Heavy Menstrual Bleeding

See also:

- Intermenstrual Bleeding
- Postcoital Bleeding
- Post Menopausal Bleeding

Disclaimer

Contents

Red Flags

- Suspicion of endometrial cancer or hyperplasia

Background

About Heavy Menstrual Bleeding (HMB)

- *HMB is defined as excessive menstrual blood loss that interferes with the woman's physical, social, or emotional wellbeing and can occur alone or with other symptoms, such as pain.*
- *The average menstrual cycle has bleeding for 7 days with a cycle length between 21 and 35 days.*
- *HMB affects 25% of women of reproductive age.*
- *Women who have always had heavy periods may consider their bleeding pattern to be normal.*

Assessment

Practice Point - Exclude other causes

Exclude ectopic pregnancy or miscarriage.

---

1. Check ***history,*** including:

History

- *Menstrual history – consider a menstrual diary (printable version) or suggest the patient download an app.*
- *Duration of symptoms – exclude any recent change which could indicate alternate pathology e.g., pregnancy, malignancy.*
- *Presence of abnormal bleeding patterns e.g., irregular or intermenstrual bleeding.*
- *Pelvic pain or pressure symptoms.*
- *Symptoms of anaemia.*
- *Symptoms of related medical illness e.g., thyroid disease, haematological disorders, polycystic ovarian syndrome (PCOS), diabetes, liver disease, renal disease, obesity, hyperandrogenism.*
- *Other abnormal bleeding – surgery, invasive procedures, dental work, recurrent or severe epistaxis, excessive bruising and/or unusual sites, or family history of coagulation disorder.*
- *Use of hormonal contraception or hormone replacement therapy (HRT).*
- *Gynaecological history, including cervical screening history.*
- *Reproductive history, desire for pregnancy.*
- *Medications, including herbal and over-the-counter medications.*
- *Impact on daily activities and quality of life.*
- *Previous treatments, expectations from treatment.*

- ***volume of blood loss.***

Volume of blood loss

Ask about:

- *how often tampons or pads or both need to be changed during heavy flow.*
- *whether the patient has to change tampon or pad during the night.*
- *presence, size, and frequency of any clots passed.*
- *presence of flooding through clothing e.g., whether patient must use tampons and pads together, sleep on towels at night.*
- *if the patient is unable to leave the house on heaviest days.*

- ***risk factors for endometrial cancer.***

Risk factors for endometrial cancer

- *Weight 90 kg or more, particularly with co-morbid hypertension and diabetes*
- *History of chronic anovulation, polycystic ovarian syndrome (PCOS), or infertility*
- *Nulliparity*
- *Exposure to unopposed oestrogen, either prescribed over-the-counter (OTC) or bioidentical*
- *Exposure to tamoxifen*
- *Endometrial thickness over 4 mm in postmenopausal women*
- *Pelvic ultrasound showing cystic endometrial changes*
- *Strong family history of endometrial or colon cancer*

2. Perform ***examination.***

Examination

- *Examine the abdomen and pelvis (speculum and bimanual examination), assessing for tenderness, masses and uterine size, position, and mobility.*
- *Avoid pelvic examination in a patient who is not yet sexually active.*
- *If indicated in history, examine for:*
    - *anaemia and hypovolaemia.*
    - *signs of insulin resistance and hyperandrogenism.*
    - *hypothyroidism.*

3. Consider ***differential diagnosis.***

Differential diagnosis

Anovulatory cycles – common causes:

- *Polycystic ovarian syndrome (PCOS)*
- *Adolescence – common up to 2 years after menarche*
- *Perimenopause*

Gynaecological causes:

- *Pregnancy-related e.g., miscarriage, ectopic, molar pregnancy*

- *Fibroids, endometrial polyps*
- *Adenomyosis*
- *Endometrial hyperplasia or endometrial cancer*
- *Pelvic inflammatory disease (PID)*
- *Other genital tract malignancies*

Medical causes:

- *Thyroid disease – usually hypothyroidism*
- *Haematological e.g., von Willebrand disease, other coagulopathies, leukaemia*

Iatrogenic causes:

- *Blood-thinning medication e.g., warfarin, novel oral anticoagulants (NOACs), aspirin, clopidogrel*
- *Contraceptive problems including intrauterine devices (IUDs)*

4. Arrange ***investigations*** according to risk and indications.

Investigations

- *Pregnancy test.*
- *FBE, iron studies.*
- *Thyroid stimulating hormone (TSH) if indicated.*
- *Offer STI screen if appropriate.*
- *Cervical screening test – consider co-test.*
- *Consider coagulation profile (APTT, INR, fibrinogen), including testing for von Willebrand disease if HMB since menarche or personal/family history of abnormal bleeding.*
- *Transvaginal ultrasound on day 5 to 10 of cycle especially if:*
  - *abnormal pelvic examination e.g., bulky uterus, mass.*
  - *aged ≥ 45 years.*
  - *risk factors for endometrial cancer.*
  - *failed medical treatment (up to 6 months' trial).*

A transabdominal pelvic ultrasound can be performed for women who have not become sexually active or have declined a transvaginal pelvic ultrasound.

Management

1. If uncontrolled vaginal bleeding or haemodynamically unstable, arrange immediate gynaecology assessment.
2. If clinically stable, determine whether immediate ***medical management of acute heavy bleeding*** is required.

Medical management of acute heavy bleeding

Consider medication contraindications including thromboembolism risk before prescribing.

- *First line – oral tranexamic acid 1 to 1.5 g every six to eight hours, until bleeding stops.*
- *Second line – oral high-dose progestogens every 4 hours until bleeding stops e.g.:*

- *norethisterone 5 to 10 mg*
- *medroxyprogesterone 10 mg (maximum daily dose 80 mg)*

Once bleeding stops, stagger a slow reduction over several days (i.e., reduce dose every 2 days until stopped). Stopping progesterone too quickly will trigger a repeat bleed.

- *Third line – combined hormonal contraceptives (containing at least 30 microgram ethinyloestradiol) every 6 hours until bleeding stops. Re-evaluate after 48 hours.*

Antiemetics may be required with high-dose hormone treatment.

3. Manage any causative illness as indicated e.g., fibroids, endometriosis, polycystic ovarian syndrome (PCOS), sexually transmitted infection (STI).

4. If possible underlying bleeding disorder, refer for urgent or routine haematology assessment.

5. Request urgent or routine gynaecology assessment if:
   - ***features suspicious of endometrial cancer*** found on ultrasound.

Features suspicious of endometrial cancer

Irregular endometrium, cystic, or focal lesion on ultrasound.

Note: endometrial thickness depends on the stage of the menstrual cycle and may vary between individual patients. It is not generally used for diagnosis in premenopausal women.

- aged ≥ 45 years, or aged > 35 years with one or more risk factors for endometrial cancer.
- heavy menstrual bleeding associated with intermenstrual bleeding or postcoital bleeding.
- abnormal cervical screening or co-test.
- endometrial polyp.
- fibroids.

Start medical management for symptomatic relief while awaiting assessment.

6. If patient aged < 35 years with no risk factors and scan is normal, patient can trial medical treatment before arranging referral:
   - Treat any iron deficiency anaemia.
   - ***Non-hormonal treatment options***

Non-hormonal treatment options

- *Tranexamic acid:*
  - *Consider contraindication of thromboembolism risk before prescribing.*
  - *Give 500 mg orally (2 or 3 tablets every six to eight hours, for three to four days), and/or:*
- *Nonsteroidal anti-inflammatory drugs (NSAIDs):*
  - *Choice of drug is based on patient preference and cost.*
  - *Start at the onset of menses and continue for the first 3 to 4 days of the cycle.*

- *Maintain a therapeutic dose:*
  - *Ibuprofen – 200 to 400 mg orally three to four times a day. Maximum daily dose 1600 mg, or*
  - *Mefenamic acid – 500 mg orally three times a day, or*
  - *Naproxen – 500 mg orally initially then 250 mg every six to eight hours. Maximum daily dose 1250 mg.*

- Hormonal treatment options – consider medication contraindications including thromboembolism risk before prescribing:

Oral progestogen (non-contraceptive)

Oral progestogen (non-contraceptive)

- *Norethisterone (Primolut N) or medroxyprogesterone (Provera).*
- *Start at 5 mg orally once daily – can increase up to 3 times a day.*
- *Generally short-term (1 to 2 months).*
- *Can be used continuously or cyclically from day 5 to day 25 of the cycle.*
- *If spotting occurs, the dose can be doubled.*
- *If spotting ceases, and the patient experiences progestogenic side-effects, consider reducing to the starting dose.*

Combined hormonal contraceptives (CHCs)

Combined hormonal contraceptives (CHCs)

30 or 35 micrograms of oestrogen:

- *Causes ovarian suppression.*
- *Trial for at least 3 months, and continue if effective.*
- ***Tri-cycling or continuous use** can reduce the number of withdrawal bleeds, helping to regulate bleeds and pain.*

Tri-cycling or continuous use

Tri-cycling:

- *Omit the placebo tablets in the packet and run 3 packets of hormone tablets together.*
- *Breakthrough bleeding can sometimes occur when running packs together. If this is annoying for the patient, suggest a hormone-free break for 4 to 7 days (shorter, 4-day breaks result in fewer hormone withdrawal side-effects and better contraceptive efficacy).*
- *After a hormone-free break, recommence running 3 more packs together.*
- *During the hormone break the patient will have a withdrawal bleed.*

Continuous use:

- *Studies on continuous use (no hormone-free intervals) show no increase in serious adverse events regardless of duration of use.*
- *If breakthrough bleeding occurs, manage as suggested in the tri-cycling regimen or reassure that breakthrough bleeding is likely to improve with time.*

Levonorgestrel intrauterine device (Mirena)

Levonorgestrel intrauterine device (Mirena)

- *For patients with heavy bleeding.*
- *PBS-restricted benefit available for idiopathic menorrhagia where oral treatments are ineffective or contraindicated.*

Medroxyprogesterone acetate (e.g., Depro-Provera)

Medroxyprogesterone acetate

- *Injectable contraceptive progestogens*
- *Suppresses ovulation*
- *When starting, it may take a few injections to achieve infrequent bleeding or amenorrhoea.*
- *Reduced bone density can occur:*
  - *If at significant risk of osteoporosis, use alternative regimes.*
  - *Advise all patients on strategies to maintain bone strength.*

Dose:

- *Deep intramuscular injection:*
  - *150 mg within first 5 days of cycle, or within first 5 days after childbirth.*
  - *Delay until 6 weeks after childbirth if breastfeeding.*
- *For long-term contraception:*
  - *Repeat every 12 weeks.*
  - *If more than 12 weeks and 5 days, rule out pregnancy before the next injection and advise the patient to use additional* contraceptive measures e.g., barrier for 14 days after the injection.

7. If a trial of medical treatment is unsuccessful, request urgent or routine gynaecology assessment.

Referral

- If uncontrolled vaginal bleeding or haemodynamically unstable, arrange immediate gynaecology assessment.
- If possible underlying bleeding disorder, refer for urgent or routine haematology assessment.
- Request urgent or routine gynaecology assessment if:
  - features suspicious of endometrial cancer found on ultrasound.
  - aged ≥ 45 years or aged > 35 years with one or more risk factors for endometrial cancer.
  - heavy menstrual bleeding associated with intermenstrual bleeding or postcoital bleeding.
  - abnormal cervical screening or co-test.
  - endometrial polyp.

- fibroids.
- persistent heavy bleeding that has not responded to an adequate trial of medical management.

Information

For health professionals

Further information

- Australian Commission on Safety and Quality in Health Care – Heavy Menstrual Bleeding Clinical Care Standard
- Australian Doctor – Managing Adolescent Menorrhagia [login required]
- National Institute for Health and Care Excellence (NICE) – Heavy Menstrual Bleeding [NICE guideline NG88]
- The Royal Children's Hospital Melbourne – Adolescent Gynaecology: Heavy Menstrual Bleeding

For patients

- Jean Hailes for Women's Health – Heavy Bleeding
- The Royal Women's Hospital – What Causes Heavy Periods

References

1. Read CM. New regimens with combined oral contraceptive pills – moving away from traditional 21/7 cycles. Eur J Contracept Reprod Health Care. 2010;15 Suppl 2:S32-S41.

Select bibliography

- Cancer Australia. Abnormal Vaginal Bleeding in Pre- and Peri-menopausal Women. Surry Hills, NSW: Cancer Australia; 2011.
- eTG complete. Melbourne: Therapeutic Guidelines; Menstrual disorders. 2019. Subscription required.

Last Reviewed: December 2019

Disclaimer