PALM-COEIN: Your AUB Counseling Guide
In the U.S, more than 10 million women between the ages of 35 and 49 are affected by AUB.

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Symptoms

- Menorrhagia
- Infertility
- Post menopausal bleeding

Medical relevance

- May be asymptomatic and/or may contribute to AUB. Potential for malignancy and/or infertility.

Some treatment options include:
Medical therapy, NovaSure® endometrial ablation, MyoSure® tissue removal, curettage
AUB-P Polyps

IMAGING AND DIAGNOSIS

Sonohysterography (SIS)

- Substantial evidence exists to indicate that sonohysterography is superior to transvaginal ultrasonography in the detection of intracavitary lesions, such as polyps and submucosal leiomyomas.

- SIS provides better information on the general size and location of cavitary abnormalities in comparison to TVUS.

Hysteroscopy

- Hysteroscopy offers direct visualization of the uterine cavity including exact information on specific size and location.

- Hysteroscopy allows the ability to see and treat intracavitary pathology simultaneously.
AUB-A Adenomyosis

Symptoms
- AUB
- Dysmenorrhea
- Enlarged uterus

Medical relevance
- Endometrial tissue within the myometrium. Often found by MRI, the relationship between Adenomyosis and AUB is not well understood.

Some treatment options include:
NSAIDs, hormone therapy, uterine artery embolization, NovaSure® endometrial ablation, hysterectomy
AUB-A Adenomyosis

RADIOLOGIC FINDINGS

- Localized thickening of junctional zone
- Poorly defined endometrial borders
- High signal intensity spots MRI/TVUS

IMAGING AND DIAGNOSIS

Transvaginal ultrasound

- Transvaginal ultrasonography may perform less well in the presence of an enlarged uterus or with coexisting myomas.

MRI

- Some experts recommend transvaginal ultrasonography as the initial screening test for AUB and MRI as a secondline test when the diagnosis is inconclusive, when further delineation would affect patient management, or when coexisting uterine myomas are suspected.
AUB-L Leiomyoma

Symptoms
- UB
- Pelvic pressure and/or heaviness
- Urinary frequency
- Dysmenorrhea
- Abdominal enlargement
- Pregnancy loss
- Infertility

Risk factors
- Nullparity
- Obesity
- Family history
- Hypertension
- African-American

Some treatment options include:
Hormone therapy, MyoSure® tissue removal, uterine artery embolization, myomectomy, hysterectomy
AUB-L Leiomyoma

IMAGING AND DIAGNOSIS

Transvaginal ultrasound

- The primary imaging test of the uterus for the evaluation of AUB is transvaginal ultrasonography.4

Sonohysterography (SIS)

- If TVUS images are not adequate or further evaluation of the cavity is necessary, then sonohysterography (SIS) or hysteroscopy (preferably in the office setting) is recommended.6
Risk factors

- Obesity
- Prolonged anovulation
- Post menopausal estrogen replacement therapy
- Tamoxifen
- Family history
- Hypertension
- Diabetes

Some treatment options include:
Hormone therapy, radiation therapy, chemotherapy, hysterectomy
AUB-M
Malignancy/Hyperplasia

Diagnostic approach

- Endometrial tissue sampling should be performed in patients with AUB who are older than 45 years as a first-line test.\textsuperscript{8}

- Endometrial sampling also should be performed in patients younger than 45 years with a history of unopposed estrogen exposure (such as seen in obesity or PCOS), failed medical management, and persistent AUB.\textsuperscript{8}

- Endometrial biopsy has high overall accuracy in diagnosing endometrial cancer when an adequate specimen is obtained and when the endometrial process is global.\textsuperscript{8}
AUB-C Coagulopathy

INHERITED (Von Willebrand)

Examples

- Von Willebrand disease (13%)
- Carrier states for factor deficiencies
- Idiopathic thrombocytopenia purpura (platelet # abnormalities)
- Platelet dysfunctions (platelet function abnormalities)
- Leukemia
- Liver dysfunction

Diagnostic approach

- Initial tests should include a CBC with platelets, prothrombin time, and partial thromboplastin time (fibrinogen or thrombin time are optional).
- Depending on the results of the initial tests, specific tests for von Willebrand disease or other coagulopathies may be indicated.

Some treatment options include:

- Therapeutic environment, gonadal steroid agents, antifibrinolytic therapy, NovaSure® endometrial ablation
AUB-O
Ovulatory Disorders

PREVIOUSLY CALLED “DUB” ACQUIRED

Symptoms
- Irregular bleeding patterns

Possible causes
- Hypothalamic dysfunction (stress)
- Polycystic ovary syndrome (PCOS)
- Eating disorders

Diagnostic approach
- Laboratory testing (pregnancy test, complete blood count, measurement of thyroid-stimulating hormone (TSH) levels and cervical cancer screening). Testing for Chlamydia trachomatis should be considered.

Some treatment options include:
Medical therapy, gonadal steroids, NovaSure® endometrial ablation, IUD, hysterectomy
AUB-E
Endometrial Disorders

REQUIRES UNDERSTANDING OF STRUCTURED HISTORY AND EXCLUSION

Definition
- Ovulatory cycle with no structural or systematic abnormalities

Possible causes
- Impaired vasoconstriction (ratio of PGF2α:prostacyclin)
- Enhanced fibrinolysis
- Localized hemostatic disorder

Diagnostic approach
- No commercial testing available

Some treatment options include:
Medical therapy, gonadal steroids, NovaSure® endometrial ablation, IUD, hysterectomy
AUB-I iatrogenic

REQUIRES UNDERSTANDING OF STRUCTURED HISTORY AND EXCLUSION

Examples
- Warfarin
- Heparin
- IUD
- Oral contraceptive

Possible causes
- BTB a result of poor patient compliance
- Bleeding induced by gonadal steroidal therapy

Diagnostic approach
- Targeted medical history

Some treatment options include:
Estrogen/Progestin contraceptive agents, therapeutic agents
AUB-N Not Classified

REQUIRES UNDERSTANDING OF STRUCTURED HISTORY AND EXCLUSION

Examples

- Ateriovenous malformations
- Associations with some systematic diseases
- Endometritis

Diagnostic approach

- Doppler scanning
- Biopsy and cultures\(^\text{3,8}\)
References


