Obstetrics & Gynaecology - Topic 24 - Abnormal uterine bleeding

Understanding Abnormal Uterine Bleeding

- Abnormal uterine bleeding means bleeding from the uterine body that differs from the expected pattern in frequency, regularity, duration or amount in a non-pregnant woman.
- A pregnancy-related cause must be excluded before applying this classification to a person who could be pregnant.
- Bleeding from the vulva, vagina, cervix, urinary tract or bowel may be mistaken for uterine bleeding.

Meaning and Impact of Heavy Menstrual Bleeding

- **Heavy menstrual bleeding** is menstrual blood loss that interferes with physical, emotional, social or practical quality of life.
- A woman does not need to measure a particular volume of blood before her complaint is taken seriously.

Describe the Pattern Clearly

Bleeding History and Functional Impact

- Ask when each period starts, how many days it lasts and how much the timing varies between cycles.
- Ask about flooding, clots, night-time changes, double protection and inability to attend school, work or normal activities.
- Record bleeding between periods, bleeding after intercourse and any prolonged interval followed by heavy bleeding.
- The pattern should be described in plain words rather than relying only on older terms such as menorrhagia or metrorrhagia.

FIGO Frequency, Duration and Regularity Limits

- For adults in the reproductive years, the FIGO reference range for menstrual frequency is an interval of 24 to 38 days.
- Bleeding lasting more than eight days is prolonged under this system.
- Regularity is assessed from the difference between the shortest and longest cycles over the observation period.
- FIGO allows a difference of up to nine days at ages 18–25 and 42–45 years, and up to seven days at ages 26–41 years.
- These adult limits should not be applied indiscriminately soon after menarche.

Acute and Chronic Bleeding

- **Acute bleeding** is an episode severe enough to need immediate intervention to prevent further blood loss.

Copyright by Engacy Learning Private Limited. All rights reserved. Reproduction or distribution without written consent is strictly prohibited.

- **Chronic bleeding** is an abnormal pattern that has occurred for most of the preceding six months.
- A woman with chronic heavy periods may develop an acute severe episode on top of the usual problem.

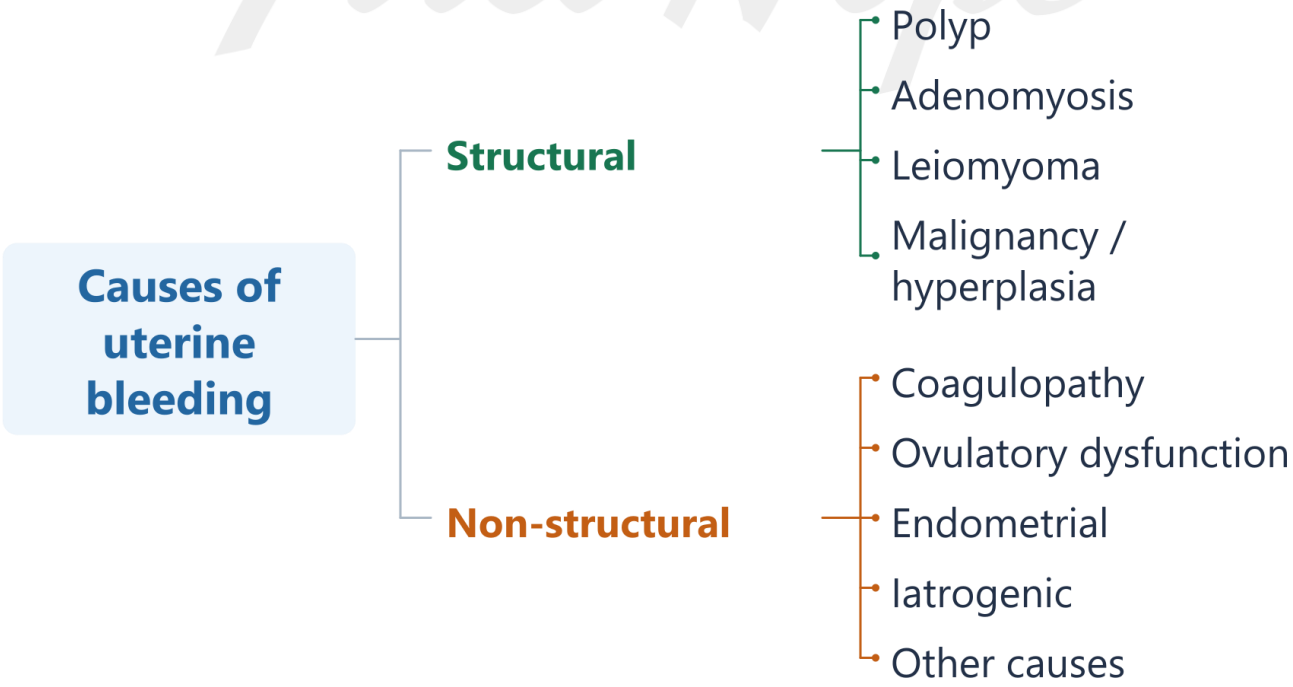
Why Bleeding Occurs

- Normal menstruation requires coordinated ovarian hormones, controlled endometrial shedding, local blood-vessel constriction and effective clot formation.
- A structural lesion can enlarge or distort the bleeding surface, while an ovulatory disorder can expose the endometrium to an irregular hormonal pattern.
- A coagulation disorder or anticoagulant medicine can increase blood loss even when the uterus has no visible lesion.

Classification and Causes

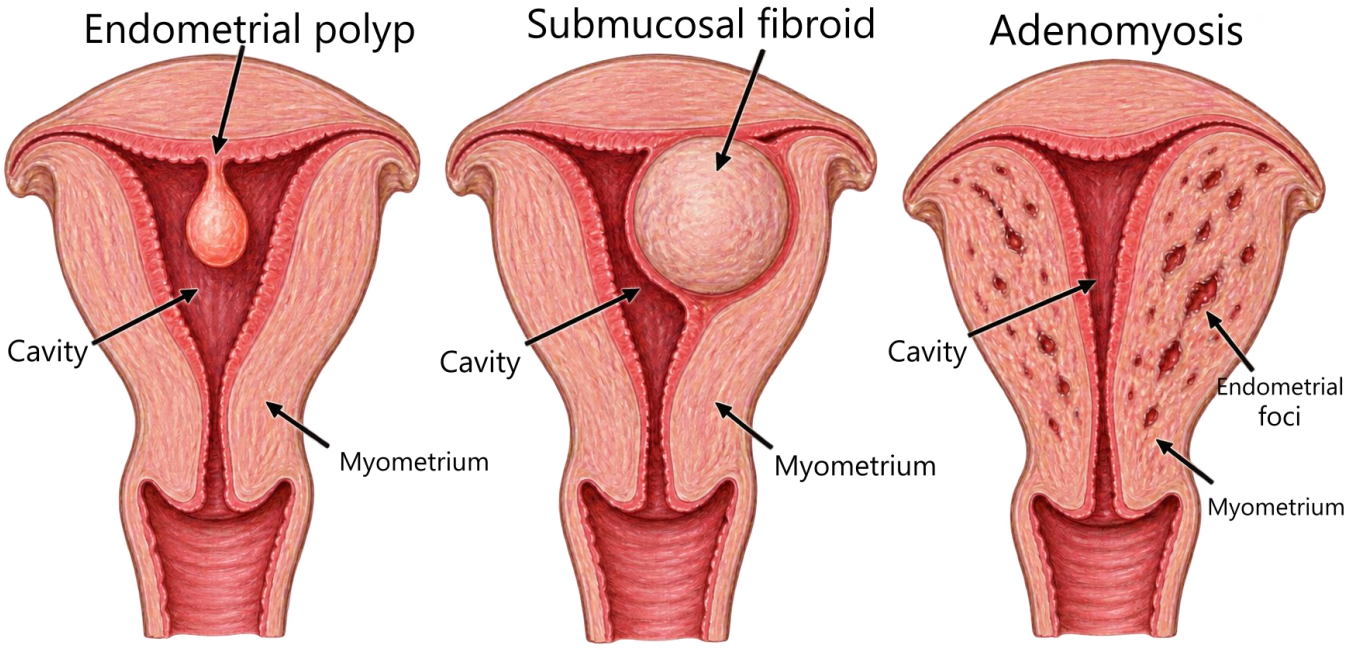
The PALM–COEIN System

- The PALM group contains structural causes that can often be identified by imaging or tissue examination.
- The COEIN group contains non-structural causes, although more than one cause may coexist in the same woman.



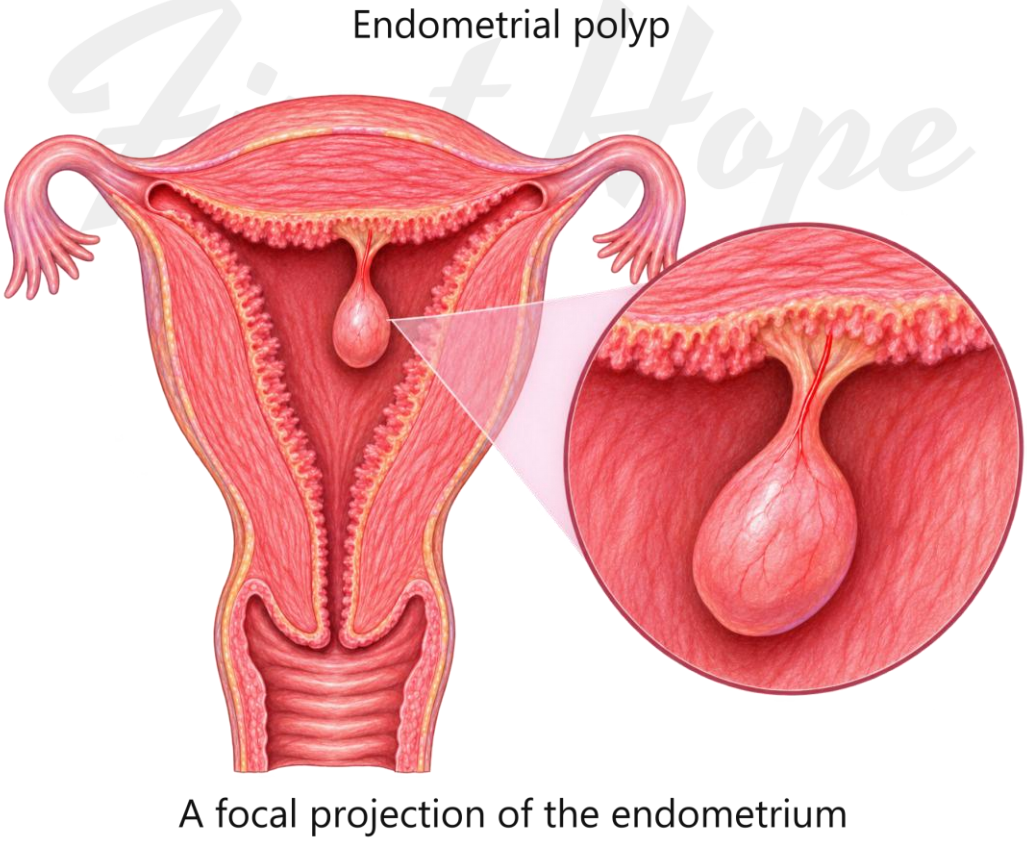
Copyright by Engacy Learning Private Limited. All rights reserved. Reproduction or distribution without written consent is strictly prohibited.

1. Structural Causes: PALM



A polyp, a submucosal fibroid and adenomyosis affect different parts of the uterine wall

A. Polyp



An endometrial polyp projects from the uterine lining into the cavity and may cause abnormal bleeding

- An endometrial polyp is a local growth of endometrial glands and stroma that projects into the uterine cavity.
- It may cause bleeding between periods, irregular spotting or heavy bleeding, although some polyps produce no symptoms.

Copyright by Engacy Learning Private Limited. All rights reserved. Reproduction or distribution without written consent is strictly prohibited.

B. Adenomyosis

- Adenomyosis contains endometrial glands and stroma within the uterine muscle and often produces a bulky, tender uterus.
- Heavy periods accompanied by significant menstrual pain are common clues.

C. Leiomyoma

- A leiomyoma, or fibroid, is a benign smooth-muscle tumour of the uterus.
- Fibroids that contact or distort the endometrial cavity are especially relevant to heavy bleeding.
- A small incidental fibroid should not automatically be blamed for every abnormal bleeding pattern.

D. Malignancy and Hyperplasia

- Endometrial hyperplasia and endometrial cancer may cause persistent irregular bleeding or bleeding between periods.
- Risk increases with prolonged unopposed oestrogen exposure, increasing age and some hereditary cancer syndromes.
- Any bleeding after menopause needs a separate prompt assessment rather than being labelled a normal variation.

2. Non-structural Causes: COEIN

A. Coagulopathy

- Von Willebrand disease, platelet disorders and other clotting abnormalities may first become apparent as heavy menstrual bleeding.
- Heavy bleeding since menarche, frequent nosebleeds, easy bruising and excessive bleeding after dental work are useful clues.

B. Ovulatory Dysfunction

- Infrequent or absent ovulation can lead to irregular endometrial growth followed by unpredictable shedding.
- Common settings include the early years after menarche, polycystic ovary syndrome and the transition to menopause.
- Thyroid disease, marked weight change and some systemic illnesses can also disturb ovulation.

C. Endometrial Causes

- A local disturbance of endometrial haemostasis may cause heavy but otherwise regular periods when other causes have been excluded.
- This category is a clinical diagnosis of exclusion rather than a visible mass on ultrasound.

Copyright by Engacy Learning Private Limited. All rights reserved. Reproduction or distribution without written consent is strictly prohibited.

D. Iatrogenic Causes

- Hormonal contraception, a copper intrauterine device, anticoagulants and some other medicines can alter bleeding.
- Check adherence, interactions and the time since a contraceptive method was started before assuming treatment failure.

E. Causes Not Otherwise Classified

- Less common causes include uterine arteriovenous malformations and bleeding associated with a caesarean-scar niche.
- Marked vascularity on imaging requires specialist assessment because blind curettage of a vascular lesion may cause severe haemorrhage.

Clinical Assessment

First Decide Whether the Woman Is Stable

- Check pulse, blood pressure, breathing, mental state, peripheral perfusion and the rate of ongoing blood loss.
- Fainting, chest discomfort, breathlessness, confusion or rapidly soaking protection with continued bleeding requires urgent assessment.
- The initial haemoglobin concentration can underestimate the seriousness of a sudden blood loss.

Focused History

- Ask about the last normal menstrual period, possibility of pregnancy, contraception and recent pregnancy or uterine procedures.
- Clarify the duration of the problem, associated pain, fever, discharge, postcoital bleeding and symptoms of anaemia.
- Ask about medicines, family bleeding history, thyroid symptoms, weight changes and features of androgen excess.
- Discuss fertility wishes and how the bleeding affects daily life because these factors influence treatment choices.

Respectful Examination

- Explain the purpose of examination, obtain consent and offer an appropriate chaperone.
- Look for pallor, bruising, thyroid enlargement, signs of androgen excess and an abdominal or pelvic mass.
- A speculum examination can identify cervical lesions, vaginal trauma or another source of bleeding when clinically appropriate.
- A bimanual examination may identify uterine enlargement, tenderness or an adnexal mass, but it is adapted to age, consent and the clinical situation.

Copyright by Engacy Learning Private Limited. All rights reserved. Reproduction or distribution without written consent is strictly prohibited.

FREE PREVIEW

Click here to visit our website

MBBS PREMIUM NOTES

Complete MBBS notes for every subject and year are available only in the FirstHope app.

Scan or click here

Click here to get the app >

Available on Google Play

Browse MBBS notes by year

firsthope.co.in/mbbs

Click here to explore MBBS >

Scan or click here

FirstHope Medical on Instagram

@firsthope.medical

Click here to follow

App and notes help

Find answers about access and downloads

Click here for help

YEAR 1 / YEAR 2 / YEAR 3 / YEAR 4