Obstetrics & Gynecology
TEAM

Genital Prolapse

Leader: Sara Alhaddab

Done By: Samiha Aljetaily

◆very important ◆mentioned by doctor ◆team notes ◆not important

Anatomy

- The pelvic floor closes the outlet of the pelvis.

- It is made up of a number of muscular and fascial structures.
  The most important: the **LEVATOR ANI muscles**.

- These structures are pierced by:
  - Urethra
  - Vagina
  - Rectum

  } passing through the exterior of the body

- These structures are **supported** in place by:
  - ligaments
  - condensation of fascia

- Genital tract is supported by:
  - Pelvic organs:
    bladder, urethra, bowels, anal canal, rectum

  - Ligaments:
    1) broad ligament 2) round ligament 3) uterosacral ligaments
    4) cardinal (transverse) ligaments 5) pubocervical ligaments
    Number (3) & (4) are the **most important** for uterus support... If they fail, prolapse occur.

Etiology

A relaxed vaginal outlet is usually a sequel to mere **OVERSTRETCHING** of the perineal supporting tissues (ligaments) as a **result of previous parturition.**

"Excessive stretching during pregnancy, labor, difficult vaginal delivery (especially with forceps or vaccum)" – Hacker and Moore's Essentials

- Lack of hormone (as in **later in life**) → causes muscular atony + loss of elastic tissue
- Delivery and pelvic surgery → damage to perineal or pelvic nerves → denervation
- Pelvic surgery = iatrogenic factor (eg. of surgery: hysterectomy)

"**Increased intraabdominal pressure** resulting from:
- chronic cough - ascites - repeated lifting of heavy weights
- habitual straining as a result of constipation
may predispose to prolapse" - Essentials

- Obesity, genetics can be risk factors

Types of Genital Prolapse (Pelvic Organ Prolapse: POP)

1- Cystocele
2- Urethrocele
3- Rectocele
4- Enterocele
5- Uterocele (uterine prolapse)
6- Vault prolapse

1- **Cystocele:**
- As a result of defect in the pubo-cervical facial plane which supports the bladder anteriorly
- It causes the bladder to sag down below and beyond the uterus. (Bladder bulges into vagina)

2- **Urethrocele:**
When the defective fascia involves the urethra (urethra bulges into vagina)

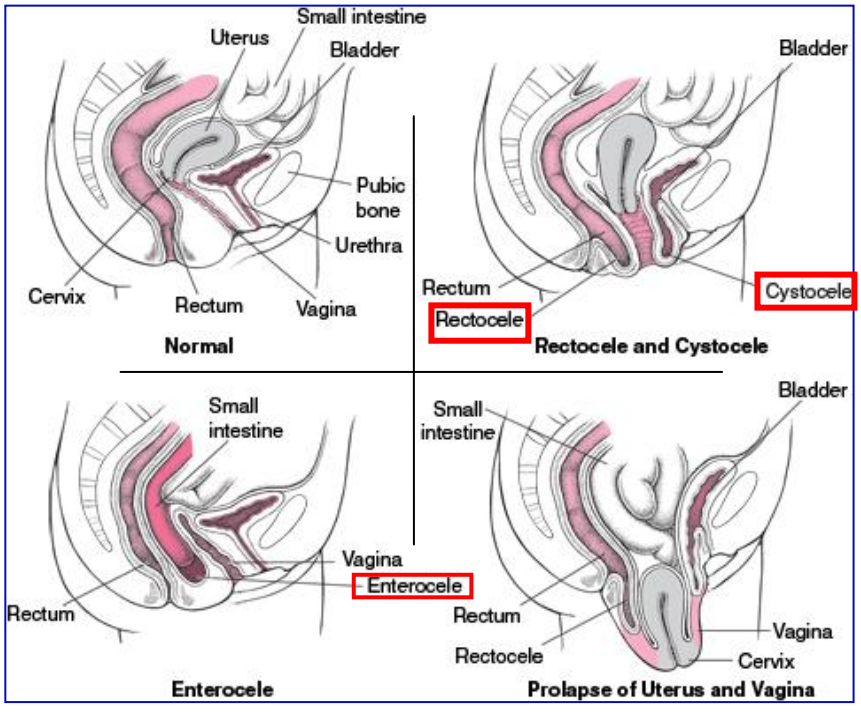
3- **Rectocele:**
Due to attenuation in the pararectal facea → permits the rectum to bulge into vagina

4- **Enterocele:**
- Perintoneal hernial sec. along the anterior surface of the rectum.
- Often contains loops of small intestine
- In other words: hernia → peritoneum herniates to posterior fornix of vagina, it often contains bowels

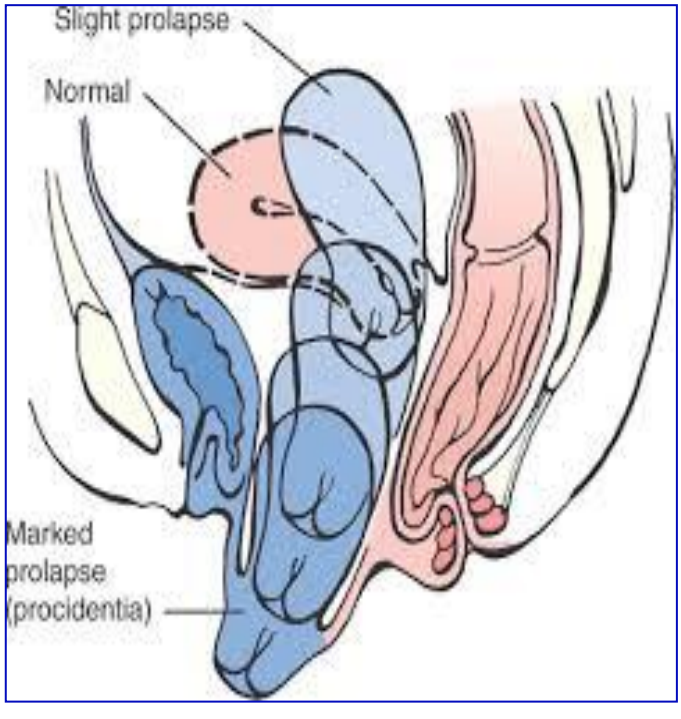
5- **Uterocele (uterine prolapse):**
- Uterus bulges (sags down) to vagina, might extend down to introitus or even below and protrude outside.
- **Grades** of prolapse:
  - 0 : in place
  - 1 : a slight prolapse into vagina (level of ischial spines)
  - 2 : comes to vaginal canal midway (between ischial spines and introitus)
  - 3 : passes midway and reaches introitus
  - 4 : completely out (called: complete **procidentia.** "Represents failure of all vaginal support" – Hacker & Moore's Essentials)

6- **Vault prolapse:**
- prolapse of the top of the vagina, this happens when the patient had a **hysterectomy** before, so there's no uterus to prolapse and instead the **vagina will prolapse**.

Types of prolapse:



Grades of uterine prolapse:



Diagnosis of POP

Take full history + examination when diagnosing POP.

Ask about causes, associated problems, occupation.

Ask about family history, because there's a genetic factor

Symptoms:

- Majority are **asymptomatic** (don't treat)
- Pressure and heaviness in the vaginal region
- Sensation of "everything dropping out"
- Bearing down discomfort in the lower abdomen
- Backache

Other associated problems
(coming from adjacent organs)**:**

- Fecal incontinence (e.g. with complete perineal laceration) and often with loose of stools.
- Difficulty in emptying the bladder with marked cyctocele
- Cystitis, due to residual urine → frequency of micturition & ascending UTI
- Urinary incontinence: stress incontinence
- Difficulty of defection and constipation with rectocele → hemorrhoids

Complaint of lump/mass protruding through → marked prolapse

Signs / Examination:

- BMI and vitals
- **Abdominal examination**: lumps or tumors that could be a factor, also check bladder (incontinence, retention)

- **Inspection:** [lithotomy position]

  - External inspection:
    - Is the organ seen bulging?
    - Gaping introitus
    - Perineal scars
    - Visible cystocele and rectocele / urethral
    - Uterine complete prolapse→ Cervical Ulceration (contact)= **Decubitus ulcer**

  - Inspection by speculum
  [position: lateral position, limbs bent and one leg is pulled]:
  In this case we use **SIMS SPECULUM** (single blade) to visualize the walls of vagina.
  Then ask patient to bear down (strain down) to check for protrusion.

- Assess the degree of the prolapse
(how much the organ is displaced, as mentioned in uterine prolapse & as seen in pic of uterine prolapse in previous page)

- "Rectal-Vaginal examination is often useful to demonstrate a rectocele and distinguish it from an enterocele" – Essentials

- The doctor mentioned that we can see a cystocele or urethrocele by ultrasound

Treatment

Considerations before treatment:

- Degree of prolapse
- Associated symptoms
- Age (menopausal or premenopausal)
- Future plans for reproduction

Let the patient choose

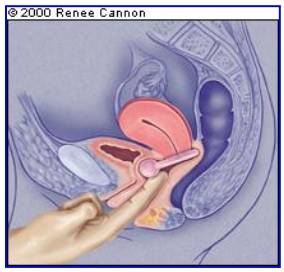
We try to treat conservatively, unless it does not work

Treatment options:

- Conservative measures:

Pelvic floor exercise (Keigel's exercise) → physiotherapy

Pessary



Pesssaries for intravaginal support:
* Can be considered when patient is not a candidate for surgery (unfit, pregnant, post partum).
* They're good to allow cubital ulcers to heal before surgery
* Should be removed, cleaned then re-inserted every 6-12 weeks.
* If neglected, they can cause ulceration and irritation, leading to fistulas, impaction, bleeding, infection.

(Source: Essentials)

- Pharmacological treatment: no drugs available

- Surgery:

Surgery is "repair":
* Anterior vaginal wall repair is called: anterior repair or **anterior colporrhaphy**
* Posterior repair: also called **posterior colporrhaphy**
* Perineal repair: **perineorrhaphy**

For uterine prolapse surgical repair:
- Hysterectomy + repair, if patient completed her family
- plication of fascia: Uterosacropexy, done laparoscopically (we're not expected to know all details)

Return the uterus to its normal position

- Vaginal vault repair: colpopexy

Counsel the patient about:
Recurrence rate 30 % after surgery
Complications of surgery

For more info regarding this topic + diagrams of surgical repair, visit ACOG website (American Congress of Ob/Gynecologists):
http://www.acog.org/Patients/FAQs/Surgery-for-Pelvic-Organ-Prolapse