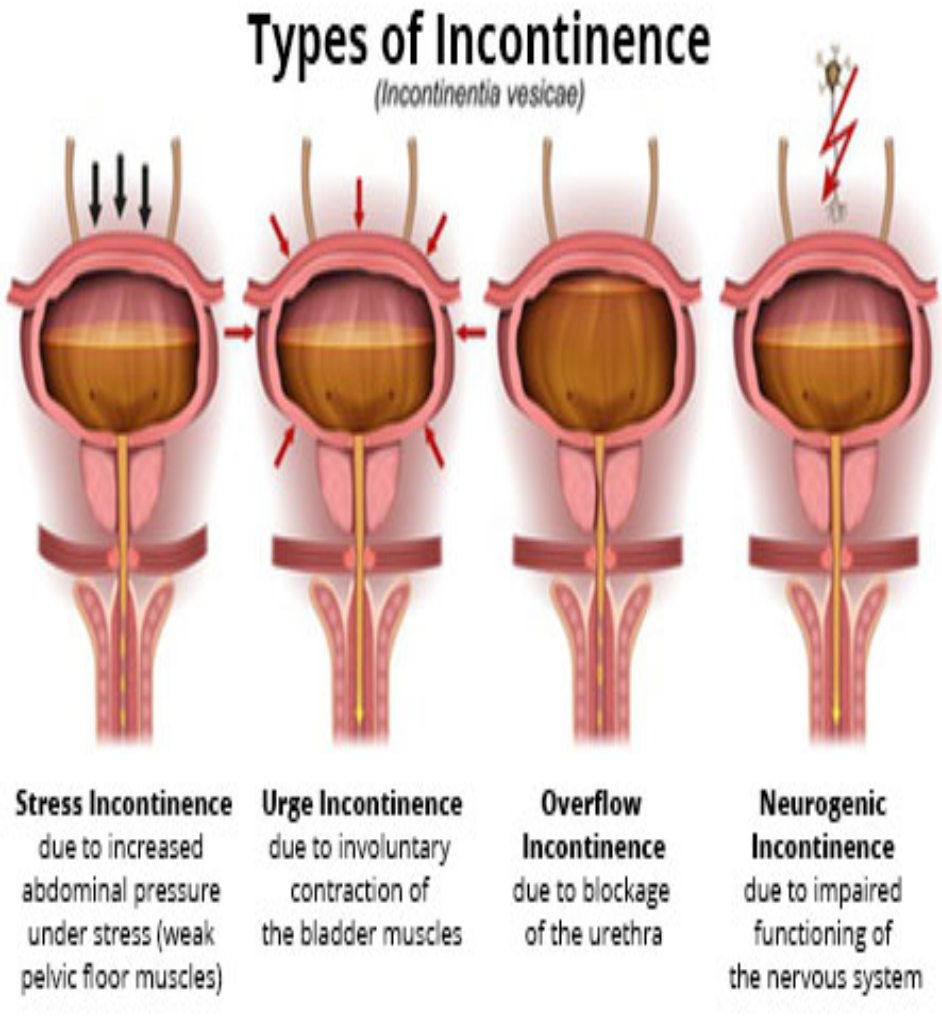

Assessment

History

- Urinary leakage with cough, sneeze
- Frequency, urgency, nocturia
- Voiding difficulties
- Bowel problems
- Medications affecting bladder function
- Previous surgery
- Bladder diary

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Examination

1. General Assessment
2. Abdominal Examination:
   - Palpable bladder
   - Abdominal masses
3. Local Ex
   - Urogenital atrophy
   - Cough reflex
   - Pelvic mass
   - Local excoriation
   - Neurological: reflexes
4. Speculum examination:
   - Type of vaginal prolapse
   - if fistula : urine leak:
   - Methylene blue dye test

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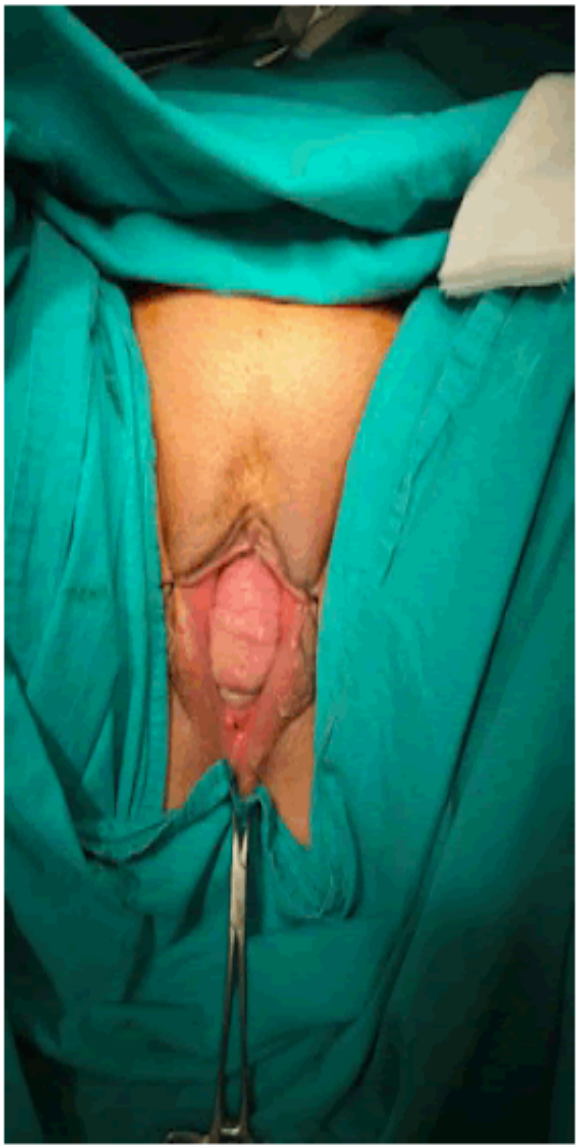
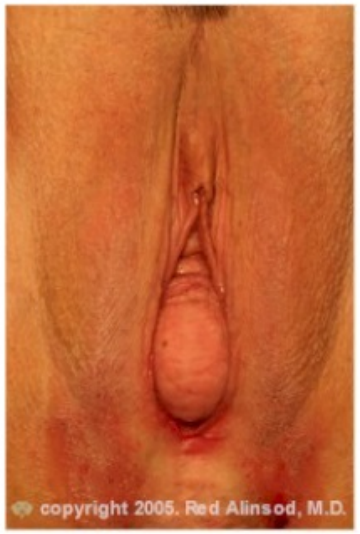


Figure 1: Preoperative POP-Q examination.

Assessment

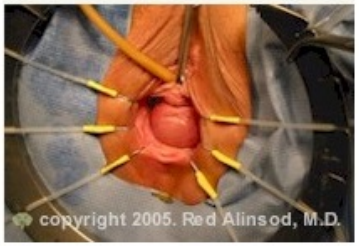
Types of Prolapse

- **Anterior vaginal wall prolapse (cystocele)**
- **Posterior vaginal wall prolapse**
- **(rectocele or enterocele)**
- **Uterine prolapse**
- **Vault prolapse in case of previous hysterectomy**



1-Severe Cystocele

2-Severe Cystocele



3-Cystocele or Fallen Bladder

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Assessment

- Mid stream urine
- Review of bladder diary
- Post void residual
- Urodynamics : indications for referral

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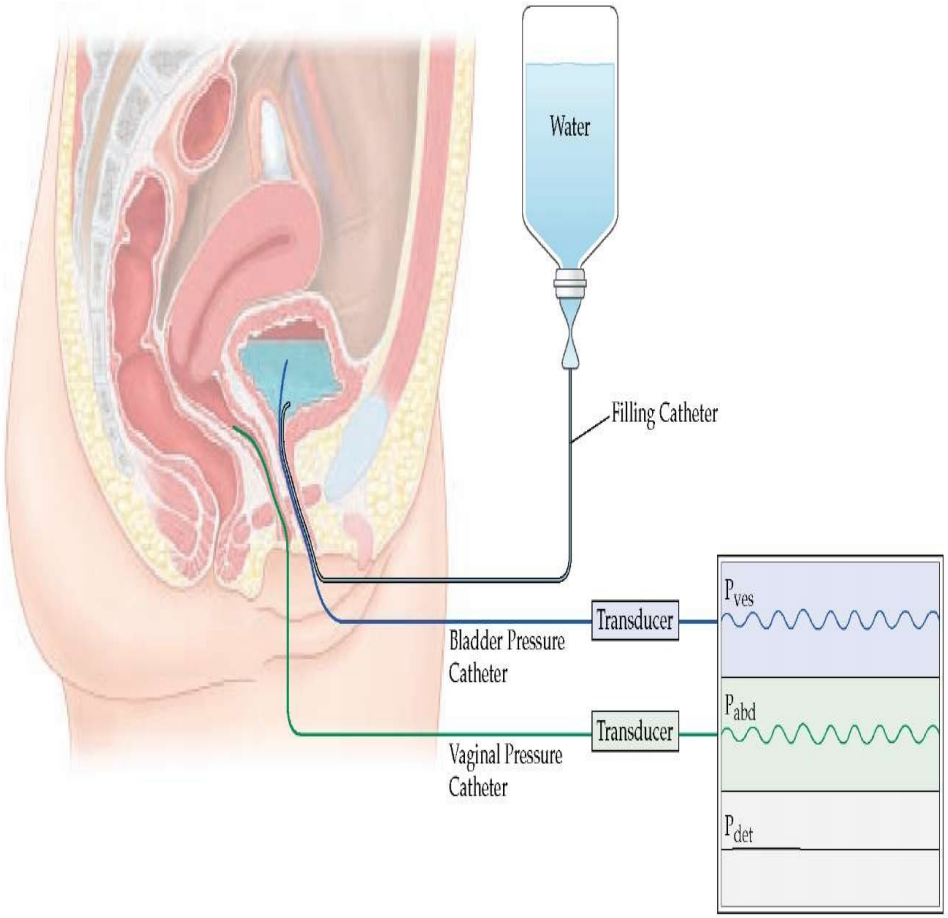
INVESTIGATIONS
- EXAMPLE OF FREQUENCY VOLUME CHART

	DAY 1		
	INPUT	OUTPUT	WET
06.00		75	
07.00			
08.00	150	50	
09.00		75	
10.00			
11.00	200	150	W
12.00			
13.00	150	100	W
14.00		75	
15.00			
16.00	150	75	
17.00			
18.00	200	150	W

Urodynamics

- **Women with complex symptomatology**
- **Failure to respond to first-line management**
- **Prior to surgical intervention**



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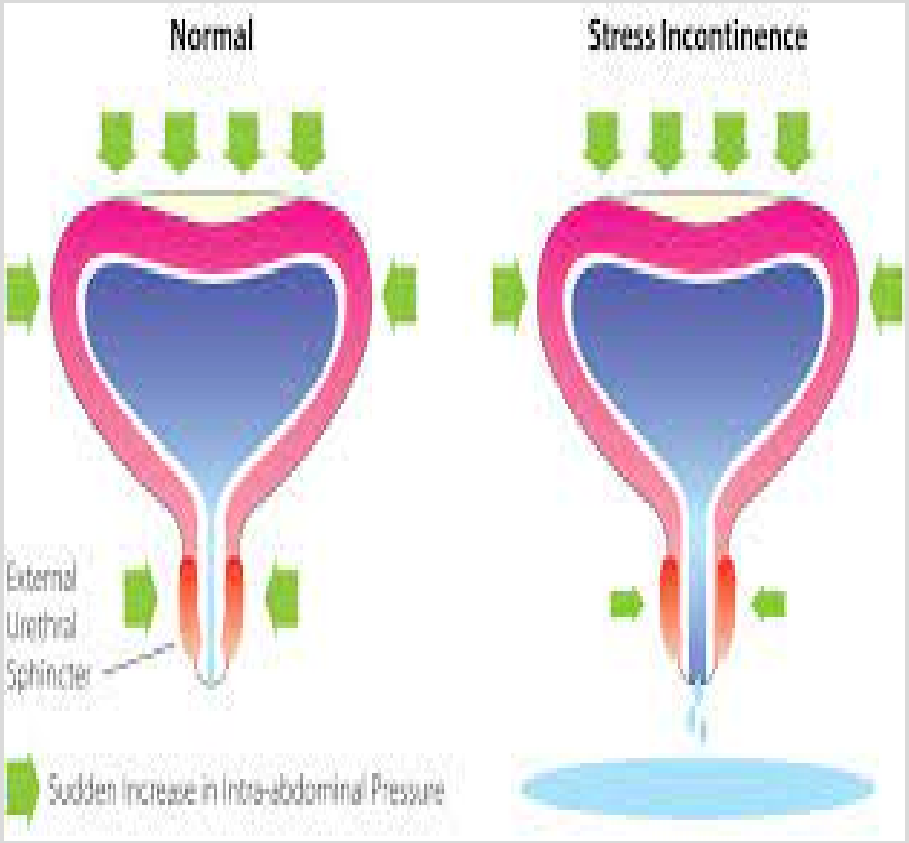
Urinary stress incontinence

- Commonest cause of female incontinence
- Affects 5-15% of women
- Occur after childbirth
- May respond to conservative management
- - Pelvic Floor Exercises(Kegels)
- - Incontinence pessary
- Mod-severe USI only cured by surgery



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Urinary stress incontinence

CONSERVATIVE MANAGEMENT

- Pelvic floor physiotherapy: PIL
- Tampon with exercise
- Local estrogens
- Cough prevention
- Treat constipation
- Weight management
- Pessaries

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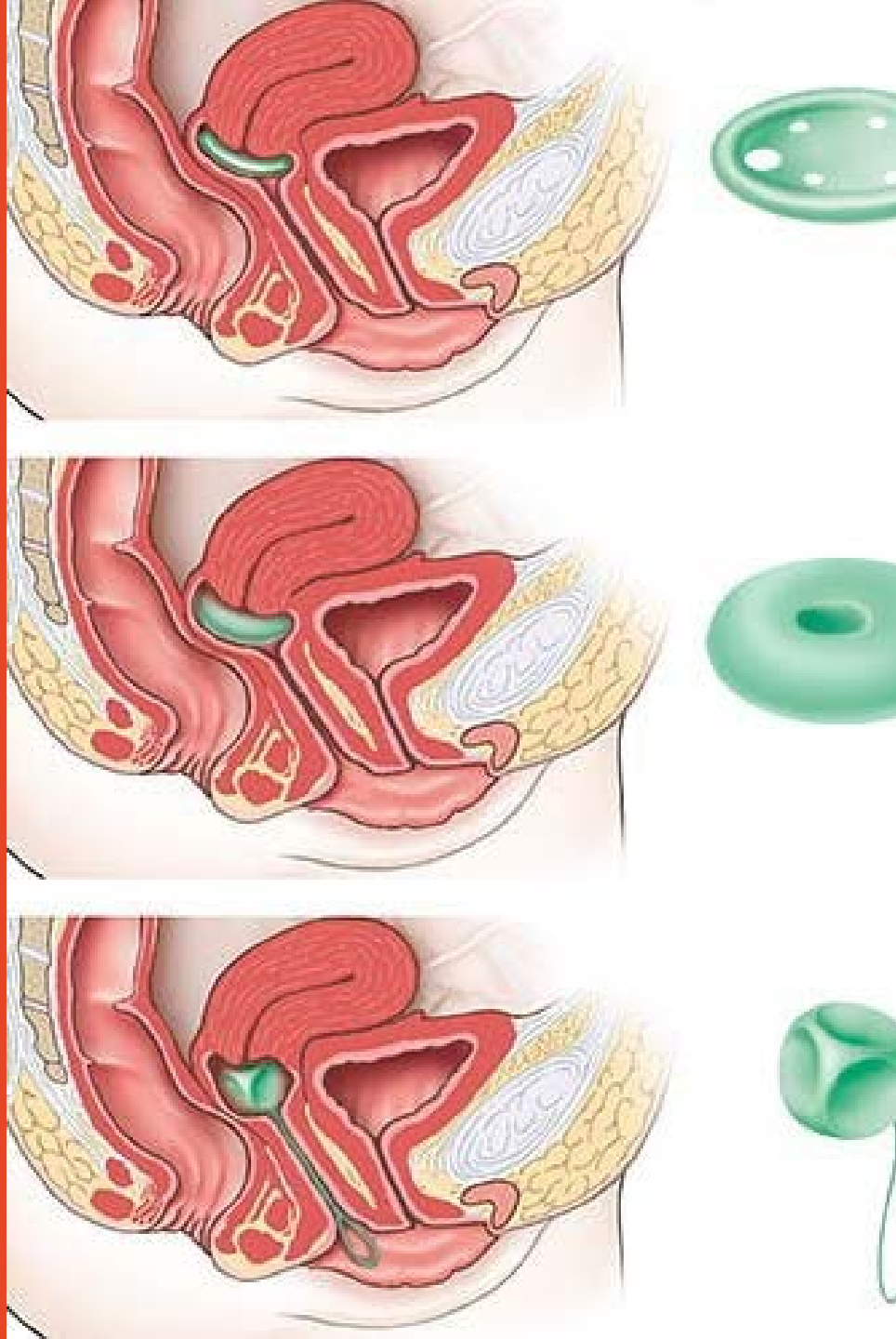
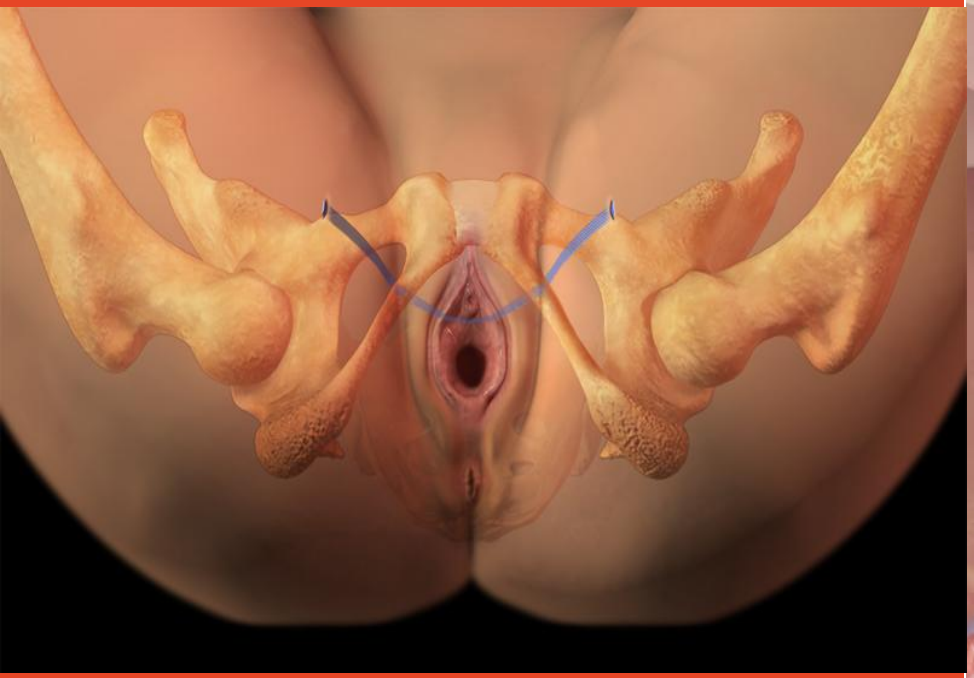


Urinary stress incontinence: Surgery
Mid-Urethral Slings



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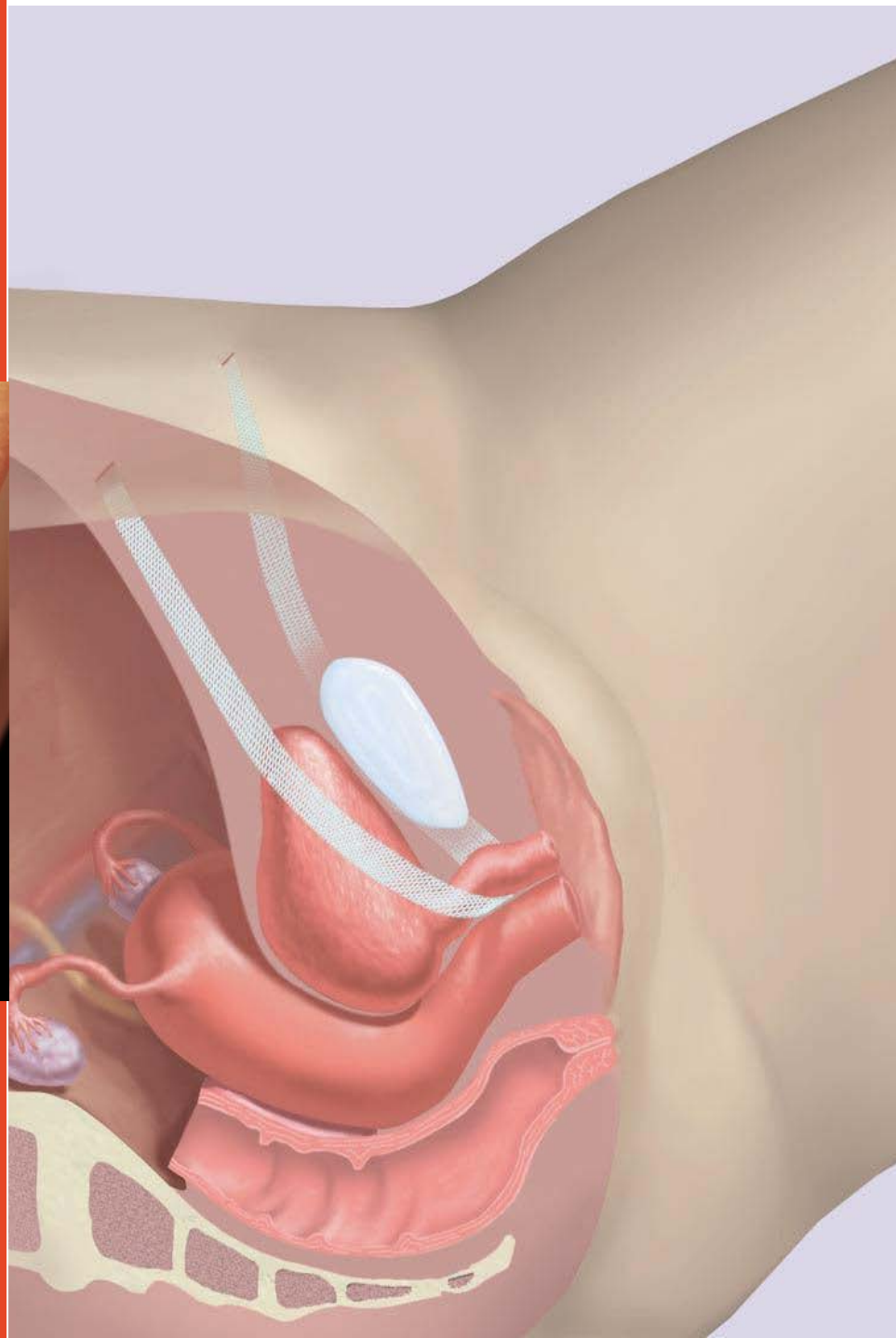

Over active bladder

- Spectrum of frequency, urgency, nocturia, urge incontinence
- Can be idiopathic or neurogenic
- Treatment
  - Bladder training: PIL
  - Anti –cholinergics
  - Vaginal estrogens
  - B3 Agonist: Betmiga
  - Botulinum Toxin: intravesical injection of 100-200 units
- Minimally invasive treatments
  - PTNS/ TTNS

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When to refer ?

- Mixed incontinence
- Complex symptomatology as prolapse with incontinence
- Refractory urinary urgency
- Failed trial of PFME/ pessary for stress incontinence
- Hematuria (microscopic or macroscopic)
- Voiding dysfunction with incontinence

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Prolapse

Pain or pressure in pelvis, lower back or both

Urinary problems like leaking or constant need to void

Difficulty emptying bladder or bowel and need to digitate

Vaginal bleeding or spotting from vaginal ulcers

Constipation

Painful intercourse

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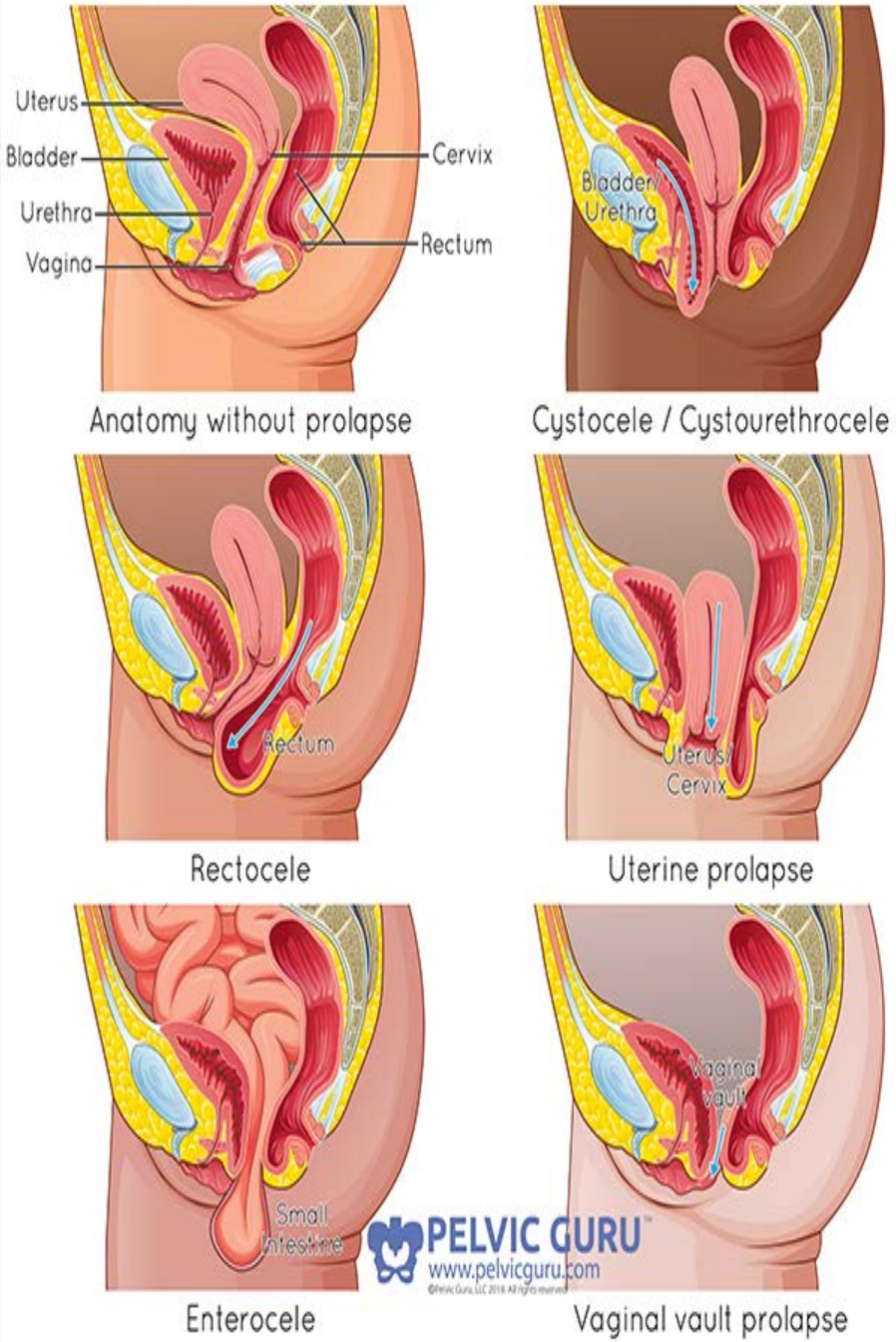

Prolapse

Conservative management:

- **Pelvic floor exercises**
- **Local estrogens**
- **Vaginal pessaries**
- **Avoid constipation and heavy lifting**
- **Bowel hygiene**

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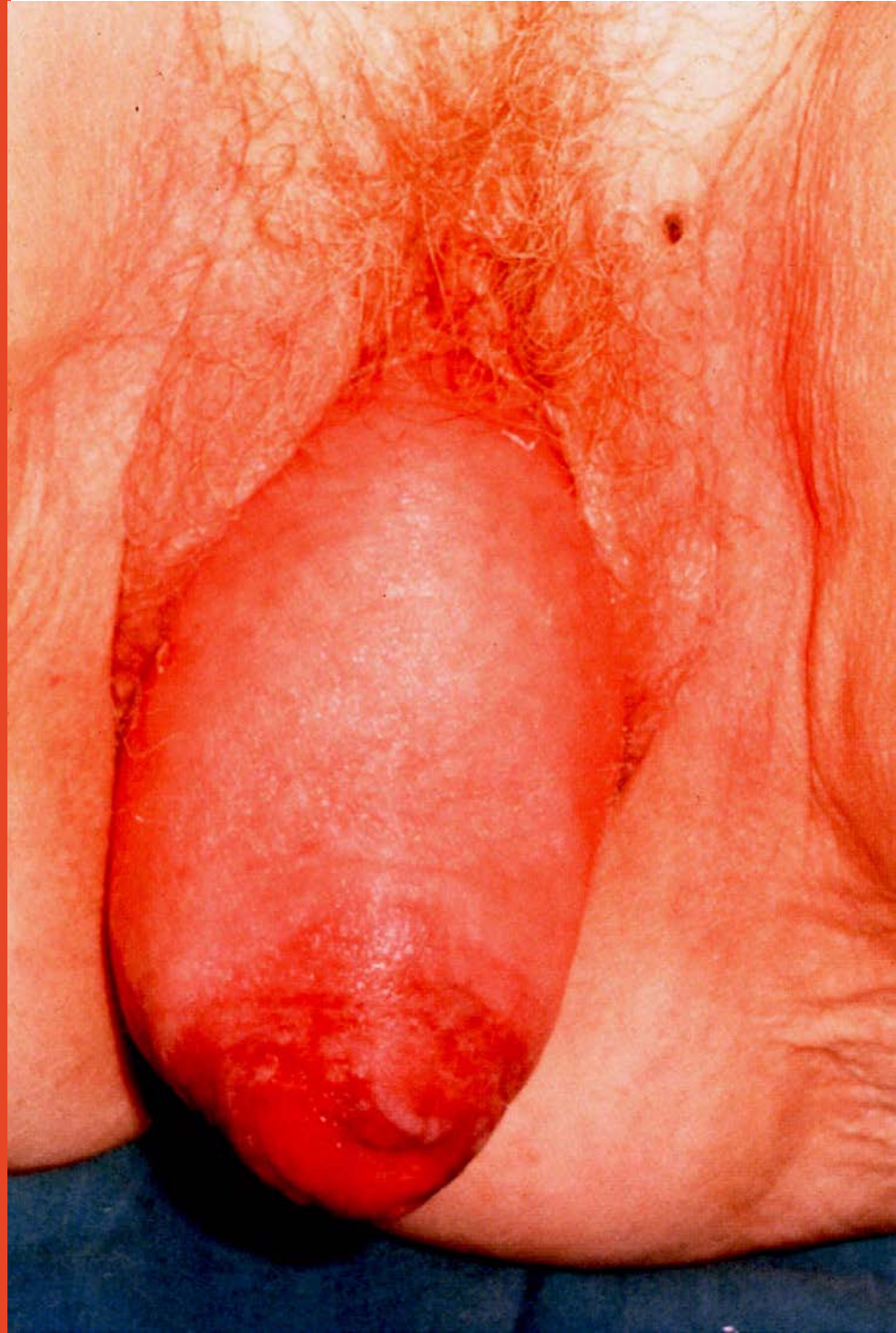

Prolapse

When to refer ?

- **Complex symptomatology with prolapse and incontinence**
- **Incontinence with voiding dysfunction**
- **Vaginal bleeding or PMB**
- **Failed trial of vaginal Pessary**
- **Stage 3 or 4 prolapse or uterine procidentia**

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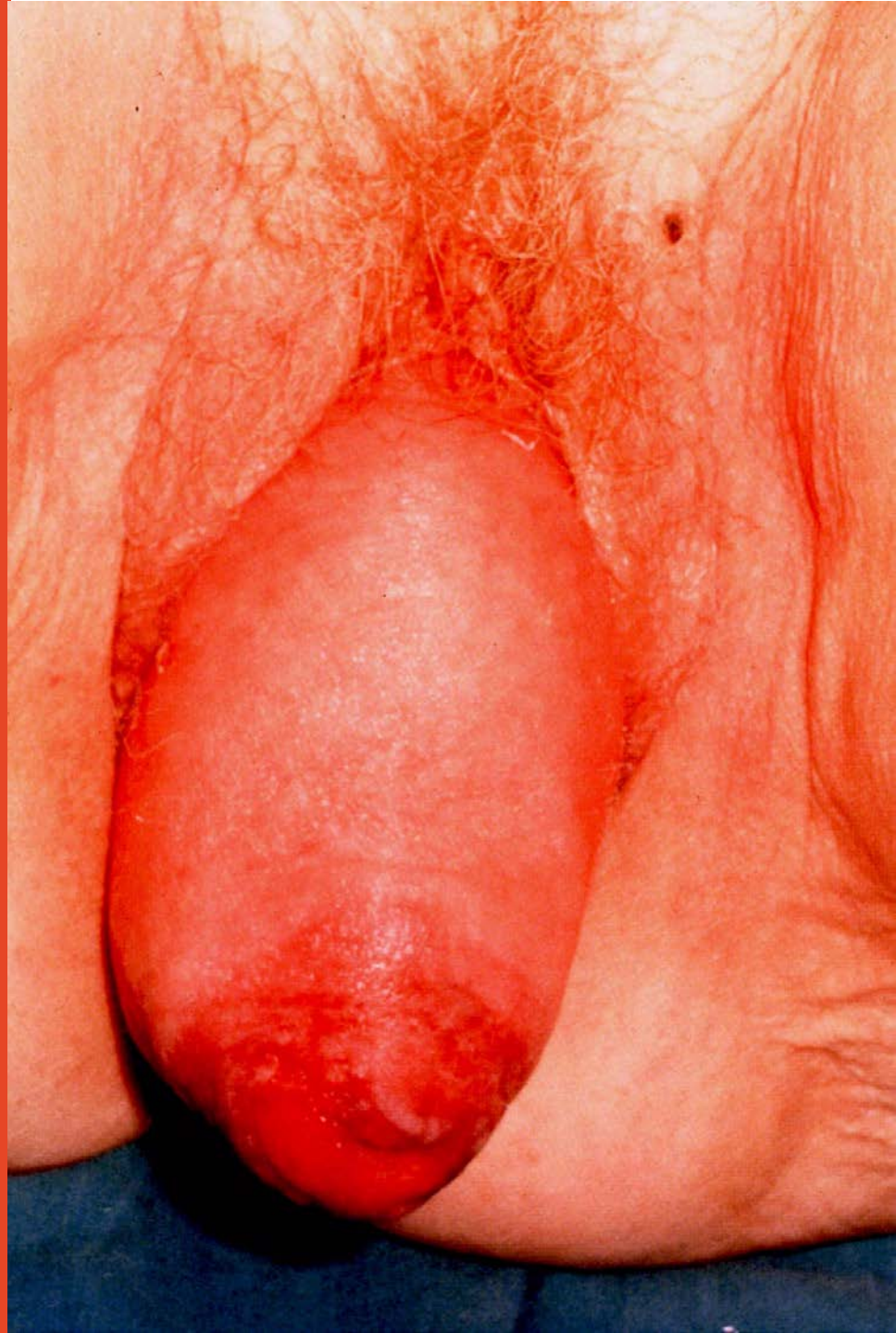

Prolapse

SURGICAL MANAGEMENT: AIM

-Restoration of the pelvic anatomy to normal

- Restore and maintain bladder and bowel function

- Maintain Coital function

- Correct coexisting pelvic pathology

- Obtain durable results

1. **Uterine prolapse: vaginal hysterectomy or vaginal hysteropexy**
2. **2. Uterine procidentia: need vault suspension procedure**
3. **Cystocele: Anterior vaginal native tissue repair**
4. **Rectocele: Posterior vaginal wall native tissue repair**
5. **Vault prolapse : Vault suspension procedure either vaginally or laparoscopically**

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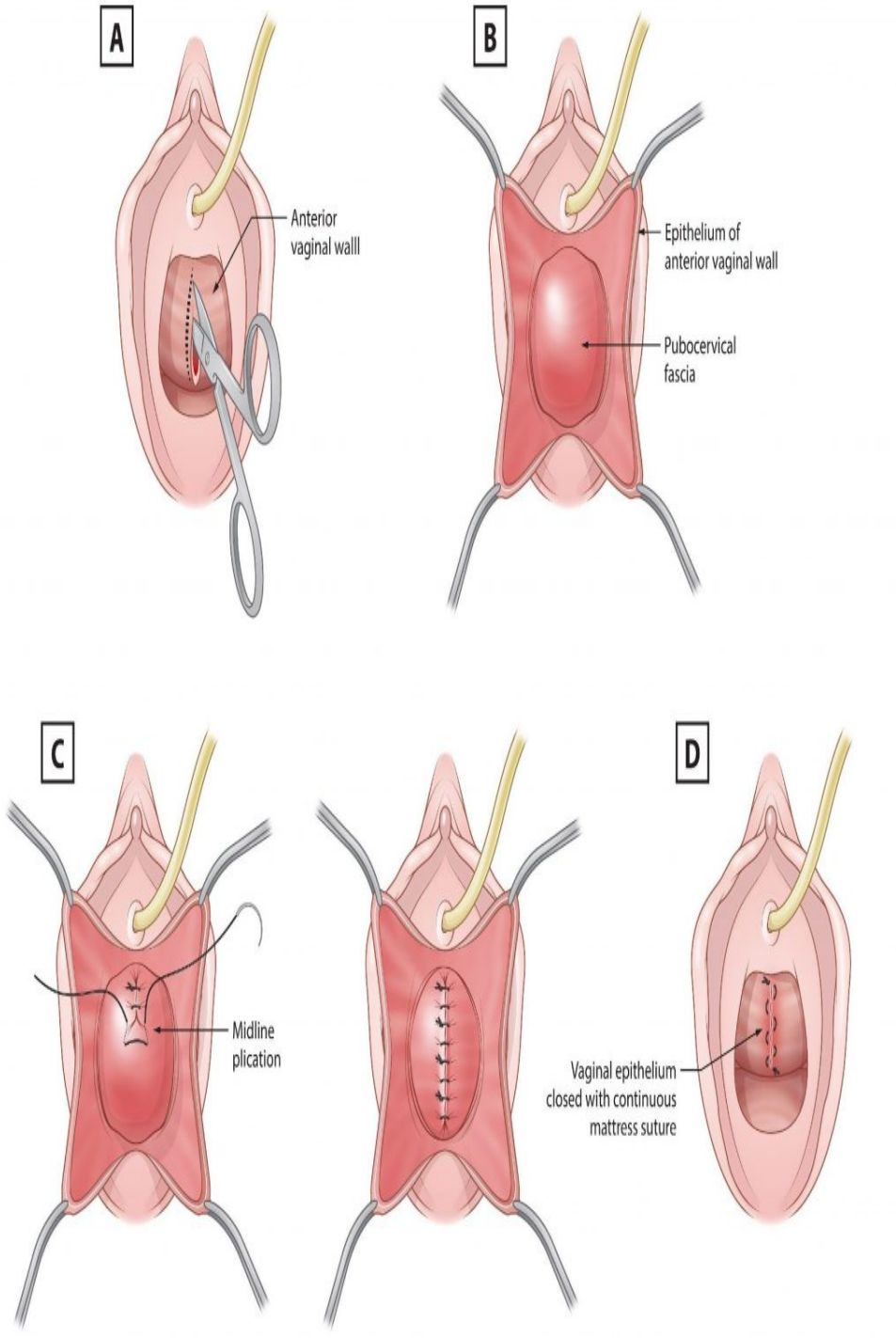

Vault suspension procedure

Case 1.

51 years old P3L3

- **Severe uterine procidentia for many years**
- **Frequency 9 and urgency**
- **Recurrent UTI**
- **Denies stress incontinence**
- **Vaginal bleeding with vaginal ulcers**
- **Rectal prolapse (referred to colorectal unit)**
- **Sexually active**
- **Med Hx: significant alcoholic liver disease with coagulopathy(liver specialist) with multiple abdominal varices**

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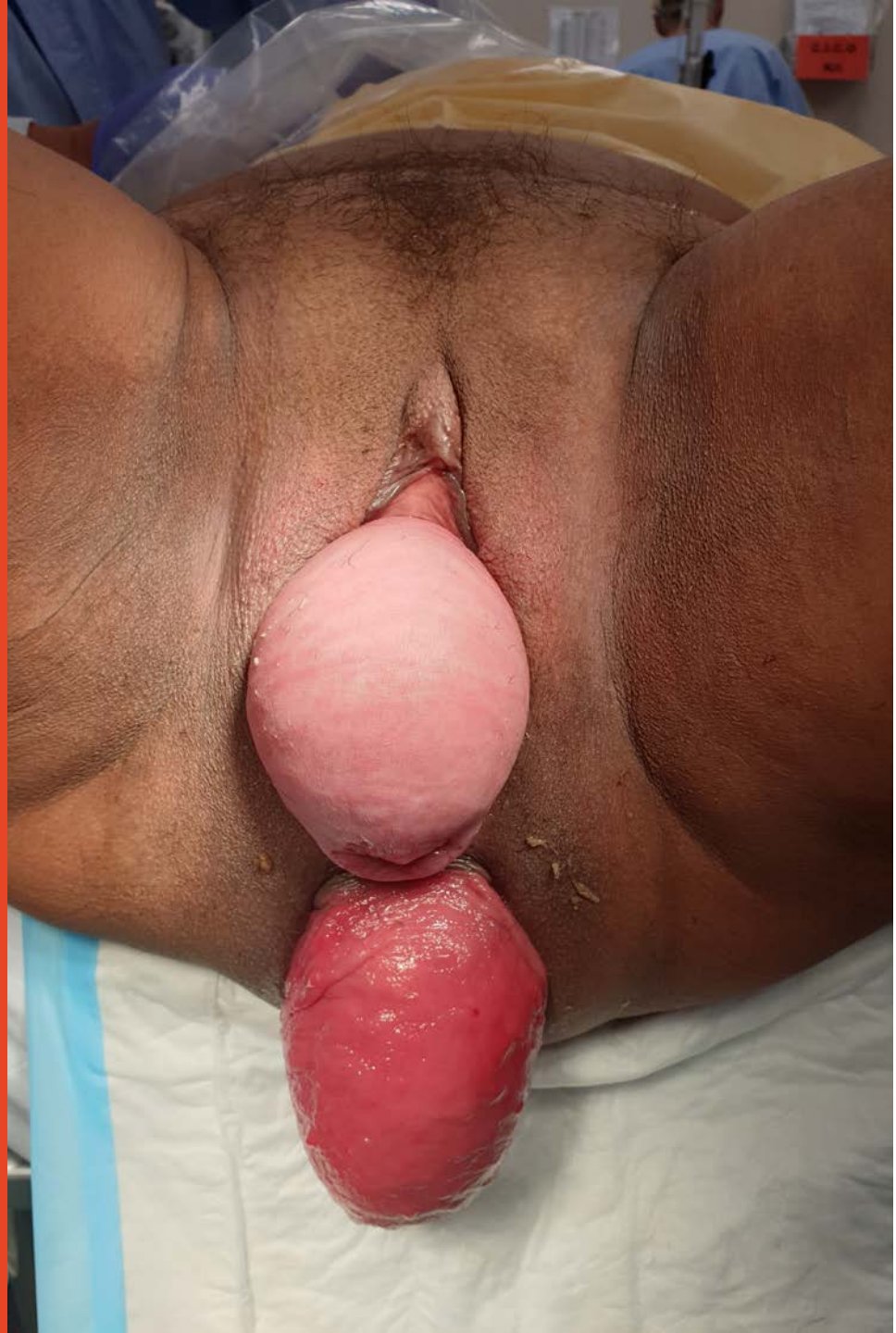

Vault suspension procedure

Pre operative workup

- Urogynaecological workup
- Pelvic ultrasound for endometrial thickness and assessment of pelvic varices
- Urodynamics for occult stress incontinence
- Estrogen pack nightly for 3 weeks prior to surgery
- Ongoing liver specialist review to optimise coagulation status
- Ultrasound kidneys for retrograde hydronephrosis
- Management of ongoing urgency and urge incontinence
- Treatment of any UTI
- Surgical options discussed :VH +AP native tissue repair with SSF

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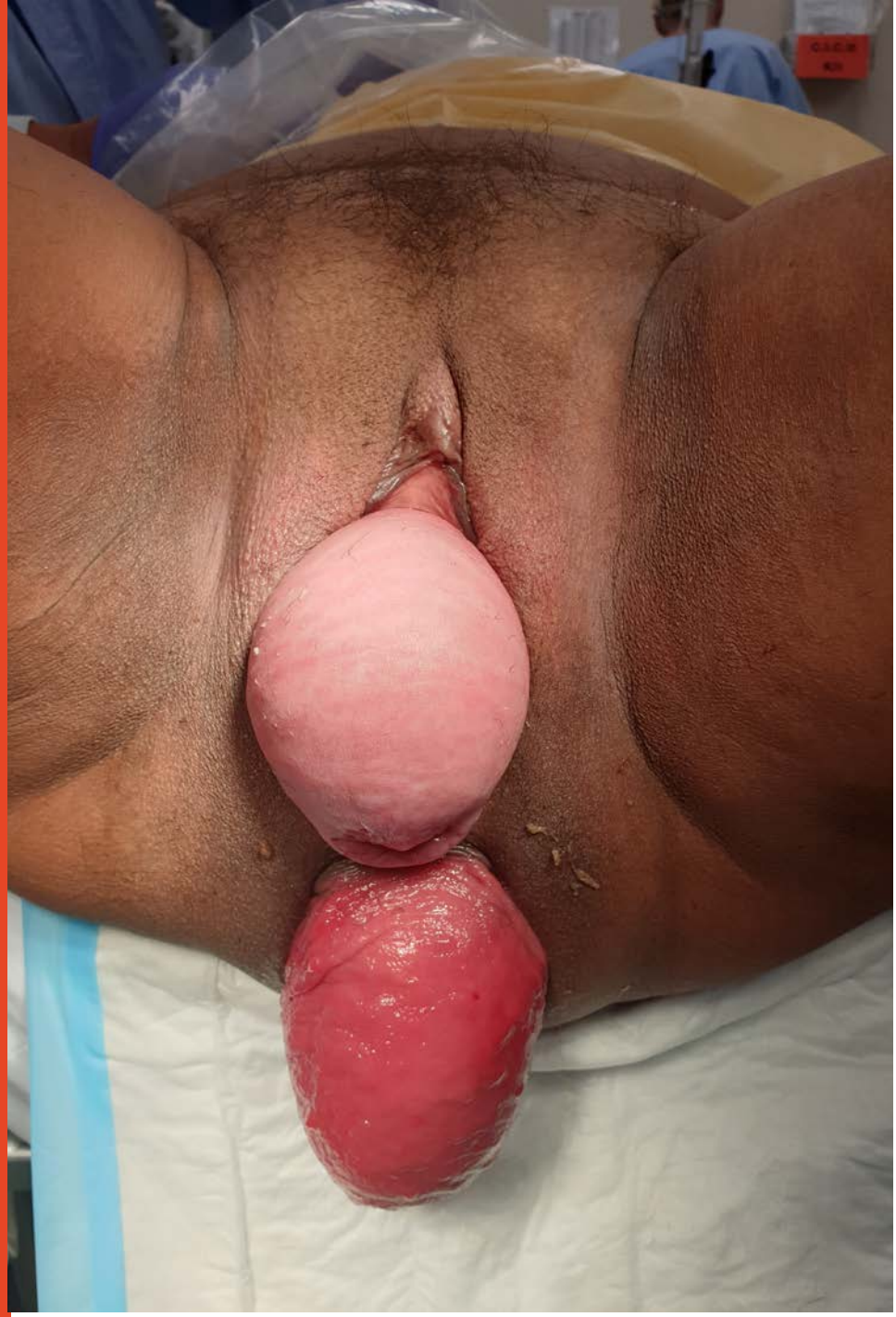
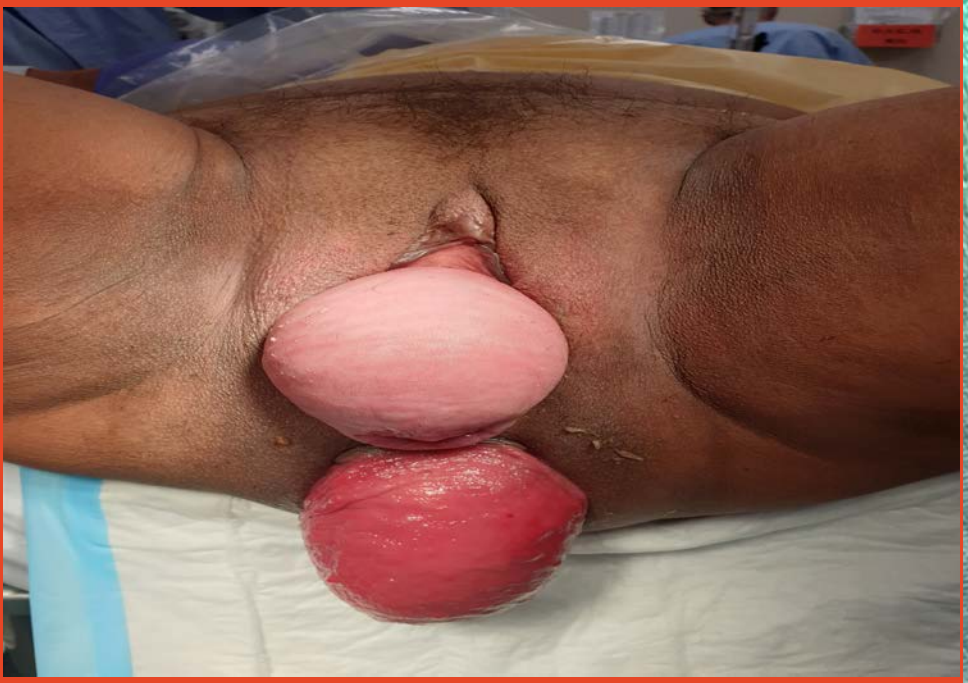


Vault suspension procedure

Pre operative



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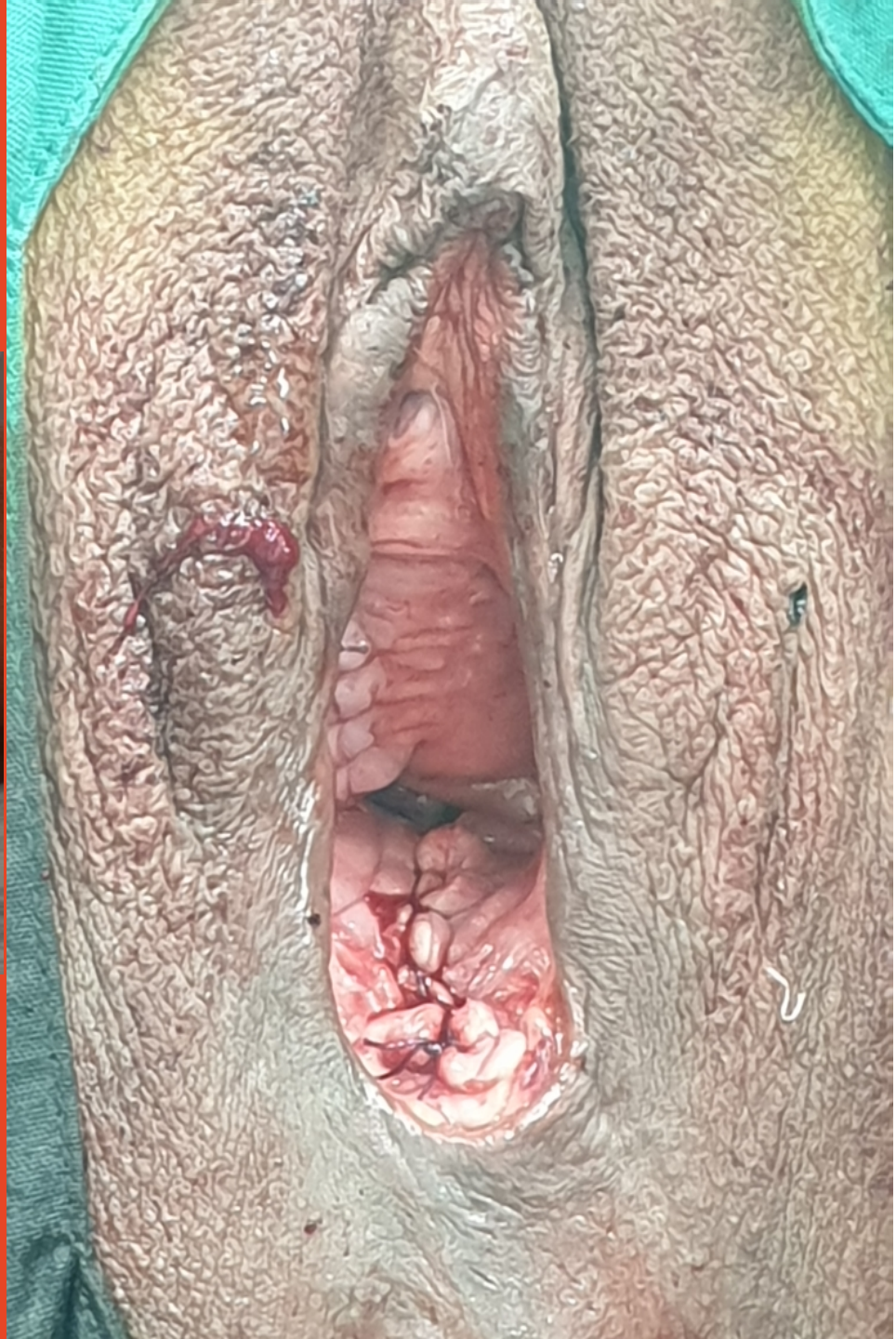
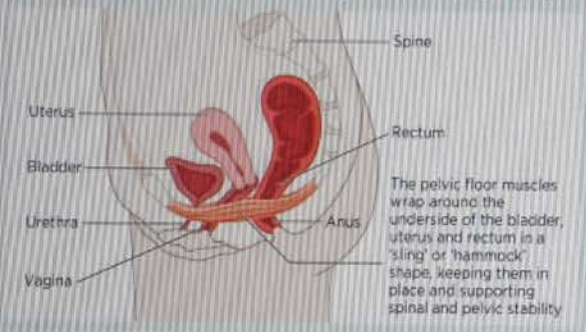


Summary-

Pelvic Floor Exercises are the mainstay of conservative treatment for stress incontinence, but they must be performed consistently, with interest and determination, for a period of several months for benefit. Accurate diagnosis of stress incontinence is essential, using urodynamic techniques, and failing success of conservative treatment, repair surgery may be necessary.

Fig 1. **General anatomy of the female pelvic floor (side view)**



For Appointments and enquiries-

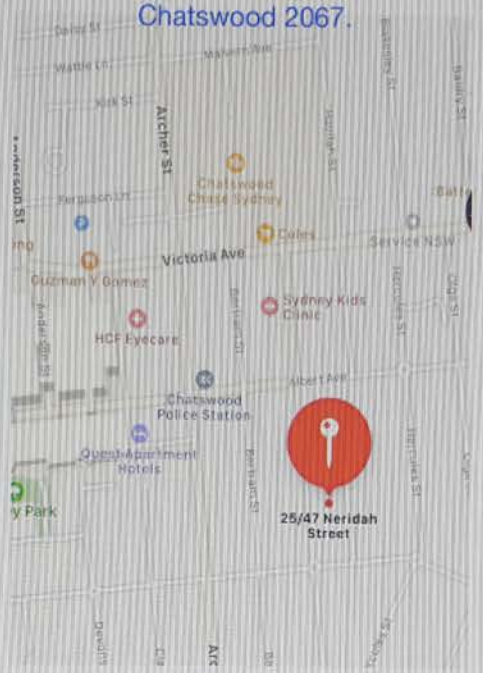
Phone: (02) 9716-4044

Fax: (02) 8088-8047

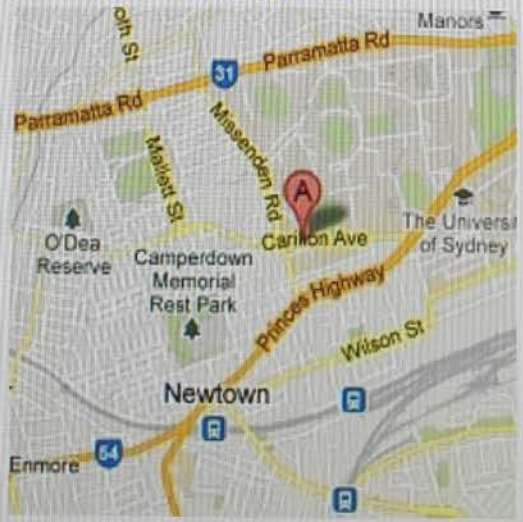
Email:

receptiondrharpreetarora@gmail.com

Suite 25/ 47 Neridah St.
Chatswood 2067.



RPAH Medical Centre
Suite 403/100 Carillon Ave.
Newtown 2042

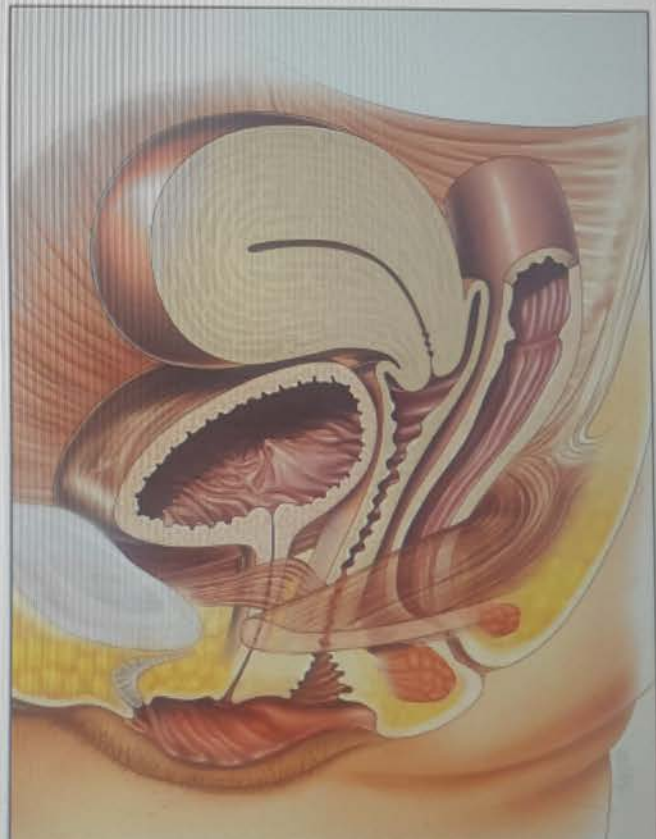


Your guide to understanding PELVIC FLOOR EXERCISES

- Dr Harpreet Arora

MBBS. MD. FRANZCOG.

~Gynaecology, Urogynaecology and Laparoscopic surgeon~



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Thank You

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