Pelvic Organ Prolapse

Common
Due to failure of pelvic muscle/fascia
Affects 50-100% of multiparous women: 20% symptomatic
Incidence ~ 1:500 female population

Presentation
- Prolapse
- Dragging sensation
- Voiding dysfunction
- Defaecation difficulty
- Dyspareunia
- Pelvic pain
- Occasionally hydronephrosis

Classification
(i) By compartment
   - Anterior: cystocele, urethrocele, combined
   - Apical: cervix/uterus, enterocoele
   - Posterior: rectocele, perineal body laxity

(ii) By musculofascial support (DeLancey)
   - Level 1: Uterosacral and cardinal ligaments
     - Uterine prolapse, enterocoele
   - Level 2: Pubocervical and rectovaginal fascia
     - Cystocele, rectocele
   - Level 3: Urogenital diaphragm, perineal body
     - Urethrocele, perineal body laxity

(iii) By degree of prolapse
    **Halfway system** (Baden and Walker)
    - Practical and reasonably reproducible qualitative system
    - Standardisation of straining/valsalva
    - Degree of prolapse graded for each pelvic organ
    - Grade 0: Normal
    - Grade 1: Halfway to hymen
    - Grade 2: At introitus
    - Grade 3: Halfway past hymen
    - Grade 4: Maximum descent

[Diagram of pelvic organs and musculature]
POP-Q system (Bump et al 1996)  
International Continence Society  
Quantitative vs. qualitative  
Uses anatomical landmarks to standardise halfway system – reference point hymenal ring cf. introitus  
Useful for research studies but cumbersome and difficult to remember  
Grading similar (grade 2 at hymen etc.)

**Grades 1/2**  
Stress incontinence due to urethral hypermobility. Impaired emptying with cystocele - up to one third of women. Usually few symptoms of OAB or obstructed voiding. Surgical options comprise vaginal or abdominal approach: Vaginal = combined TVT and anterior repair - problems with development of other compartment prolapse. Abdominal = Burch and paravaginal/pelvic floor repair - more invasive. No evidence to favour either approach

**Grades 3/4**  
Predominantly symptoms of OAB and obstructed voiding [70% of patients have objective evidence of BOO, compared with only 6% of patients with grade 1\2. Procidentia associated with hydro-nephrosis in one third of cases]. Digital reduction sometimes required to initiate voiding. Usually no symptoms of stress incontinence. POP repair associated with de novo development of stress incontinence (by relieving urethral kinking) in 22-80% of cases - therefore should have UDS with prolapse reduction, and addition of anti-incontinence repair if positive. Unfortunately no standardised way of performing prolapse-reduction UDS.

**Management**  
(i) Conservative  
- Reassurance  
- Weight loss  
- Pelvic floor exercises  
- Vaginal pessary (ring, shelf, etc.)

(ii) Surgery

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<th>Primary</th>
<th>Recurrent</th>
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<td><strong>Anterior</strong></td>
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<td>anterior</td>
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<td><strong>Posterior</strong></td>
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<td>posterior</td>
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<td><strong>Uterine</strong></td>
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<td>hysterectomy</td>
<td>sacrospinous hysteropexy</td>
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<td><strong>Vault</strong></td>
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<td>sacrospinous fixation</td>
<td>sacrococcyopexy</td>
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<tr>
<td>mesh kit (eg Apogee)</td>
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Anterior colporrhaphy
Recurrence rates 20-30% @ 2 years
Improved outcomes in those with concomitant hysterectomy.
Some evidence that mesh repair of cystocele a/w improved cure rates, but
erosion rates 5-17% and significant dysparaeunia. Highest erosion rates with
microporous (type 2) or mixed (type 3) tapes.
De-novo SUI in ~30%, particularly in those with grade 3/4 prolapse; can be
halved with concomitant TVT/TOT

Posterior colporrhaphy
Single RCT showed no benefit for mesh. Case series suggest high rates of
erosion and dysparaeunia (up to 30% at 3 yrs).

Apical repairs
Mesh (sacrocolpopexy) more effective and less side effects than sacrospinous
fixation