



Pelvic Organ prolapse

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Outline

- What is pelvic Organ prolapse
- Aetiology and pathophysiology
- Types and assessment
- Treatment of pelvic floor prolapse
- Bladder dysfunction associated with pelvic floor prolapse
- Treatment of bladder dysfunction

POP – Definition and impact

- Downward descent of the pelvic organs that result in a protrusion of the vagina, uterus or both.
- Can cause symptoms in lower genital tract, urinary and gastrointestinal
- Affect daily activities, sexual function and QoL
- Can be present in over 50% after menopause, but only a minority would seek treatment (Samuelsson et al 1999)
- Accounts for >20% in waiting lists in UK

Presentation

- Asymptomatic prolapse can be common
 - WHI - 41% between 50-79 yrs
 - In routine gynaecology practice 43-76%
 - 3-6% beyond the hymen
- When beyond hymen it is considered clinically significant

Aetiology

- Vaginal delivery
 - 2VDs x 8.4 , 4VDs x 10.9
 - WHI 1VD x 2 (10-20% rise with each more)
 - CS protects, FD - increases
- Advanced age
 - Increase by 40% with each decade
- Obesity
 - Overweight x2.51, Obese x2.56

Aetiology

- Other obstetric factors
 - Large baby
 - Prolonged second stage
 - Age <25 at first delivery
- ? Pregnancy
- Hysterectomy
- Family history

Aetiology

- Ethnicity
 - Low in African-American
 - High among hispanic and Asian
- Repetitive straining
 - Constipation, heavy lifting

Pathophysiology

- Support is mainly by the levator ani muscle complex (pubococcygeus, puborectalis, illiococcygeus) and endopelvic fascia
- These muscles tonically contracted at rest
 - Decline in muscle tone – denervation or direct muscle trauma
- After vaginal delivery defects seen in 20% by MRI

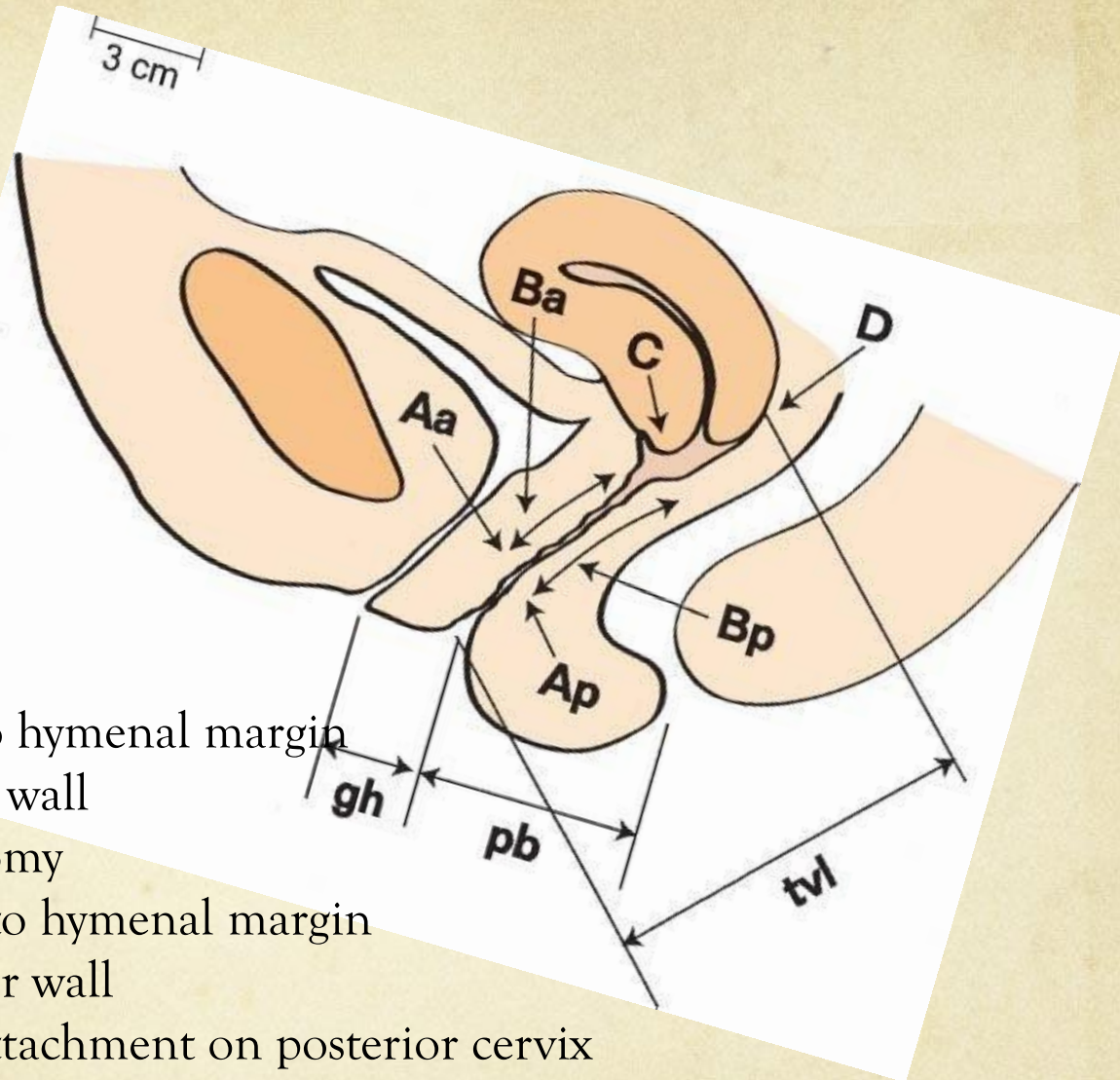
Pathophysiology

- Neuropathic injury to levator ani muscle
 - Evidence of neuro muscular dysfunction noted by electromyography in 25% after VD
 - Chronic straining is also a known cause
- Abnormalities in collagen metabolism with POP

Types and assessment

- Anterior compartment
 - Cystocele - Bladder
- Posterior compartment
 - Rectocele – Rectum, Large /small bowel
- Uterus / vault - Apical prolapse
 - Bladder, small bowel, colon

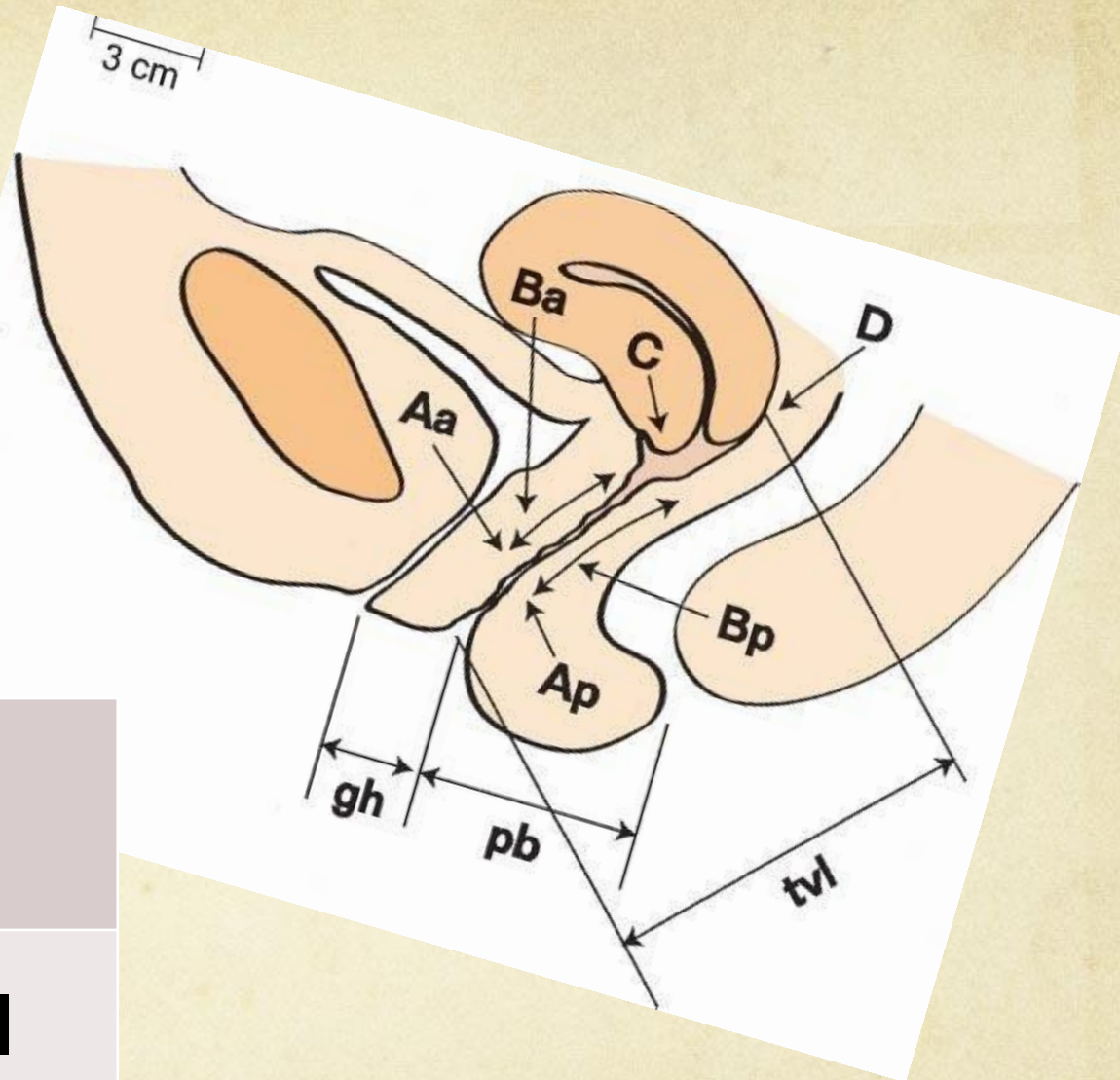
POP Q system



Aa – Anterior wall 3cm proximal to hymenal margin
Ba – Most distant point of anterior wall
C – Cervix or vault after hysterectomy
Ap – Posterior wall 3 cm proximal to hymenal margin
Bp – Most distant point of posterior wall
D - Point of uterosacral ligament attachment on posterior cervix

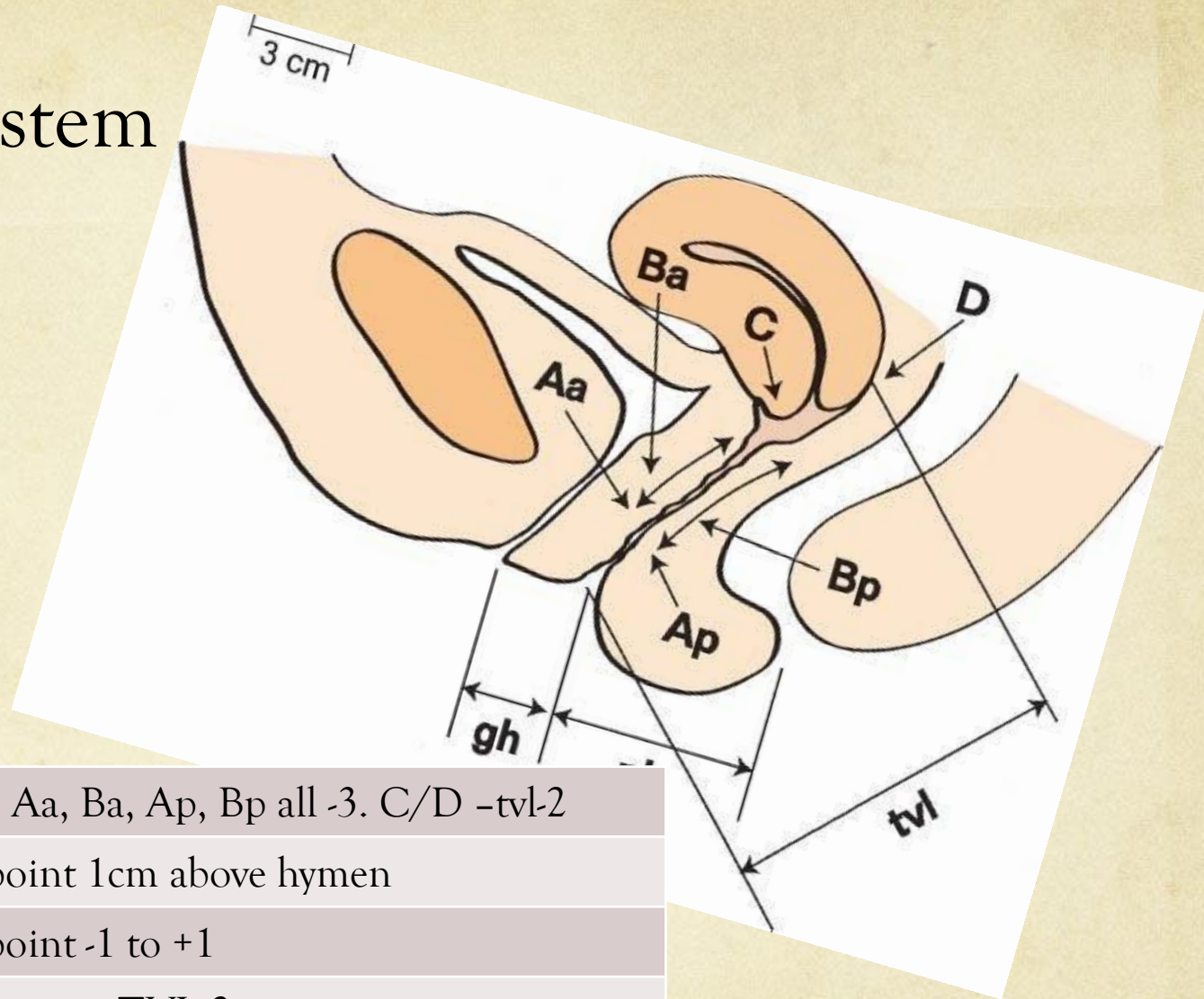
Gh – Urethral meatus to middle of posterior wall
Pb – Middle of posterior wall to middle of anal opening
tvI – Hymenal margin to D (or C) after reduction

POP Q system



Aa -3 - +3	Ba -3 - ..	C
Gh	Pb	tvl
Ap -3 - +3	Bp -3 - ..	D

POP Q system



Stage 0	No prolapse. Aa, Ba, Ap, Bp all -3. C/D -tvL-2
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Stage I	Most distal point 1cm above hymen
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Stage II	Most distal point -1 to +1
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Stage III	Most distal point < TVL-2
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Stage IV	Complete eversion. Most distal point > TVL-2
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Presentation

- Prolapse symptoms - awareness, discomfort
 - Urinary incontinence
 - Frequency and urgency
 - Voiding dysfunction
 - Faecal incontinence
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- Some may not directly related to the prolapse
 - Specially bowel symptoms
 - Beyond hymenal margin is an important landmark

Presentation

- Anterior compartment
 - Urethral hypermobility - SI
 - When beyond hymen: may cause obstruction by urethral obstruction
 - Urinary hesitancy, intermittent flow, weak or prolonged flow, incomplete emptying, retention

Presentation

- Posterior compartment
 - Bowel dysfunction – incomplete emptying, straining, need for splinting
 - The association is weak
 - Faecal incontinence often co-exist
 - Causative association is not clear
- Sexual dysfunction
 - Often present
 - Causative association less clear

Management

- Conservative
- Vaginal pessary
- Surgical correction
- Need for intervention depends on the symptoms and the effects on daily activities & sexual function

Management - Observation

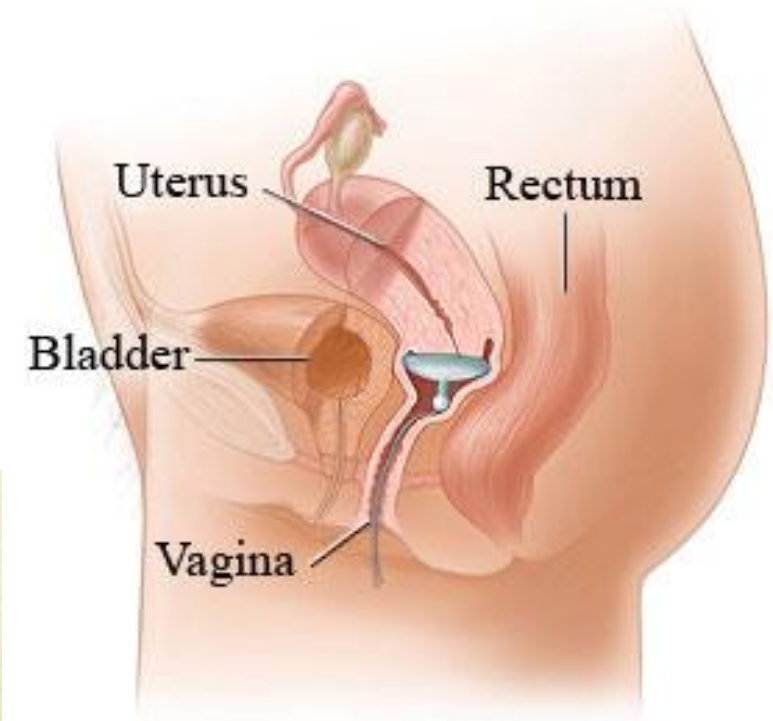
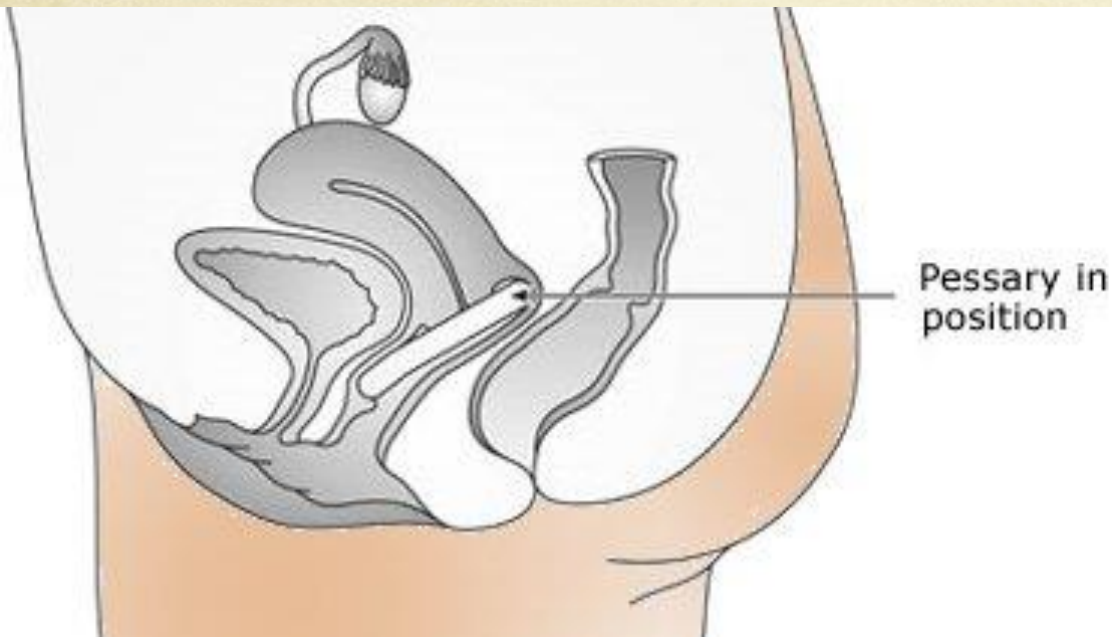
- When minimal – less than up to the hymen
- Pelvic physiotherapy
 - Useful for bladder and bowel dysfunction
 - Less established for prolapse symptoms
- May slow the progress of prolapse

Management –Pessary use

- Many have been in use
- Today the commonly used are: Ring, ring with support, Gelhorn



Management – Pessary use



Management - surgery

- Reconstructive or obliterative
- Reconstructive
 - Aimed at anatomical correction
 - Relieve symptoms and improve sexual functions
- Obliterative
 - Colpocleisis or LeFort's partial colpocleisis
 - Reduction of Viscera and obliteration

Management - surgery

- Reconstructive
 - Vaginal or abdominal route
 - 80-90% done vaginally
- Anterior colporrhaphy
 - Central plication of fascia of anterior vaginal wall
- Posterior colporrhaphy
 - Midline fascial plication

Management - surgery

- Apical prolapse
 - Abdominal sacral colpopexy – suspension of upper vagina to sacral promontory
 - No difference noted between open and laparoscopic methods
 - Vaginal sacrospinous ligament suspension
 - Attach the upper vagina / cervix to the sacrospinous ligament
 - High uterosacral lig suspension, McCall culdoplasty

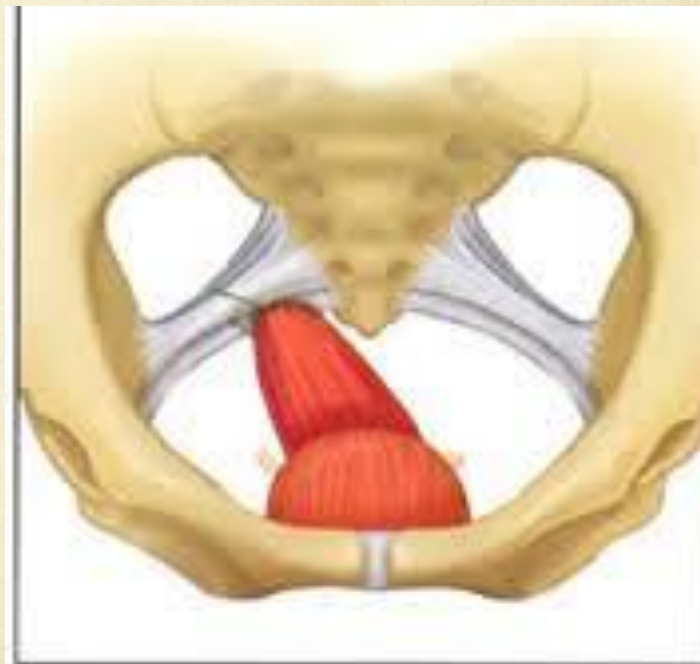
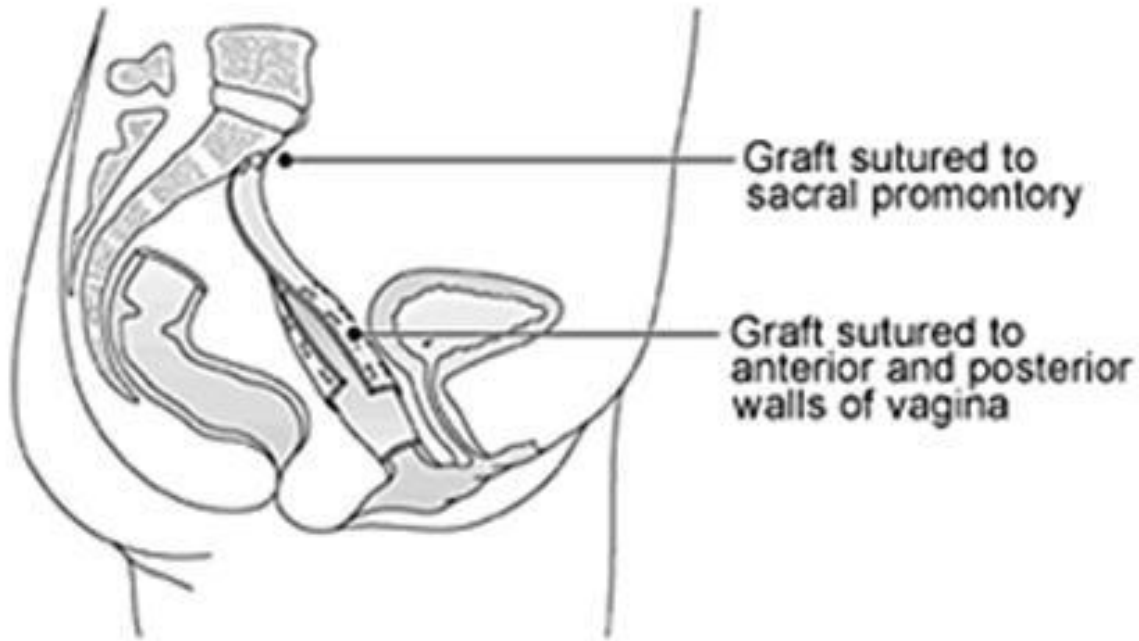


Figure 8: The upper vaginal vault is secured to the sacrospinous ligament, restoring vaginal wall support and correcting prolapse

Prolapse and bladder dysfunction

- Association between POP and bladder dysfunction in well established
- UI can be present in 15-80%
- SI can develop after correction in those with obstruction
- OAB is common with anterior prolapse
 - Distension of stretch receptors of the urothelium due to descent of the trigone

Thank You !