Abnormal Uterine Bleeding
In Reproductive Aged Women..

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KAUH, Jeddah.
Menorrhagia: Heavy menstrual bleeding (>80 mL)

Metrorrhagia: Bleeding between periods

Polymenorrhea: Bleeding that occurs more often than every 21 days

Oligomenorrhea: Bleeding that occurs less frequently than every 35 days

Definitions
Abnormal uterine bleeding
Heavy ... inter-menstrual

Classification
PALM-COEIN

PALM
Polyp
Adenomyosis
Leiomyoma
Malginancy

COEIN
Coagulapthy
Ovulatary dysfunction
Endometrial
Itrogenic
Not yet psecified

International Federation of Gynecology and Obstetrics, 2011
A: USS view of polyp
B: Hysteroscopic view of polyp
C: MRI of adenomyosis
D: USS of adenomyosis
E: Hysterectomy specimen containing fibroids
F: Hysterectomy specimen containing endometrial cancer
G: Histology of endometrioid carcinoma
H: Excessive bruising
I: USS of polycystic ovary
J: Progesterone receptor localisation in secretory phase
K: levonorgestrel-releasing intrauterine system (LNG-IUS)
L: Doppler USS of AV malformation
M: Doppler USS of endometrial pseudo-aneurysm
Diagnosis

History

Menstrual bleeding hx (severity & assoc pain)

FHx: AUB/ bleeding disorders

Meds: warfarin, heparin, NSAID, OCP, ginkgo, ginseng, motherwort
Diagnosis Physical

Bleeding disorder: petechiae, pallor, signs of hypovolemia

PCOS: Obesity, Hirsutism, Acne

DM: acanthosis nigricans

Thyroid dysfunction: cold/heat intolerance, dry skin, lethargy, proptosis
Diagnosis: Labs and Imaging

Labs
- Pregnancy test
- CBC

Targeted screening for bleeding disorder (when indicated)

**TSH**
- Gonorrhea/Chlamydia in high risk patients

Endometrial biopsy

Imaging:
- TVUS
- Sono-hysterography
- Hysteroscopy
- MRI
Common Differential by Age

13-18

- Anovulation
- Tumor
- OCP
- Coagulopathy
- Pelvic infection
Common Differential by Age

19-39

- Pregnancy
- Endometrial hyperplasia and cancer
- Structural Lesions (leiomyoma, polyp)
- OCP
- Anovulatory cycles (PCOS)
Common Differential by Age

**40-menopause**

- Anovulatory bleeding
- Leiomyoma
- Endometrial atrophy
- Endometrial hyperplasia/carcinoma

**40-Menopause**
Management

- **Medical management** should be initial treatment for most patients

- **Need for surgery** is based on various factors (stability of patient, severity of bleed, contraindications to medical management, underlying cause)

- **Type of surgery** dependent on above + desire for future fertility

- **Long term maintenance therapy** after acute bleed is control **Treatment of Anemia**
Determine acute vs. chronic
Acute

- If acute, signs of hypovolemia/hemodynamic instability?

IV

- If yes, IV access with 1 to 2 large bore IV; prepare for transfusion and clotting factor replacement

RX

- Once stable, evaluate etiology (PALM-COEIN)
- Determine Treatment
Medical Management

Conjugated Equine Estrogen

Combined OCPs

Medroxy-progesterone Acetate

Tranexamic Acid
Medical Management

Long term therapy: levonorgesterel IUD, OCPs, progestin (PO or IM);

Unopposed estrogen should not be used long term

Treatments differ for pts with bleeding disorders

Ex: desmopressin can help in vWF disease, etc
Avoid NSAIDs
Surgical Management Options

- D&C
- Endometrial Ablation
- Uterine Artery Embolization
- Hysterectomy
Management

- **Drug**: Conjugated equine estrogren

- **Suggested Dose & Schedule**: 25 mg IV, Every 4–6 hours for 24 hours

• Drug
  Combined oral contraceptives†

• Suggested Dose Dose Schedule
  • Monophasic combined oral contraceptive that contains 35 micrograms of ethinyl estradiol
  • Three times per day for 7 days

• Source
- **Drug**
  Medroxyprogesterone acetate‡

- **Suggested Dose**
  - **Dose Schedule**
  - 20 mg orally
  - Three times per day for 7 days

- **Source**
• **Drug**
  Tranexamic acid

• **Suggested Dose**
  Dose Schedule
  • 1.3 g orally or
  • 10 mg/kg IV (maximum 600 mg/dose)
  • Three times per day for 5 days (every 8 hours)

• **Source**
### Key Recommendations For Practice

<table>
<thead>
<tr>
<th>CLINICAL RECOMMENDATION</th>
<th>EVIDENCE RATING</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents with excessive uterine bleeding should be evaluated for bleeding disorders, such as von Willebrand disease.</td>
<td>C</td>
<td>Consensus guidelines</td>
</tr>
<tr>
<td>Saline infusion sonohysterography is more sensitive and specific for the detection of endometrial abnormalities than transvaginal ultrasonography.</td>
<td>C</td>
<td>Meta-analysis and a small prospective comparison trial</td>
</tr>
<tr>
<td>The levonorgestrel-releasing intrauterine system (Mirena) is an effective treatment for menorrhagia, with patient satisfaction scores similar to endometrial ablation and hysterectomy.</td>
<td>A</td>
<td>Cochrane review and randomized trial</td>
</tr>
<tr>
<td>NSAIDs are effective in reducing heavy menstrual blood flow. There is no evidence that one NSAID is more effective than another.</td>
<td>B</td>
<td>Cochrane review of nine small randomized controlled trials</td>
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</tbody>
</table>
“All women of reproductive age are at risk of iron deficiency. It is estimated that 30% of women globally are anaemic, with at least half of these cases arising from iron deficiency.”

“Among pregnant women, IDA has been associated with increased risks of low birth weight, prematurity and maternal morbidity.”

“Iron deficiency and anaemia reduce the work capacity of individuals and entire populations, bringing serious economic consequences and obstacles to national development.”
Worldwide, 30% of women of reproductive age are anaemic.

Variations in global prevalence reflect economic status and associated nutritional deficiencies.
Anemia

- Disease progression
- Hospitalizations
- Blood transfusion
Iron in the Body can be Distinguished Based on Functional and Physiological Roles

Global DALYs attributable to the 25 leading risk factors in 2010

- High blood pressure
- Tobacco smoking
- Household air pollution from solid fuels
- Diet low in fruit
- Alcohol use
- High BMI
- High fasting plasma glucose level
- Childhood underweight
- Exposure to ambient particulate-matter
- Physical inactivity
- Diet high in sodium
- Diet low in nuts and seeds
- Iron deficiency
- Suboptimal breast-feeding
- High total cholesterol level
- Diet low in whole grains
- Diet low in vegetables
- Diet low in seafood n-3 fatty acids
- Drug use
- Occupational risk factors for injuries
- Occupation-related low back pain
- Diet high in processed meat
- Intimate-partner violence
- Diet low in fibre
- Lead exposure

Rank 13

ID/IDA – global leaders in disability

IDA is the **third** leading cause of disability.\(^1,2\)

ID ranks as the **thirteenth** leading risk factor of YLDs (year life disability).

The high prevalence of ID/IDA has important adverse economic consequences.

“**Iron deficiency and anaemia reduce the work capacity of individuals and entire populations, bringing serious economic consequences and obstacles to national development**”\(^5\)
Most common causes of ID/IDA

**Decreased iron intake**
- Vegetarian or otherwise unbalanced diet
- Eating disorder
- Disease-related anorexia

**Blood loss**
- Heavy or prolonged menstrual bleeding (HMB)
- Delivery
- Gastrointestinal bleeding
- Surgery
- Blood donation

**Decreased iron absorption**
- Coeliac disease
- Malabsorption
- Chronic inflammatory or malignant diseases
- Concomitant intake of drugs

**Increased iron demand**
- Pregnancy and lactation
- Infancy
- Adolescence
- Endurance sport

ID/IDA
ID/IDA in the life course of women

AUB & HMB

Post-partum

Pregnancy

Medical treatment options:
1. Slow correction of ID
2. Blood loss
3. Poor outcomes with ID

Impact of ID/IDA on fertility

Greater risk of HMB, and subsequent blood loss, in older women

Normal or operative delivery and subsequent blood loss
Heavy menstrual bleeding is the leading cause of iron deficiency/iron deficiency anaemia in women.
Consequences of HMB & AUB associated with ID

<table>
<thead>
<tr>
<th>Impact of Bleeding</th>
<th>Also associated with ID</th>
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<tbody>
<tr>
<td>• Weakness</td>
<td>+</td>
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<tr>
<td><strong>• Fatigue</strong></td>
<td>+</td>
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<tr>
<td>• Unexplained weight loss</td>
<td></td>
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<tr>
<td>• Mood swings</td>
<td></td>
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<tr>
<td><strong>• Impaired cognitive function</strong></td>
<td>+</td>
</tr>
<tr>
<td>• Impaired sexual function</td>
<td>+ (physical performance)</td>
</tr>
<tr>
<td>• Psychological morbidity</td>
<td>+ (depression)</td>
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<tr>
<td>• May impact QoL.</td>
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النزيف الرحمي كيفية وقفه

1. الكمادات الباردة
2. النشا
3. القرفة
علاج النزيف الرحمي بالأعشاب

- خلطة القصب مع ماء الورد، ثم يشرب على الريق.

- خلط ستة وثلاثين غراماً من البقدونس وال الكرفس، ثم يسكب عليه الماء، ثم تضعه في قدر على النار إلى أن يغلي ثمّ تصفيفه ويبشرب ساخناً.

- غلي قشر الرمان ثم يستخدم كحقنة مهبلية.

- خلط دقيق القمح مع العفص، ثم يسحق ويغلي وأخيراً يضع على السرة.
علاج النزيف

تقرأ الفاتحة وأيات الشفاء مع الآيات الآتية عدد 7 مرات على ماء ويشرب منه يومياً وتقرأ على الإنسان:

(قبل يا أرض ابلعى ماءك و يا سماء أقلعي وغيض الماء و قضى الأمر و استوت على الجودي و قيل بعدا للقوم الظالمين)
- سورة هود آية 44

(قل آرائك إن أصبَح ماؤكم غويرا فَمَن يأتَيكَ مَاء مَعِين)
- سورة الملك آية 30

(لا يصدعون عنها ولا ينزفون)
- سورة الواقعة آية 19

(لا فيها غول ولاهم عنها ينزفون)
- سورة الصافات آية 47
Conclusion

Acute Bleeding

Chronic Bleeding

Associated Anemia