

AUB- differential diagnosis & workup

Dr Neha Gupta
Associate Professor OBG, HIMSR

ABNORMAL UTERINE BLEEDING (AUB) (FIGO, ACOG-2011)

Defined as

- **Any uterine bleeding outside the**
 - normal volume
 - Duration
 - Regularity
 - frequency

is considered abnormal uterine bleeding (AUB).

- Nearly **30%** of all gynecological outpatient attendants are for AUB.

NORMAL MENSTRUATION

- Cycle interval 28 days (21–35 days)
 - Menstrual flow 4–5 days
 - Menstrual blood loss 35 ml (20–80 ml)
-
- Abnormal menstrual bleeding pattern have been traditionally expressed by terms like
 - Menorrhagia (Heavy menstrual bleeding),
 - Metrorrhagia (Inter menstrual bleeding),
 - polymenorrhea,
 - oligomenorrhea



Causes of AUB with relation to age

Neonate/infant	Premenarchal	Adolescent	Reproductive age	Menopausal age
E2 withdrawl effects	Foreign body	AUB	AUB(PALM- COEIN)	Senile Endometritis
	Infection	Endocrine dysfunction(thyroid)		Endocrine Dysfunction (thyroid)
	Sexual abuse	Coagulation ds		Carcinoma Cervix
	Precocious puberty	Pregnancy complication		Carcinoma Endometrium
	Trauma	Sexual abuse		Ca of Vulva
	Neoplasm	Polyp		Ca of Vagina
		Neoplasm		Endometrial Hyperplasia/Polyp
				Estrogen Replacement therapy
13-04-2020		Dr Neha Gupta		4

- In order to create an universally accepted nomenclature to describe abnormal uterine bleeding, International Federation of Gynecology and Obstetrics (FIGO) and American College of Obstetricians and Gynaecologists (ACOG) introduced newer system of terminology to describe AUB.
- The newer classification system is known by the acronym
- **PALM–COEIN (FIGO–2011).**
- It is used to classify the abnormal uterine bleeding on the basis of etiology **IN REPRODUCTIVE AGE**

P olyp
A denomyosis
L eiomyoma
M alignancy & hyperplasia

S ubmucosal
O ther

C oagulopathy
O vulatory dysfunction
E ndometrial
I atrogenic
N ot yet classified



Work up

History & examination

- A. Detailed history taking and physical examination should be done.
- a. Medical history should include: Age of the patient, patterns of abnormal uterine bleeding, severity, associated pain, family history and use of medication.
- b. General and physical examination: Pallor, edema, neck glands, thyroid, and systemic examination, and pelvic examination (per speculum, Pap smear, and bimanual examination) are included.

Investigations

Laboratory investigations:

- Complete hemogram
- thyroid profile
- pregnancy test
- Coagulation profile.

Investigations

- **Imaging studies:**

- **Ultrasonography (Transvaginal),**

- Saline infusion sonography (SIS), hysteroscopy (SIS is superior to TVS for detection of intracavitary pathology like, polyps, submucosal fibroids).
 - Magnetic resonance imaging (MRI): MRI may be used as a second line procedure especially in cases with adenomyosis

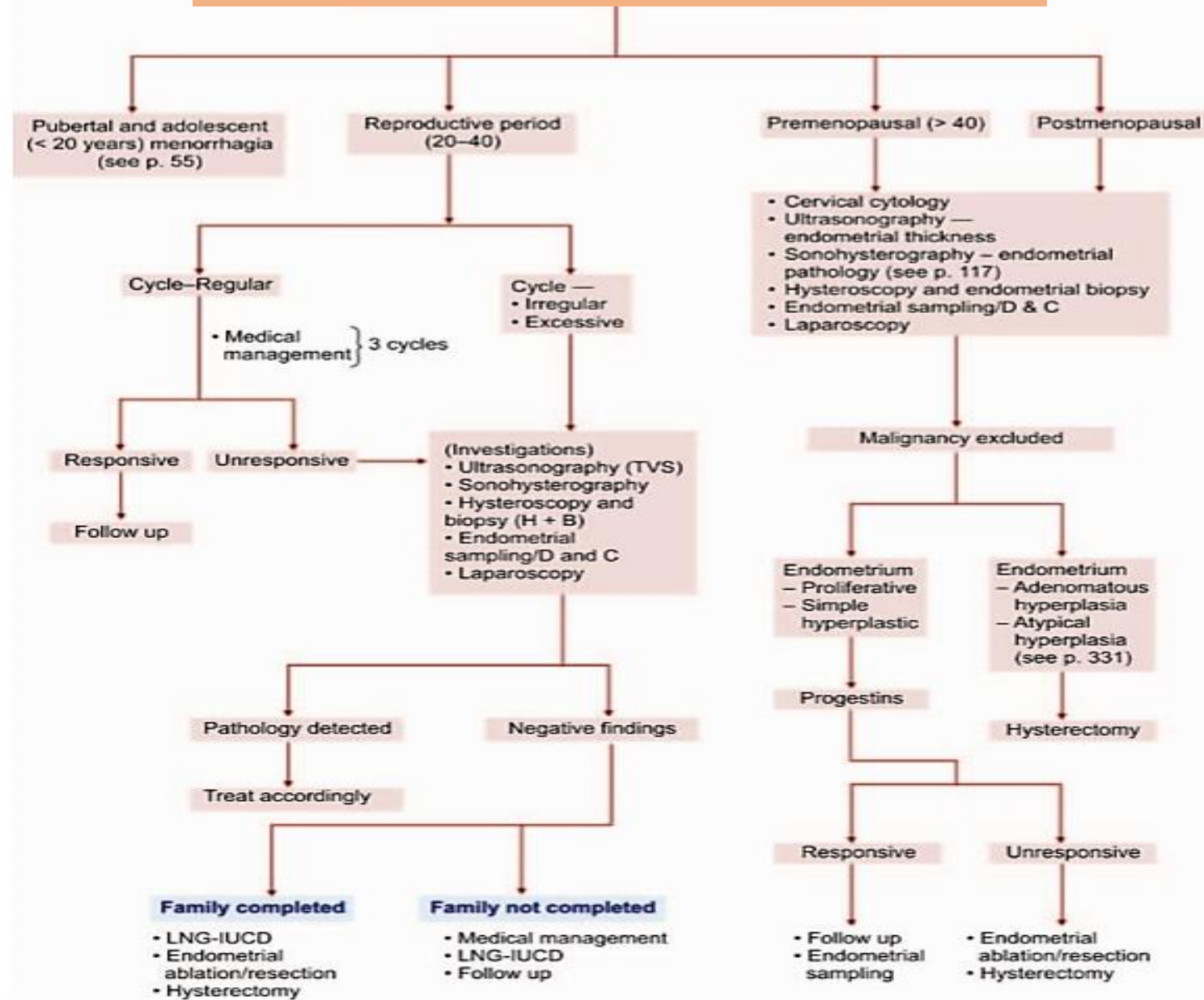
- **Histological confirmation of pathology by**

- Endometrial Biopsy or
 - Diagnostic Hysteroscopy

Management options for a case with AUB

- Management issues of AUB depend upon the pathology obtained in an individual woman (discussed above).
- Women with AUB with age ≥ 45 years should have endometrial biopsy (D/C or hysteroscopy directed biopsy) as an initial step of management.
- Adolescent girls with AUB or heavy menstrual bleeding need exclusion of bleeding disorders besides other investigations. Complete hemogram, platelet count, prothrombin time, and partial thromboplastin time need to be done

MANAGEMENT OF AUB



Treatment

- Mainly treatment is based on the cause.
- Symptomatic management of heavy menstrual bleeding includes
 - Correction of anemia- Iron supplements
 - NSAIDS- Mefenamic acid
 - Tranexamic acid
- Cycle control
 - Combined oral contraceptive pills- OCPs
 - Progesterone therapy
 - Oral (Medroxy progesterone Acetate, Norethisterone, norgestral)
 - Levonorgestrel Intra uterine System(LNG-IUS/ Mirena)

SURGICAL MANAGEMENT

Surgical treatment is done as per indication depending on the cause of AUB identified esp. for structural causes like Polyp, Adenomyosis, Leiomyoma(fibroid) and Malignancy.

- CONSERVATIVE SURGERY
- HYSTERECTOMY
 - ABDOMINAL/VAGINAL/LAPAROSCOPIC

LONG QUESTIONS

1. A 45 year old multipara present with menstrual cycles once in 60-70 days with profuse bleeding for 10-15 days for the past 6 months. Discuss the diagnosis, evaluation and management.
2. How do you classify abnormal uterine bleeding ? Discuss the various options available to manage a 40 year old patient with AUB.
3. What are the causes of heavy menstrual bleeding in a 35 year old woman ? Describe hormonal treatment in AUB.



further reading

- Book - Essentials of gynecology 2nd edition, Lakshmi Sheshadri
- Book – D.C. Dutta's Textbook of Gynecology

The FIGO classification of causes of abnormal uterine bleeding in the reproductive years
Malcolm G. Munro, M.D.^{a,*}, [Correspondence information about the author M.D. Malcolm G. Munro](#)
[Email the author M.D. Malcolm G. Munro](#), Hilary O.D. Critchley, M.D.^b, Ian S. Fraser, M.D.^cFIGO Menstrual Disorders Working Group
[PlumX Metrics](#)