Dysmenorrhea Seminar

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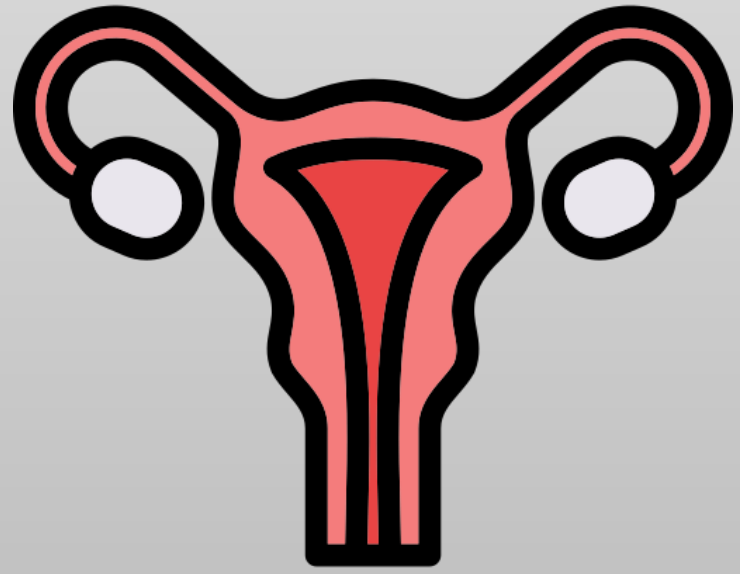


Guided by: Dr. mona Ahmed

Questions to identify:

5.Dysmenorrhea 3

- Define dysmenorrhea and differentiate between primary and secondary types.
- Explain the pathophysiology.
- Identify etiologies.
- Plan appropriate investigations.
- Design a management plan.

Epidemiology:

- 50% of all menstruating women are affected by dysmenorrhea
- 90% of 1ry dysmenorrhea occur within first 2y of menarche
- Endometritis affects 10% of reproductive age – 50% of infertile
- Fibroids: 40–60% by age 35 (especially in African descent)
- PID affects 8% in sexually active women
- Polyps: 10–24% in women with abnormal uterine bleeding

Definition: Refers to the pain associated with menstruation

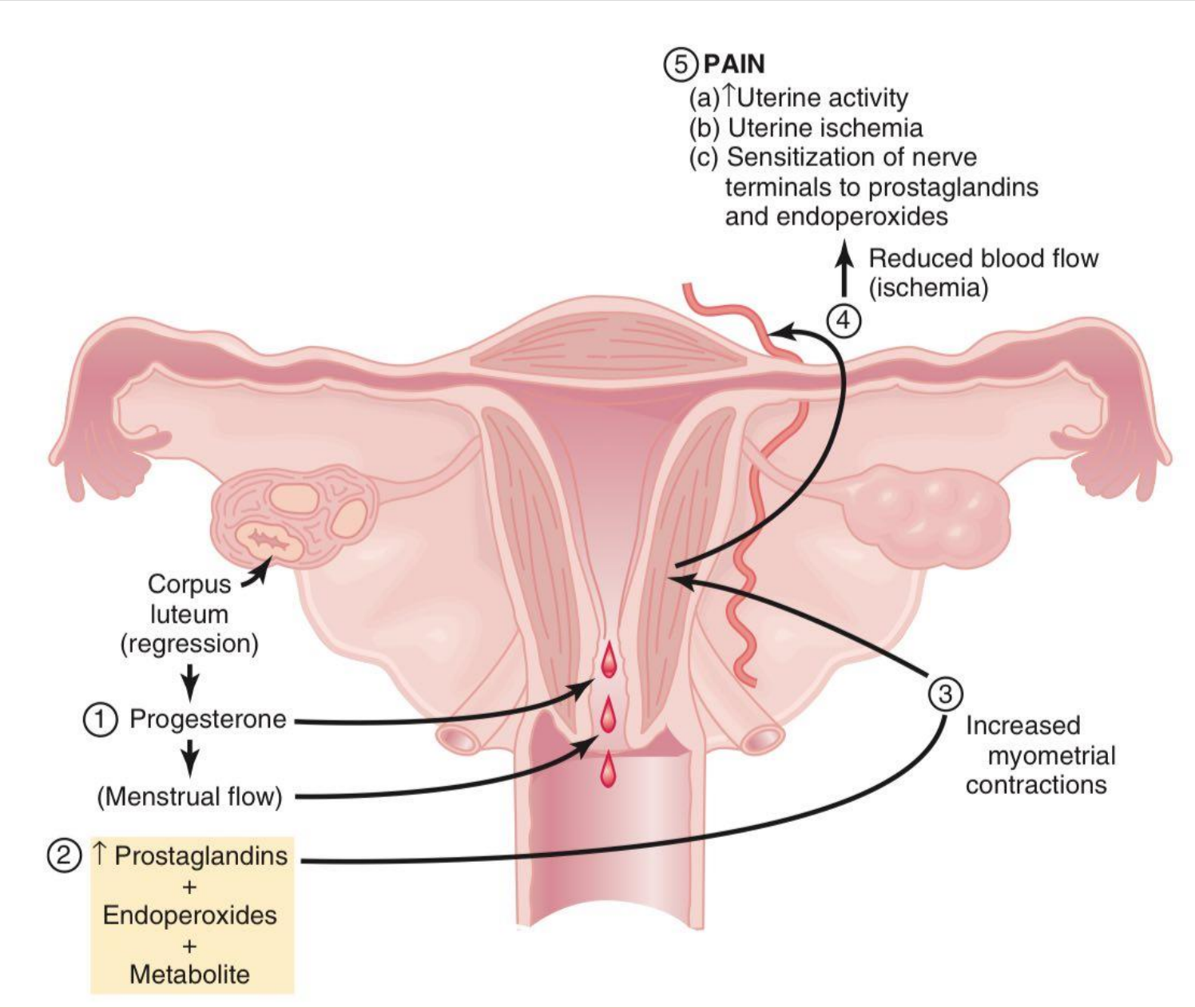
1ry: Occurs without an underlying medical condition. It is often linked to hormonal changes during menstruation, particularly the increase in prostaglandins, which cause uterine contractions.

2ry: caused by underlying conditions like endometriosis, fibroids, or pelvic inflammatory disease. It typically develops later in life.

Pathophysiology:

1ry: pain is primarily due to the release of prostaglandins during menstruation. Prostaglandins cause the uterus to contract, which can lead to reduced blood flow to the uterus, causing ischemia (lack of oxygen) and pain. The increased levels of prostaglandins contribute to uterine hypercontractility, which is often felt as cramping pain. This pain typically peaks at the beginning of the menstrual period and usually decreases as menstruation progresses.

2ry: The pathophysiology here involves underlying conditions.


⑤ PAIN
(a) ↑ Uterine activity
(b) Uterine ischemia
(c) Sensitization of nerve terminals to prostaglandins and endoperoxides
Reduced blood flow (ischemia)
④
Corpus luteum (regression)
① Progesterone
(Menstrual flow)
② ↑ Prostaglandins + Endoperoxides + Metabolite
③
Increased myometrial contractions

Etiology:

2ry:

- Endometriosis: Implantation of endometrial tissue outside uterine cavity.
- Adenomyosis: Where endometrial tissue extends into the myometrium.
- Pelvic inflammatory disease (PID): Infection causing chronic inflammation.
- Cervical stenosis and hematometra: Obstructed outflow of menstrual blood causing retained blood and pressure.

H&E of 1ry dysmenorrhea:

S: Lower abdomen
O: Sudden
C: Cramp like
R: Back – Inner thighs
A: Nausea – Vomiting – Fatigue – Headache
T: 2h before or just after menstruation
E: NSAIDs relief symptoms
S: 5 – 7 out of 10

Sign of 1ry

-ve findings on exam

Sign of 2ry

2w prior – 1w after

Investigation:

CBC

Ultrasound

Etiology	ESR CRP	US	CS	Laparoscopy	MRI	Swab / Biopsy
Endometriosis		Chocolate cyst		Gold	Deep lesion	
Adenomyosis		Bulky uterus			Gold	
Fibroids		Well defined mass				
PID	↑	Douglas pouch	+			
Polyps		SIS				Diagnostic

Fluid

Investigation:

Name an iatrogenic cause?

IUD (Copper) ↑ PGs 20%

Management:

1ry:

- Reassurance
- NSAIDs (2 – 3 days before flow)
- Contraceptive measures (OCP – Patches – Rings)
- Progestogens

Management:

2ry:

- Treat the underlying disease
- NSAIDs – Analgesics (useful)

Facts:

- Most common cause of secondary dysmenorrhea overall → PID.
- In older/multiparous women → Adenomyosis.
- Most common pelvic tumor → Fibroids.
- Young, sexually active → think PID.

Thank You