Heavy menstrual bleeding: Choosing the right pathway

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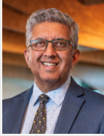
About the Expert



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Background

Heavy menstrual bleeding is a significant problem in New Zealand and globally, affecting at least 10% of women.

When assessing a patient consider if there is an identifiable (PALM -COEIN) cause for the HMB.[1] This useful FIGO mnemonic classification system facilitates effective history taking, investigations and physical examination. The '**PALM**' categories describe structural aetiologies, which can be diagnosed by imaging and/or histopathological evaluation: **P**olyp, **A**denomyosis, **L**eiomyoma (fibroids), and **M**alignancy and hyperplasia. The '**COEIN**' categories describe non-structural aetiologies where the patient's medical history often provides a clue to diagnosis, even if their imaging results are normal: **C**oagulopathy, **O**vulatory dysfunction, **E**ndometrial dysfunction, **I**atrogenic, and **N**ot otherwise classified. These aetiologies are not mutually exclusive, and patients may have more than one cause.[1]

NICE recently provided updated guidance offering an optimum, efficient, and evidence-based treatment pathway (**Figure 1**) and recommends that healthcare professionals advise each woman with HMB about the treatment options that are right for her, **with a clear focus on the woman's choice.**[2]

Discuss treatment options taking into account the woman's choices & preferences:
- desire to retain fertility and/or uterus
- benefits and harms of treatment
- clinical considerations (comorbidities, multiple pathologies, size of uterus)

No identified pathology, fibroids <3 cm, or adenomyosis
Take into consideration severity of symptoms

Consider LNG-IUD

If LNG-IUD declined or not suitable

Consider alternative medical treatment:
- non-hormonal:
  - TXA
  - NSAIDs
- hormonal:
  - COC
  - oral progestogens

Alternative medical treatment declined, not suitable, or failed

If LNG-IUD failed

Severe symptoms

Consider referral to specialist care

+/- investigations

Consider medical treatment:
- non-hormonal:
  - TXA
  - NSAIDs
- hormonal:
  - LNG-IUD
  - COC
  - oral progestogens

Consider surgery:
- 2nd generation endometrial ablation
- hysterectomy

Submucosal fibroids

Consider hysteroscopic removal

Fibroids ≥3 cm
Take into consideration size, location and number of fibroids, and severity of symptoms

Consider referral to specialist care.
If treatment is needed while investigations and definitive treatment are being organised, offer tranexamic acid and/or NSAIDs

Consider surgery:
- myomectomy
- hysterectomy; minimally invasive preferred

Consider pretreatment with GnRHa if fibroids causing an enlarged or distorted uterus

Consider UAE

Prior to UAE or myomectomy, schedule ultrasound

Consider 2nd generation endometrial ablation

Consider medical treatment:
- non-hormonal:
  - TXA
  - NSAIDs
- hormonal:
  - LNG-IUD
  - COC
  - oral progestogens

Abbreviations used in this review

COC = combined oral contraceptive pill
FBC = full blood count
FIGO = International Federation of Obstetrics & Gynecology
GnRHa = gonadotrophin-releasing hormone analogue
HMB = heavy menstrual bleeding
LNG-IUD = levonorgestrel-releasing intrauterine device
NSAIDs = non-steroidal anti-inflammatory drugs
NICE = National Institute for Health and Care Excellence
PCOS = polycystic ovary syndrome
TVS = transvaginal ultrasonography
TXA = tranexamic acid
UAE = uterine artery embolisation

Investigations

Ideally an assessment should include history, abdo-pelvic examination and laboratory and imaging investigations. This will aid in the identification of a cause(s), and to gain an understanding of the impact on a woman's physical and psychological health, and work and social effects.

Where appropriate, a Pipelle® endometrial biopsy can be useful, although a normal result does not overrule an abnormal TVS. An endometrium that is described as 12mm or over or where 'inadequate views' or 'ill-defined' phrases are used should lead to gynaecological referral. TVS is especially important if irregular periods or if a structural aetiology is suspected or if symptoms persist despite appropriate initial treatment. TVS may be difficult to access for some patients however there are DHB referral pathways.

This document only covers premenopausal women, and HMB in this group is usually a symptom of benign problems. However, it can also be due to endometrial cancer or hyperplasia and these risk factors include obesity, age > 45 years, early menarche, nulliparity, infertility, smoking history, family history of ovarian, colon or uterine cancer, history of certain conditions (such as PCOS, diabetes, thyroid disease) or tamoxifen use or unopposed oestrogen replacement therapy.[3]

Clinicians should provide information about all HMB treatment options, both medical and surgical, and discuss:[2,4]

- The nature, benefits, and risks of the assorted options
- Suitable treatments if she is trying to conceive
- Whether she wants to retain her fertility and/or her uterus.

The aim is to ensure that women are offered the least invasive and most effective treatment appropriate to their clinical needs and that they can make an informed choice from the range of treatments suitable to their individual situation.[2,4]

Specialist referral

A woman with HMB should be referred for early specialist review when there is a suspicion of malignancy or other significant pathology based on clinical assessment or ultrasound i.e. irregular bleeding, abnormal examination, fibroids bigger than 3 cm, enlarged uterus, inadequate response to treatment over 3 months, thickened endometrium, risk factors for hyperplasia, abnormal endometrium on scan or Pipelle®, or if there has not been a satisfactory response to 3 months of medical treatment.

There are several surgical procedures (**Table 1**) to control HMB including the minimally invasive techniques of endometrial ablation, hysteroscopic polypectomy and myomectomy. Where clinically appropriate, these uterine-sparing surgical procedures are an alternative to hysterectomy.

Table 1: Secondary care procedures

Procedure	Advantages	Disadvantages
Endometrial ablation • Removal of the uterine lining. • Radio frequency endometrial ablation, e.g. with NovaSure®	**Advantages:** • No hormones / foreign body or incisions • Day case procedure • Quick recovery time[5] • Average treatment time 90 seconds[5]	**Disadvantages:** • Conception no longer appropriate due to risk of late miscarriage (contraception still required) • Non-reversible
Fibroid and polyp removal By minimally invasive procedure, methods include: • Hysteroscopic resection, e.g. with MyoSure® device • Fibroid embolisation after assessment for appropriate cases.	**Advantages:** • No pre-treatment required • Outpatient treatment possible if small[6] • Quick procedure and recovery[6] • Retain fertility	**Disadvantages:** • Sometimes necessary to repeat the procedure as fibroids and polyps can grow again/recur. • Contraception still required • May not resolve the bleeding if there are also hormonal reasons for it
Hysterectomy • Removal of the uterus and ideally the tubes (ovarian cancer prevention) and discussion regarding ovaries (ideally preserved if premenopausal and no other indications to remove e.g. family history ovarian cancer). • Ideally vaginal or laparoscopic preferred (including for large uteri, e.g. morcellation)	**Advantages:** • Permanent solution with 100% success	**Disadvantages:** • Major surgery, 2-6 weeks recovery • Increased risk of complications e.g. infection, haemorrhage, damage to the bowel or bladder and other surgical complications[4] • Only suitable once childbearing complete

EXPERT'S CONCLUDING COMMENTS

The hysterectomy rate in NZ is 134/100,000 women and whilst we are doing well compared to Australia (255/100,000), we have a way to go to match Denmark (19/100,000).[7] That is not to say that there zero is the ideal rate, as women should be offered choice after objective case-specific informed discussion and consent. However, given the potential physical, psychological, and social consequences of hysterectomy and the fact that it can still be undertaken after an initial trial of an alternate lower risk option (if that fails), it would be negligent not to discuss options prior to planning treatment.

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Scan the QR code to view a short podcast on general management of HMB including minimally invasive surgical techniques

Patient Resources:

ADHB patient pamphlet - heavy periods

RANZCOG - Patient Information Pamphlets

- Heavy Menstrual Bleeding
- Hysteroscopy-pamphlet.pdf
- Endometrial-Ablation.pdf
- Hysterectomy-pamphlet.pdf

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