

ABNORMAL UTERINE BLEEDING

Definition: is a descriptive term applied to any alteration in normal pattern of menstrual flow

- . excessive flow
- . prolong flow
- . intermenstrual bleeding

The Normal Menstrual Period

- ▶ Blood loss < 80 ml (average 30–35 ml)
- ▶ Duration of flow 2–7 days (average 4 days)
- ▶ Cycle length 21 – 35 days (average 28 days)



Classical nomenclature of abnormal uterine bleeding

Menorrhagia: prolonged and increased menstrual flow

Metrorrhagia: regular intermenstrual bleeding

Polymenorrhea: menses occurring at less than 21 days' interval

Hypermenorrhea: excessive regular menstrual bleeding

Menometrorrhagia: prolong menses and intermenstrual bleeding

Amenorrhea: absence of menstruation for more than 6 months

Oligomenorrhea: menses at intervals of more than 35 days

Definition

Definition	Interval	Frequency	Amount	Others
Polymenorrhea	Regular	Increase	Normal	< 21 days
Menorrhagia	Regular	Normal	Excessive	>7 days > 80 ml
Oligomenorrhea	Regular	Decrease	Normal	> 35 days
Metrorrhagia	IRregular	Normal	Normal	-----
Menometrorrhagia	IRregular	Normal	Excessive	Combination Meno + Metro

AETIOLOGY

1. organic causes

2. non organic causes this is called dysfunctional uterine bleeding (DUB)

ORGANIC CAUSES

A General causes

- . psychological or emotional can lead to abnormal bleeding through the effect on hypothalamus effecting hormonal control of the ovary or it act on autonomic nerves system supplying genital organ
- . medication: exogenous steroid hormones neuroleptic. anticoagulant and cytotoxic drugs
- . endocrine disorder: abnormal thyroid function, pituitary gland disorder, adrenal disorder, prolactin disorder, Diabetes mellitus
- . Disorder of hemostasis
- . liver and renal disease

B local causes

- . pregnancy complication: implantation bleeding, all types of abortion, ectopic, trophoblastic disease
- . congenital anomalies: double uterus increase surface area

Traumatic: local internal or external injuries, ring pessary

- . IUCD

PID: either local endometritis or severe pelvic infection may affect ovarian function and secondarily abnormal menstruation

- . hormonal producing tumor

- . tumor of the uterus: benign fibroid common cause or malignant endometrial carcinoma

- . end cervical polyp or hyperplasia

Cervical carcinoma

Rarities such as arteriovenous malformation in the uterus

NON ORGANIC CAUSES

- . Known as dysfunction uterine bleeding

- . any abnormal bleeding for which no organic cause can be detected

- . responsible for 50% of abnormal bleeding

- . diagnosis by exclusion

- . classified to: ovulatory & anovulatory causes

Anovulatory cause

. this tend to occur in woman at the extremes of reproductive age and is typically irregular cycle .it is more common in obese women

Threshold bleeding: estrogen produce in amount enough to cause with drawl bleeding but not enough to produce proper proliferative endometrium (thin hypoplastic) this usually occur in adolescent and around menopause

Cystic glandular hyperplasia is the condition in which excessive and contiuos production of estrogen producing proliferative endometrium progress to hyperplasia so columnar epithelium become hypertrophy and stroma also proliferate with polymorph small haemorrhagic area, necrosis and cystic dilation of the gland keeping the appearance of Suisse cheese appearance.

OVULATORY DUB

This pattern is more common in woman aged 35 – 45 and is typically regular heavy and often painful menstruation

Corpus luteum defect :

.corpus luteum slow to degenerate this cause prolong menstrual cycle and progesterone changes within the

endometrium continue for longer time and there is premenstrual spotting

.corpus luteum slow to develop (corpus luteum insufficiency)menstrual loss is prolong may last 15 days

MANGEMENT

History and examination

.Patients will have different idea about heavy period so we have to confirm this is really heavy cycle

Soaked sanitary pad, presence of clots, blood spills over cloths or bedding, take any time off work due to this bleeding, treatment for anemia or blood transfusion

Type of abnormal bleeding whether continuous or regular or intermenstrual bleeding



Examination:

Sign of anemia, sign of endocrine or medical disease that associated with heavy loss. abdominal and pelvic examination, cervix is visualized for polyp or carcinoma, cervical smear and swab

INVESTIGATIONS

- . full blood count: assess severity and ascertain the need for treatment iron therapy or even blood transfusion
- . coagulation screen: especially if history consistent with coagulation disorder
- . pelvic ultrasound: mass fibroid, polyp, drug failure, endometrial thickness ,.....
- . high vaginal and endocervical swab
- . endometrial biopsy: should be performed

If age more than 45, irregular or intermenstrual bleeding, drug therapy has failed

Biopsy is performed either through outpatient Pipelle

Dilation and curettage

Outpatient hysteroscopy

Thyroid function test

Treatment

- .for some woman ,the demonstration that their blood loss in fact normal may be sufficient to reassure them and make further treatment unnecessary
- .when selecting appropriate management for the patient ,it is important to consider and discuss :.patients preference of treatment
- .risk \benefit of each treatment

- .contraceptive requirement complete family or not
- .past medical history
- .any contra indication to medical therapy
- .suitability of anesthetic

MEDICAL TREATMENT:

Mefenamic acid and other NSAIDs

- .reduce blood loss of 20 25 percent
 - .effective analgesia
 - .a number of contra indication like DU and asthma
- Recommended dose 500 mg tds

Tranexamic acid

- .reduction blood loss by 50 percent
- .recommended dose 1 g qds to be taken when menstruating heavily

Combined oral contraceptive pills

- .benefit double up as very effective contraceptive
- .limited by side effect and contra indications ,age smoking ,obesity and family history

Norethisterone:

.cyclical from day 6 to day 26 of menstrual cycle

5 – 10 mg tds

Effective ,oral use but can cause break through bleeding

Levonogestrel intrauterine system (mirena)

.reduce menstrual blood by 95 %

.effective contraceptive

.disadvantages irregular menses and break through bleeding in the first 3 – 9 month after insertion

GnRH agonists

Act on pituitary to stop the production of estrogen which result in amenorrhea

.for short term use because its used limited due to hypo estrogenic state and can cause flushing and sweating

.use for maximum 6 month unless addback HRT

.effective in reducing dysmenorrhea

.can cause irregular bleeding

Dose Zoladex 3.6 mg monthly or Decapeptyl 3 mg monthly

SURGICAL TREATMENT

.failure of medical treatment

.complete family

Endometrial ablation

- .destructive procedures employ the principle that ablation of endometrial lining of the uterus to sufficient depth prevents regeneration of the endometrium
- .reduction blood loss by 95 %
- .different method either resection of endometrium ,thermal ablation ,balloon thermal ablation ,microwave ablation




Hysterectomy

KEY POINT

- . PREGNANCY SHOULD ALWAYS BE CONSIDERED AND EXCLUDED
- . CONTRACEPTIVE HISTORY IS VITAL
- . REGULAR BLEEDING USUALLY INDICATE HORMONAL OR SYSTEMIC CAUSE WHILE IIREGULAR BLEEDING INDICATE LOCAL CAUSE
- . PATIENT AGE IMPORTANT AND MAY REFLECT THE UNDERLYING CAUSE
- . EXTREME REPRODUCTIVE AGE USUALLY BENIGN AN OVULATORY DUB WHILE MIDDLE AGE USUALLY BENIGN ORGANIC PATHOLOGY AND IF DUB USUALLY OVULATORY TYPE

. COAGULATION DEFECT SHOULD BE EXCLUDED IN ANY ADOLECENT WITH ABNORMAL BLEEDING CAUSING SIGNIFICANT ANEMIA OR FAMILY HISTORY OF BLEEDING TENDANCY

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Pictorial blood loss chart (Higham, 1990)										
Pad			<u>Days of bleeding</u>							
			1	2	3	4	5	6	7	8
	1 point									
	5 points									
	20 points									
1p clot	1 point									
5p clot	5 points									
Flooding	25 points									
Score >100 = Menorrhagia										