Proceedings of International Educators Conference
Hosted online from Rome, Italy.
Date: 25th July - 2024
ISSN: 2835-396X Website: econferenceseries.com

UTERINE BLEEDING ABNORMALITIES

Juraev Islombek Izzatullo ugli
Student of 508-Group, Faculty of 1-Treatment

Yanvarova Jasmin Yashin qizi
Student of 510-Group, Faculty of 1-Treatment

Zakirova Nodira Islamovna
Professor of the Department of Obstetrics and Gynaecology №1
Samarkand State Medical University, Samarkand, Uzbekistan

Abstract:
Abnormal uterine bleeding (AUB) is a broad term that describes menstrual irregularities involving the frequency, regularity, duration, and volume of discharge outside of pregnancy. Up to one-third of women experience abnormal uterine bleeding during their lifetime, with disorders most commonly occurring during menstruation and perimenopause. A normal menstrual cycle has a frequency of 24 to 38 days and lasts 2 to 7 days with blood loss of 5 to 80 millilitres. Changes in any of these 4 parameters constitute abnormal uterine bleeding. Old terms such as oligomenorrhoea, menorrhagia and dysfunctional uterine bleeding should be abandoned to use simple terms to describe the nature of abnormal uterine bleeding. Changes to the terminology were first published in 2007, followed by International Federation of Obstetrics and Gynaecology (FIGO) updates in 2011 and 2018. The FIGO systems first define abnormal uterine bleeding and then provide an abbreviation for common etiologies. These descriptions apply to chronic non-gestational AMI. In 2018, the committee added intermenstrual bleeding and defined irregular bleeding as outside the 75th percentile. [l]

Keywords: Abnormal uterine bleeding (AUB), leiomyoma, ovulatory dysfunction, coagulopathies.

Relevance:
The prevalence of abnormal uterine bleeding among women of reproductive age worldwide is estimated to be between 3% and 30%, with a higher incidence during

menstruation and perimenopause. Many studies are limited to heavy menstrual bleeding (HMB), but if irregular and intermenstrual bleeding are included, the prevalence rises to 35% or higher.[l] Many women do not seek treatment for their symptoms, and some components of the diagnosis are objective and others subjective, making it difficult to determine an accurate prevalence.[2] The prevalence of abnormal uterine bleeding is high.

MATERIALS AND METHODS:

PALM-COEIN is a useful acronym provided by the International Federation of Obstetrics and Gynaecology (FIGO) to classify the major etiologies of abnormal uterine bleeding. The first part, PALM, describes structural problems. The second part, COEI, describes nonstructural problems. N stands for "not otherwise classified".

P: Polyp
A: Adenomyosis
L: Leiomyoma
M: Malignant neoplasms and hyperplasia.
C: Coagulopathy
A: Ovulatory dysfunction.
E: Endometrial diseases
Me: Iatrogenic.
N: not otherwise categorised

One or more of the problems listed above may contribute to abnormal uterine bleeding in the patient. Some structural masses, such as endocervical polyps, endometrial polyps, or leiomyomas, may be asymptomatic and not be the primary cause of AMI in a patient.

In the 2018 FIGO system, AUB secondary to anticoagulants has been moved from the category of coagulopathy to iatrogenic. Conditions to be included in the category not otherwise classified include pelvic inflammatory disease, chronic liver disease, and cervicitis. AMI not otherwise classified has a rare aetiology and includes arteriovenous malformations (AVMs), myometrial hyperplasia and endometritis. [1] The clinician should obtain a detailed history of the patient presenting with menstruation-related complaints. Specific aspects of the history include:

- Menstrual history
- When was the first menstruation
- Last menstrual period
- Frequency of menstruation, regularity, duration, volume of discharge
- Frequency can be characterised as frequent (less than 24 days), normal (24 to 38 days) or infrequent (more than 38 days).
- Regularity can be characterised as absent, regular (with fluctuations of +/- 2 to 7 days) or irregular (with fluctuations of more than 20 days).
- The duration can be characterised as long (more than 8 days), normal (about 4 to 8 days) or shortened (less than 4 days).
- The volume of blood flow can be characterised as severe (more than 80 ml), normal (5 to 80 ml) or mild (blood loss less than 5 ml).
- Accurate volume measurements are difficult to determine outside of research facilities; therefore, detailed questions regarding the frequency of hygiene product changes throughout the day, the passage and size of clots, the need to change hygiene products at night, and the sensation of "flooding" are important. "[5]
- Intermenstrual and postcoital bleeding.
- Sexual and reproductive history
- Obstetric history, including number of pregnancies and mode of delivery.
- Desire for conception and subfertility
- Current contraception
- History of sexually transmitted infections (STIs)
- History of the PAP dipstick
- Associated symptoms/Systemic symptoms
- Weight loss
- Pain
- Sack
- Bowel or bladder symptoms
- Signs/symptoms of anaemia
- Signs/symptoms or history of clotting disorders
- Signs/symptoms or history of endocrine disorders
- Current medications
- Family history, including questions regarding coagulopathies, malignancies,

endocrine disorders.

- Social history, including tobacco, alcohol and drug use; occupation; impact of symptoms on quality of life Surgical history
- The physical examination should include:
- Vital signs, including blood pressure and body mass index (BMI)
- Signs of pallor, such as pale skin or mucous membranes.
- Signs of endocrine disruption
- Examination of the thyroid gland for enlargement or soreness.
- Excessive or abnormal hair growth, clitoromegaly, acne, potentially indicative of hyperandrogenism.
- Moon face, abnormal fat distribution, and striae, which may indicate Cushing's syndrome.
- Signs of coagulopathy such as bruising or petechiae.
- Abdominal examination to palpate any masses in the pelvis or abdomen.
- Examination of the pelvic organs: in the mirror and bimanually.
- Papanicolaou smear, if indicated
- STI screening (e.g. gonorrhoea and chlamydia) and wet preparation if indicated.
- Endometrial biopsy if indicated [4]

Laboratory tests may include, but are not limited to, urine pregnancy tests, general blood tests, ferritin determination, coagulation tests, thyroid function tests, gonadotropins, and prolactin.

Imaging studies may include transvaginal ultrasound, MRI and hysteroscopy. Transvaginal ultrasound does not expose the patient to radiation and can detect uterine size and shape, leiomyomas (myomas), adenomyosis, endometrial thickness and ovarian abnormalities. It is an important tool and should be obtained early in the investigation of abnormal uterine bleeding. MRI provides detailed images that may be useful in surgical planning, but it is expensive and is not a first-line imaging modality in patients with AMI. Hysteroscopy and sonohysterography (transvaginal ultrasound with intrauterine contrast) are useful in situations where endometrial polyps are noted, transvaginal ultrasound images are inconclusive, or submucosal leiomyomas are observed. Hysteroscopy and sonohysterography are more invasive but can often be performed in an office setting.

Endometrial sampling may not be necessary for all women with AMI, but should be performed in women at high risk of hyperplasia or malignancy. Endometrial biopsy is considered the first-line test in women with AMI aged 45 years and older. Endometrial sampling should also be performed in women younger than 45 years of age with uncontrolled estrogen exposure, such as women with obesity and/or polycystic ovary syndrome (PCOS), and in cases of treatment failure or persistent bleeding. [6]

RESULTS:

Treatment of abnormal uterine bleeding depends on multiple factors such as the etiology of AMI, desire to conceive, clinical stability of the patient and other comorbidities. Treatment should be individualised based on these factors. In general, medical options are favoured as initial treatment for AMI.

For acute abnormal uterine bleeding, the first line of medical treatment is hormonal methods. Intravenous (w/v) conjugated equine estrogen, combined oral contraceptives (COCs), and oral progestins are all treatment options for acute AMH. Tranexamic acid prevents fibrin degradation and can be used to treat acute AMC. Foley bulb tamponade of uterine bleeding is a mechanical option for the treatment of acute AMI. It is important to assess the patient's clinical stability and replenish volume with intravenous fluids and blood products in an attempt to stop acute abnormal uterine bleeding. Desmopressin given intranasally, subcutaneously, or intravenously can be administered for acute AMK secondary to
the coagulopathy of Willebrand disease. Some patients may require dilation and scraping.

Based on the PALM-COEIN acronym for the etiology of chronic AMC, specific treatment options for each category are listed below:

- Polyps are treated surgically.
- Adenomyosis is treated by hysterectomy. Adenomyomectomy is performed less frequently.
- Leiomyoma (fibroma) can be treated medically or surgically, depending on the patient's desire for fertility, comorbidities, pressure symptoms, and uterine cavity deformity. Surgical options include uterine artery embolisation, endometrial ablation or hysterectomy. Medical treatment options include intrauterine coil releasing levonorgestrel, GnRH agonists, systemic progestins and tranexamic

acid in combination with non-steroidal anti-inflammatory drugs (NSAIDs).

- Malignancy or hyperplasia can be treated with surgery, +/- adjuvant treatment depending on the stage, high-dose progestins when surgery is not possible, or palliative therapy such as radiation therapy.
- Coagulopathies leading to AMI can be treated with tranexamic acid or desmopressin (DDAVP).
- Ovulatory dysfunction can be treated by lifestyle modification in women with obesity, SPCA or other conditions in which anovulatory cycles are suspected. Endocrine disorders should be corrected with appropriate medications, such as cabergoline for hyperprolactinaemia and levothyroxine for hypothyroidism.
- Endometrial diseases have no specific treatment because the mechanisms are not fully understood.
- Iatrogenic causes of AMI should be addressed with consideration of the drug and/or drugs causing the condition. If a particular contraceptive method is the suspected culprit for AMI, alternative methods such as levonorgestrel - releasing IUD, combined oral contraceptives (monthly or extended cycles) or systemic progestins can be considered. If other medications are suspected and cannot be discontinued, the above methods may also help control AMI. Individualised therapy should be tailored to the patient's reproductive wishes and comorbidities.
- Not otherwise classified causes of AMI include conditions such as endometritis and AVMs. Endometritis can be treated with antibiotics and AVMs can be treated with embolisation.[6][4][5]

The prognosis for abnormal uterine bleeding is favourable but also depends on the etiology. The main goal of evaluation and treatment of chronic AMH is to rule out serious diseases such as malignancy and to improve the patient's quality of life, taking into account current and future fertility goals as well as other comorbidities that may affect treatment or symptoms. Prognosis also varies between medical and surgical treatment. Non-hormonal treatment with antifibrinolytic and non-steroidal anti-inflammatory drugs has been shown to reduce menstrual blood loss by up to 50%. [5] Oral contraceptive pills may be effective, but data from randomised trials are scarce. In women with heavy menstrual bleeding as a primary symptom of AMI, the levonorgestrel-releasing IUD has been shown to be more effective than other treatments and to improve patients' quality of life. Injectable progestagens and GnRH agonists can cause amenorrhoea in 50% and 90% of women, respectively.

However, injectable progestagens can cause the side effect of breakthrough bleeding, and GnRH agonists are usually only used for a 6-month course due to their side effects associated with low estrogen levels.

With regard to surgical methods, randomised clinical trials and reviews have shown that endometrial ablation is more effective in controlling bleeding 4 months after surgery, but there was no difference after 5 years compared with medical treatment. When studies compared hysterectomy with levonorgestrel-releasing IUD, the hysterectomy group had better outcomes after 1 year. There was no difference in quality of life after 5 and 10 years, but many women in the group receiving the levonorgestrel-releasing IUD underwent hysterectomy after 10 years. [5]

Conclusions: Obstetrician-gynaecologist consultation should be started early for proper evaluation and treatment. Depending on the etiology of abnormal uterine bleeding, other specialities may need to be involved in the care of the patient. For coagulopathies, consultations with a haematologist/oncologist are necessary. If the patient wishes to undergo uterine artery embolisation, an interventional radiologist should be consulted. Both gynaecological oncology and haematology/oncology may be required for proper treatment of malignancy.

Globally, many women do not report abnormal uterine bleeding to their health care providers, so it is important to create an atmosphere of open discussion about menstruation. Primary care physicians should ask women about their last menstrual cycle, regularity, desire to become pregnant, contraception and sexual health. If abnormal uterine bleeding can be detected at the primary health-care level, then history taking, examination and testing can be done, and appropriate counselling can be arranged.

Patients with abnormal uterine bleeding should be informed of any relevant lifestyle changes, treatment options and when to seek emergency treatment.

Literature used:

1. Munro MG, Critchley HOD, Fraser IS, FIGO Menstrual Disorders Committee. The two FIGO systems for normal and abnormal uterine
2. bleeding symptoms and classification of causes of abnormal uterine bleeding in the reproductive years: 2018 revisions. Int J Gynaecol Obstet. 2018 Dec;143(3):393-408.
3. Liu Z, Doan QV, Blumenthal P, Dubois RW. A systematic review evaluating

health-related quality of life, work impairment, and health-care costs and utilisation in abnormal uterine bleeding. Value Health. 2007 May-Jun; 10(3): 183-94.

4. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4970656/
5. Cheong Y, Cameron IT, Critchley HOD. Abnormal uterine bleeding. Br Med Bull. 2017 Sep 01; 123(1): 103-114.
6. Whitaker L, Critchley HO. Abnormal uterine bleeding. Best Pract Res Clin Obstet Gynaecol. 2016 Jul;34:54-65. Munro MG, Critchley HOD, Fraser IS, FIGO Menstrual Disorders Committee. The two FIGO systems for normal and abnormal uterine bleeding symptoms and classification of causes of abnormal uterine bleeding in the reproductive years: 2018 revisions. Int J Gynaecol Obstet. 2018
7. ACOG committee opinion no. 557: Management of acute abnormal uterine bleeding in nonpregnant reproductive-aged women. Obstet Gynecol. 2013 Apr; 121(4):891-896.