



- **Primary dysmenorrhea:**

- **Definition:** recurrent, crampy lower abdominal pain along with GI symptoms (nausea, vomiting and diarrhea) that occurs during menstruation in absence of pelvic pathology.
- **It occurs among adolescent females (onset is correlated with occurrence of ovulatory cycles).**
- **Symptoms:** they start several hours prior to menses and continue for 1-3 days.
- **Pathogenesis:**
 - ✓ Increased production of endometrial PGF_{2α} which leads to dysrhythmic uterine contractions, hypercontractility and increased uterine muscle tone → all of this will result in uterine ischemia.
 - ✓ Increased production of PG also causes nausea, vomiting and diarrhea due to stimulation of GIT smooth muscles.
- **Management:**
 - ✓ NSAIDs (Drug of Choice) → inhibiting PG synthesis.
 - ✓ Combined oral contraceptives (2nd choice).

- **Secondary dysmenorrhea (example: endometriosis):**

- **Definition:** dull aching pain which occurs at the age of 20-30 with the presence of pelvic pathology but no GI symptoms (nausea, vomiting or diarrhea).
- **Endometriosis:**
 - ✓ Definition: presence of ectopic endometrial glands and stroma outside the uterus (most commonly on ovaries).
 - ✓ Pathophysiology:
 - ❖ Retrograde menses: backward through the fallopian tubes.
 - ❖ Or autoimmune.
 - ✓ Common sites (other than ovaries):
 - ❖ Cul-de-sac.
 - ❖ Uterosacral ligament (hence the nodularity which you will detect with physical examination).
 - ❖ Rectosigmoid.
Notice that the uterus may become retroverted, adherent and non-mobile.
 - ✓ Clinical findings:
 - ❖ Dyspareunia (painful intercourse).
 - ❖ Uterosacral ligament nodularity (felt by rectovaginal exam).
 - ❖ Infertility.
 - ✓ Diagnosis:
 - ❖ Visualization via laparoscopy.
 - ❖ Ultrasound may show chocolate cyst.
 - ✓ Treatment:
 - ❖ *Medical:* the aim is to create
 - Pseudopregnancy: continuous medroxyprogesterone acetate or combined oral contraceptives.
 - Pseudomenopause: GnRH agonist (e.g. Leuprolide).
 - ❖ *Surgical:*
 - Conservative (preserving fertility): laser vaporization + adhesion lysis.
 - Aggressive: TAH-BSO (+ estrogen replacement).