Dysfunctional Uterine Bleeding

Dr Asma Basha

Menstrual cycle

- The mean age of first period usually is 12.5y.
- Menstruation stops at menopause which usually occurs at 51-52 years of age.
- Bleeding usually lasts around 2 to 7 days.
- Frequency every 21 to 35 days(an average of 28 days).
- Volume of blood ≥5 to ≤80 mL; clinically.
- Excessive blood loss is defined as a volume that interferes with the woman's physical emotional, social, and/or material quality of life.

Definition

- **Abnormal uterine bleeding** (AUB) :

❖ **Any** symptomatic **variation** from normal menstruation including intermenstrual bleeding.

- **Dysfunctional uterine bleeding** :

❖ Abnormal uterine bleeding not due to organic gynecologic disease or pregnancy.

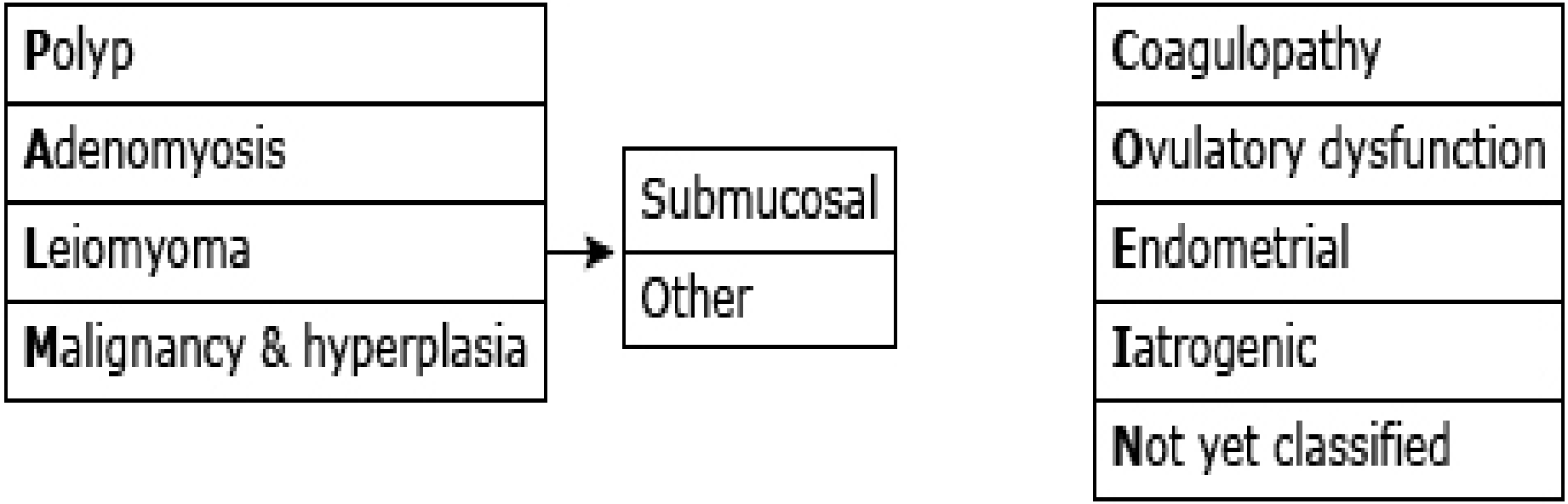
In women **between menarche and menopause**.

The bleeding is unpredictable in many ways, It may be excessively heavy or light and may be prolonged, frequent, or random.

Patterns of abnormal uterine bleeding

- Heavy menstrual bleeding (menorrhagia)
- Intermenstrual bleeding
- Frequent (polymenorrhea)
- Infrequent (oligomenorrhea)
- Decreased amount of bleeding (Hypomenorrhea)

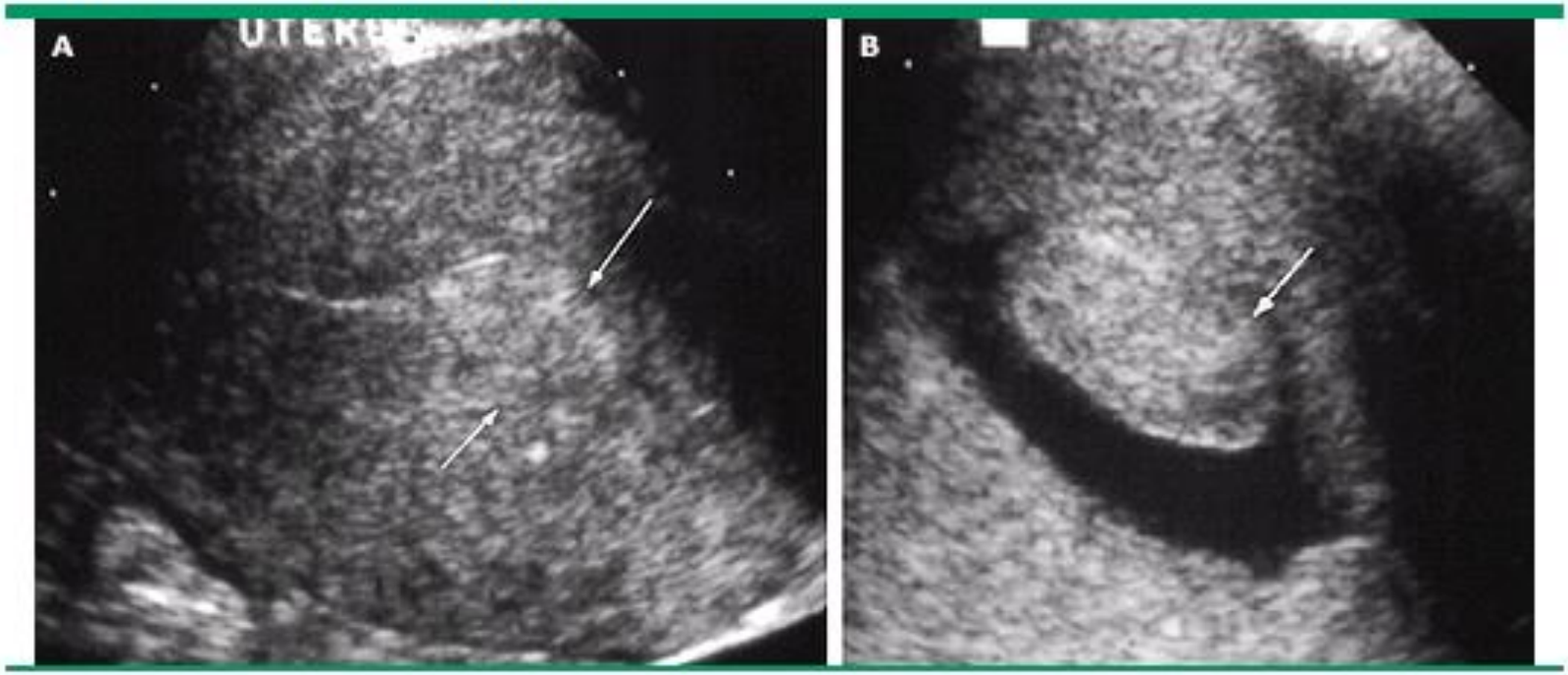
PALM-COEIN classification system for abnormal uterine bleeding in nongravid reproductive-age women



Polyps (AUB-P)

- Polyps are localized epithelial tumors that include those in the endometrial cavity and the cervical canal.
- Mainly present as intermenstrual bleeding.

Single endometrial polyp in 44-year-old woman who presented with excessive bleeding



(A) Sagittal transvaginal sonogram shows endometrial polyp (arrows) in fundus. Endometrium appears thick and is difficult to measure. (B) Sagittal sonohysterogram shows single round 1.9-cm echogenic polyp (arrow). Note otherwise thin endometrium (2 mm).

Adenomyosis (AUB-A)

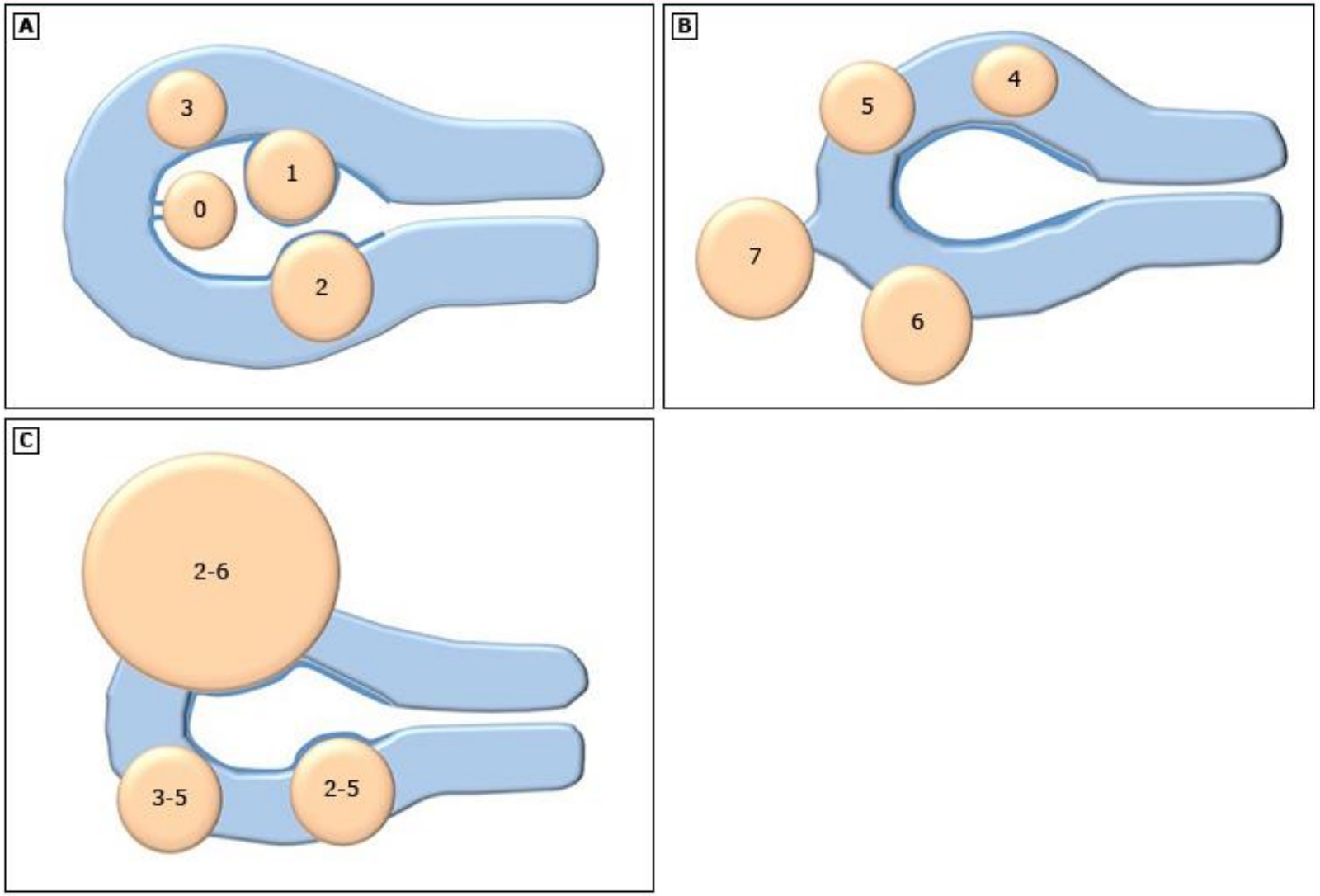
- Adenomyosis is the presence of endometrial-type glands and stroma within the myometrium.

- Present mainly as heavy menstrual bleeding, dysmenorrhea, with enlarged boggy, globular, tender uterus.

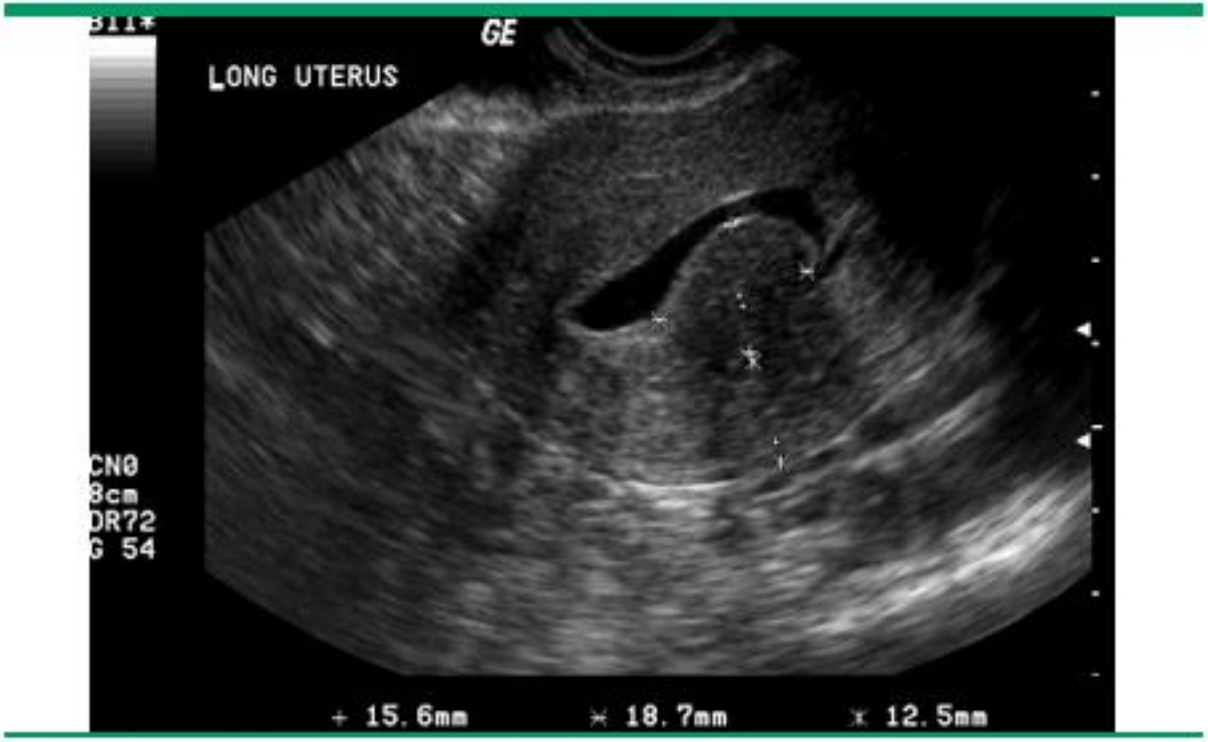
Leiomyomas (AUB-L)

- Benign neoplasms of smooth muscle.
- Present mainly as heavy menstrual bleeding.

PALM-COEIN AUB leiomyoma locations



Saline infusion sonohysterogram of a submucous myoma



A posterior mid-segment submucous myoma measuring 1.6 x 1.9 cm is identified after infusion of saline. The distance from the back of the myoma to the serosal surface measures 1.2 cm (calipers). The endometrium surrounding the fluid is thin, compatible with early proliferative phase.

Courtesy of Steven Goldstein, MD.

Malignancy and hyperplasia (AUB-M)

- Endometrial hyperplasia , simple or complex or even with atypia and carcinoma.
- Usually diagnosed with endometrial sampling.
- Present mainly as heavy menstrual bleeding or irregular bleeding .

Coagulopathy (AUB-C)

- Most commonly von Willebrand disease .
- Drugs : Aspirin, Anticoagulants.
- Confirmation requires laboratory testing.

Ovulatory dysfunction (AUB-O)

- Ovulatory dysfunction occurs when a woman is not ovulating, or has infrequent ovulation, especially in the late reproductive years or early post menarche.

- Typically a combination of irregularity of bleeding and a variable volume, which in some cases includes the symptom of heavy menstrual bleeding.

Etiology of AUB-O

- There is often no identifiable cause.
- Can be related to psychological stress, weight loss or gain, excessive exercise.

- Medications that affect dopamine metabolism (Antipsychotics, antidepressants, anti HTN (methyldopa and verapamil)

- Endocrine abnormality that impacts the hypothalamic-pituitary-ovarian axis, such as hyperprolactinemia, thyroid disease, and polycystic ovary syndrome.

Endometrial causes (AUB-E)

- Most likely present with heavy menstrual bleeding but can also include intermenstrual bleeding.
- Endometritis secondary to, for example, Chlamydia trachomatis.

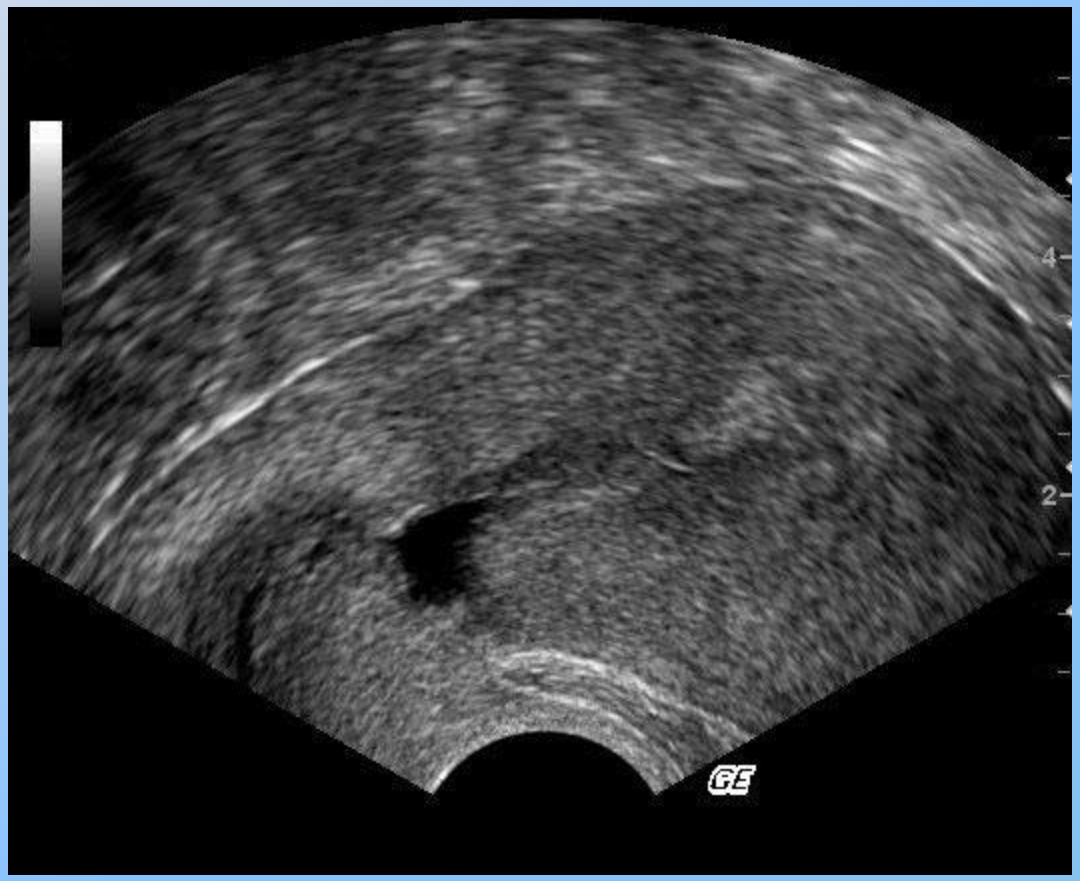
Iatrogenic causes (AUB-I)

- Gonadal steroids (eg, estrogens, progestins, androgens).
- Gonadal steroid-related therapy (eg, gonadotropin-releasing hormone analogues, selective estrogen receptor modulators, selective progesterone receptor modulators).
- Anticoagulants.
- Systemic agents that contribute to disorders of ovulation, for example, those that interfere with dopamine metabolism or cause hyperprolactinemia .

Not otherwise classified (AUB-N)

Examples include :

- Arteriovenous malformation.
- Cesarean scar defect.


4
2
GE

Diagnosis

1.History:

- Menstrual history .
- Symptoms of endocrine or organic disease.
- The patient's background , home, and marital circumstances.
- Emotional stress or psychiatric abnormality.

2.Examination:

Complete physical examination.

General examination

- Fever.
- Ecchymoses.
- Thyroid gland.
- Hyperandrogenism (hirsutism, acne, clitoromegaly, or male pattern balding).
- Acanthosis nigricans .
- Galactorrhea.

Local Examination

- Vulva, vagina, cervix, urethra, anus, or perineum.

  (mass, laceration, ulceration, friable area, vaginal or cervical discharge, foreign body).

- Uterus and adnexa :

  Size, contour, mobility, tenderness, adnexal mass or tenderness.

Investigations

Initial tests :

- BhCG to exclude pregnancy
- Complete blood count

Other investigations:

- Cervical smears.
- Endocrine investigations i.e. Thyroid, Adrenal, Pituitary function tests.
- Haematological investigations i.e. Hb, Blood film, Platelet count, Bleeding time…etc.
- Transvaginal sonography (TVS) . …MRI.
- Uterine curettage and endometrial biopsy.
- Saline infusion sonohysterography or diagnostic hysteroscopy.
- Diagnostic laparoscopy.

Management

1. Exclude organic disease.

2. Make a positive diagnosis of the functional defect.

3. Treatment should be individualized according to :

- Age, parity, emotional and social background of the patient.
- Severity ,pattern and duration of the bleeding.
- The nature of the underlying defect.
- The prognosis and the likelihood of organic disease.
- Associated symptoms and issues (e.g., pelvic pain, infertility).
- Contraceptive needs and plans for future pregnancy.
- Medical co morbidities as underlying risk for thrombo-embolic disease
- Patient preferences regarding, medical versus surgical and short-term versus long-term therapy.

Management

- General measures.
- Hormone therapy.
- Anti-fibrinolytic therapy.
- Curettage.
- Endometrial resection.
- Endometrial ablation.
- Surgery (hysterectomy).

Medications

- Estrogen-Progestin contraceptives.
- Oral progestin therapy (High-dose).
- Depot medroxyprogesterone acetate.
- Levenorgesterol releasing IUD (mirena).
- Tranexamic acid .
- NSAIDs.

THANK YOU