NHS
National Institute for Health and Clinical Excellence

Quick reference guide

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Heavy menstrual bleeding

NICE clinical guideline 44
Developed by the National Collaborating Centre for Women's and Children's Health

About this booklet

This is a quick reference guide that summarises the recommendations NICE has made to the NHS in 'Heavy menstrual bleeding' (NICE clinical guideline 44).

Who should read this booklet?

The quick reference guide is for healthcare professionals and other staff who care for women with heavy menstrual bleeding. It contains what you need to know to put the guideline's recommendations into practice.

Who wrote the guideline?

The guideline was developed by the National Collaborating Centre for Women's and Children's Health, which is based at the Royal College of Obstetricians and Gynaecologists. The Collaborating Centre worked with a group of healthcare professionals (including consultants, GPs and nurses), patients, and technical staff, who reviewed the evidence and drafted the recommendations. The recommendations were finalised after public consultation.

For more information on how NICE clinical guidelines are developed, go to www.nice.org.uk

Where can I get more information about the guideline?

The NICE website has the recommendations in full, summaries of the evidence they are based on, a summary of the guideline for patients and carers, and tools to support implementation (see inside back cover for more details).

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This guidance is written in the following context

This guidance represents the view of the Institute, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Contents

Heavy menstrual bleeding

In the early 1990s, it was estimated that at least 60% of women presenting with heavy menstrual bleeding went on to have a hysterectomy. This was often the only treatment offered. Hysterectomy is a major operation and is associated with significant complications in a minority of cases. Since the 1990s the number of hysterectomies has been decreasing rapidly.

Heavy menstrual bleeding has a major impact on a woman's quality of life, and any intervention should aim to improve this rather than focusing on menstrual blood loss. The guideline makes recommendations on a range of treatment options for heavy menstrual bleeding. It aims to help healthcare professionals provide the right treatments for individual women. Healthcare professionals should be aware that it is the woman herself who determines whether a treatment is successful for her.

Woman-centred care

Heavy menstrual bleeding has a major impact on a woman's quality of life. Treatment and care should take into account the woman's needs and preferences. Good communication is essential, supported by evidence-based information, to allow women to reach informed decisions about their care. Women should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals.

How to use this guide

The care pathway on page 6 gives an overview of the care of women with heavy menstrual bleeding. The green boxes cover diagnosis and investigation, the blue boxes cover pharmaceutical treatments (see page 7 for more details) and the purple boxes cover surgical and radiological treatments (see pages 8–9 for more details).

Key priorities for implementation

Impact on women

- For clinical purposes, heavy menstrual bleeding (HMB) should be defined as excessive menstrual blood loss which interferes with the woman's physical, emotional, social and material quality of life, and which can occur alone or in combination with other symptoms. Any interventions should aim to improve quality of life measures.

History taking, examination and investigations

- If appropriate, a biopsy should be taken to exclude endometrial cancer or atypical hyperplasia. Indications for a biopsy include, for example, persistent intermenstrual bleeding, and in women aged 45 and over treatment failure or ineffective treatment.
- Ultrasound is the first-line diagnostic tool for identifying structural abnormalities.

Education and information provision

- A woman with HMB referred to specialist care should be given information before her outpatient appointment. The Institute's information for patients ('Understanding NICE guidance') is available from www.nice.org.uk/CG044publicinfo

Pharmaceutical treatment

- If history and investigations indicate that pharmaceutical treatment is appropriate and either hormonal or non-hormonal treatments are acceptable, treatments should be considered in the following order:
  - levonorgestrel-releasing intrauterine system provided long-term (at least 12-months) use is anticipated
  - tranexamic acid or non-steroidal anti-inflammatory drugs (NSAIDs) or combined oral contraceptives
  - norethisterone (15 mg) daily from days 5 to 26 of the menstrual cycle, or injected long-acting progestogens.
- If hormonal treatments are not acceptable to the woman, then either tranexamic acid or NSAIDs can be used.

Non-hysterectomy surgery

- In women with HMB alone, with uterus no bigger than a 10-week pregnancy, endometrial ablation should be considered preferable to hysterectomy.

Hysterectomy

- Taking into account the need for individual assessment, the route of hysterectomy should be considered in the following order: first-line vaginal; second-line abdominal.

Competencies

- Maintenance of surgical, imaging or radiological skills requires a robust clinical governance framework including audit of numbers, decision making, case-mix issues and outcomes of all treatments at both individual operator and organisational levels. These data should be used to demonstrate good clinical practice.

Competencies and training

- Surgeons and radiologists should be able to demonstrate consultation, technical and surgical competence.
- A structured process for assessment should be built into the training schemes of the Postgraduate Medical Education and Training Board, the Royal Colleges and/or the Society and College of Radiographers.
- Training should ensure competency in complex procedures, and should be located in units with sufficient workload to allow experience of these procedures.
- Established healthcare professionals should be able to demonstrate that their skills meet or exceed the standards for newly trained professionals.
- If you lack the competence to undertake a procedure, refer the women to a skilled professional.

Care pathway for heavy menstrual bleeding

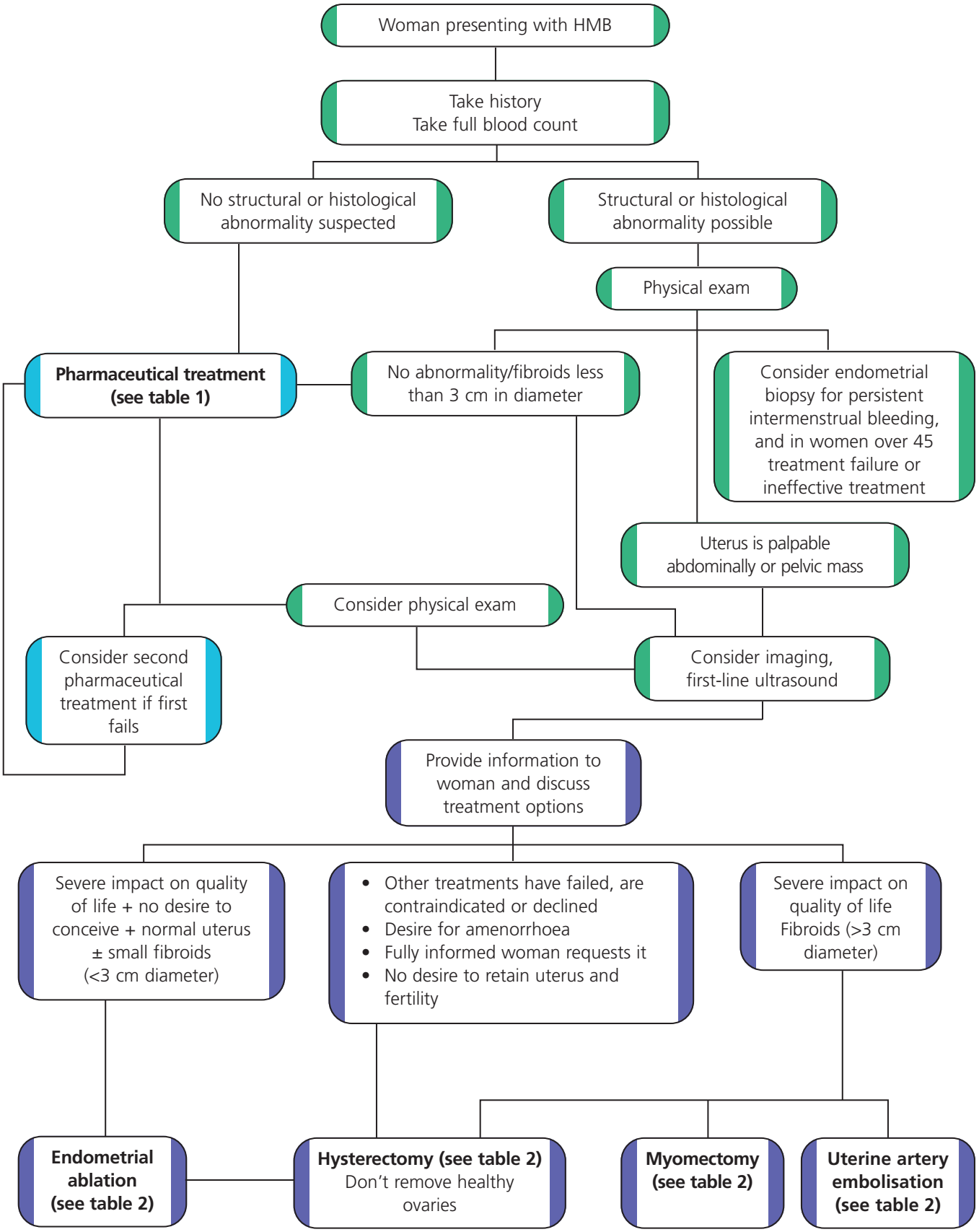

Table 1 Pharmaceutical treatments proven to reduce menstrual bleeding.[1]

Discuss hormonal and non-hormonal options and provide time and support to help the woman decide which option is best for her.

	Pharmaceutical treatment	How it works	Is it a contraceptive?	Will it impact on future fertility?	Potential unwanted outcomes experienced by some women[4]
First line	Levonorgestrel-releasing intrauterine system (LNG-IUS)[2, 3]	A device which slowly releases progestogen and prevents proliferation of the endometrium A physical examination is needed before fitting	Yes	No	Common: irregular bleeding that may last for over 6 months; hormone-related problems such as breast tenderness, acne or headaches if present, are generally minor and transient Less common: amenorrhoea Rare: uterine perforation at the time of insertion
Second line	Tranexamic acid (non-hormonal) Can be used in parallel with investigations. If no improvement, stop treatment after 3 cycles	Oral antifibrinolytic tablets	No	No	Less common: indigestion; diarrhoea; headache
	Non-steroidal anti-inflammatory drugs (NSAIDs) (non-hormonal) If no improvement, stop treatment after 3 cycles. Can be used in parallel with investigations Preferred over tranexamic acid in dysmenorrhoea	Oral tablets that reduce production of prostaglandin	No	No	Common: indigestion; diarrhoea Rare: worsening of asthma in sensitive individuals; peptic ulcer with possible bleeding and peritonitis
	Combined oral contraceptives[3]	Oral tablets that prevent proliferation of the endometrium	Yes	No	Common: mood change; headache; nausea; fluid retention; breast tenderness Very rare: deep vein thrombosis; stroke; heart attack
Third line	Oral progestogen (norethisterone)[3]	Oral tablets that prevent proliferation of the endometrium	Yes	No	Common: weight gain; bloating; breast tenderness; headaches; acne (but usually minor and transient) Rare: depression
	Injected progestogen[2, 3]	Intramuscular injection that prevents proliferation of the endometrium	Yes	No	Common: weight gain; irregular bleeding, amenorrhoea; premenstrual-like syndrome (including bloating, fluid retention, breast tenderness) Less common: bone density loss
Other	Gonadotrophin-releasing hormone analogue (Gn-RH analogue) If used for more than 6 months add-back HRT therapy is recommended	Injection that stops production of oestrogen and progesterone	No	No	Common: menopausal-like symptoms (e.g. hot flushes, increased sweating, vaginal dryness) Less common: osteoporosis, particularly trabecular bone with longer than 6-months use

[1] The evidence for effectiveness can be found in the full guideline.
[2] Check the Summary of Product Characteristics for current licensed indications. Informed consent is needed when using outside the licensed indications.
[3] See World Health Organization 'Pharmaceutical eligibility criteria for contraceptive use' (WHOMEC), www.ffprhc.org.uk/admin/uploads/298_UKMEC_200506.pdf
[4] Common: 1 in 100 chance; less common: 1 in 1000 chance; rare: 1 in 10,000 chance; very rare: 1 in 100,000 chance

Table 2 Surgical and radiological treatment options for women whose quality of life is severely impacted.

Provide information to the woman before her outpatient appointment.

Indication	Type of surgery	How it works	Will it impact on future fertility?	Other considerations	Potential unwanted outcomes experienced by some women[5]
Severe impact on quality of life + no desire to conceive + normal uterus +/- small fibroids (<3 cm diameter) Consider as first line only after full discussion of risks and benefits Preferable to hysterectomy if uterus no bigger than 10-week pregnancy	Endometrial ablation Second-generation: • impedance-controlled bipolar radiofrequency • balloon thermal • microwave • free fluid thermal First-generation: • rollerball • transcervical resection of the endometrium	It destroys the womb lining	Yes	Discuss impact on fertility Use second-generation technique in women with no structural or histological abnormality Advise use of effective contraception following this procedure	Common: vaginal discharge; increased period pain or cramping (even if no further bleeding); need for additional surgery Less common: infection Rare: perforation (but very rare with second-generation techniques)
Fibroids (>3 cm diameter) + severe impact on quality of life Consider as first line if there are other significant symptoms, pain or pressure Recommended for women who want to retain uterus +/- avoid surgery	Uterine artery embolisation (UAE)	Small particles are injected into the blood vessels that take blood to the uterus. The blood supply to the fibroids is blocked and this causes them to shrink	Fertility is potentially retained	Discuss impact on fertility	Common: persistent vaginal discharge; post-embolisation syndrome – pain, nausea, vomiting and fever (not involving hospitalisation) Less common: need for additional surgery; premature ovarian failure particularly in women over 45 years old; haematoma Rare: haemorrhage; non-target embolisation causing tissue necrosis; infection causing septicaemia
Fibroids (>3 cm diameter) + Severe impact on quality of life Recommended for women who want to retain uterus	Hysteroscopic myomectomy	Surgical removal of the fibroids using a hysteroscope	Fertility is potentially retained	Discuss impact on fertility Consider pretreatment with Gn-RH analogue Following with a first-generation ablation technique is appropriate	Less common: adhesions (which may lead to pain and/or impaired fertility); need for additional surgery; perforation; recurrence of fibroids; infection Rare: haemorrhage

Fibroids (>3 cm diameter) + Severe impact on quality of life	Myomectomy	Surgical removal of the fibroids	Fertility is potentially retained	Discuss impact on fertility. Consider pretreatment with Gn-RH analogue	Less common: adhesions (which may lead to pain and/or impaired fertility); need for additional surgery; recurrence of fibroids; infection Rare: haemorrhage
Fibroids (>3 cm diameter) + Severe impact on quality of life	Hysterectomy Decide route based on individual assessment. First line: vaginal Second line: abdominal Do not remove healthy ovaries	Surgical removal of the uterus Ovaries may also be removed (oophorectomy)	Yes	Discuss impact on sexual feelings, fertility, bladder function, psychology Discuss complications, expectations, alternatives Consider pretreatment with Gn-RH analogue Discuss increased risk in women with fibroids Discuss total and subtotal methods in abdominal surgery If considering oophorectomy, discuss impact on wellbeing If concerned discuss risks and benefits with woman. Offer genetic counselling	Common: infection Less common: intraoperative haemorrhage; damage to other abdominal organs, for example, urinary tract or bowel; urinary dysfunction – frequent passing of urine and incontinence Rare: thrombosis (DVT and clot on the lung) Very rare: death *With oophorectomy at time of hysterectomy:* Common: menopausal-like symptoms
Not first line solely for HMB. Consider when: • Other treatments have failed, are contra-indicated or declined • Desire for amenorrhoea • Fully informed woman requests it • No desire to retain uterus and fertility	Hysterectomy Decide route based on individual assessment First line: vaginal Second line: abdominal Consider laparoscopic vaginal hysterectomy in morbidly obese/ oophorectomy Do not remove healthy ovaries	Surgical removal of the uterus Ovaries may also be removed (oophorectomy)	Yes	Discuss impact on sexual feelings, fertility, bladder function, psychology Discuss complications, expectations, alternatives Consider pretreatment with Gn-RH analogue Discuss total and subtotal methods in abdominal surgery If considering oophorectomy, discuss impact on wellbeing If concerned about health of ovaries discuss risks and benefits. Offer genetic counselling	Common: infection Less common: intraoperative haemorrhage; damage to other abdominal organs, for example, urinary tract or bowel; urinary dysfunction – frequent passing of urine and incontinence Rare: thrombosis (DVT and clot on the lung) Very rare: death *With oophorectomy at time of hysterectomy:* Common: menopausal-like symptoms

[5] Common: 1 in 100 chance; less common: 1 in 1000 chance; rare: 1 in 10,000 chance; very rare: 1 in 100,000 chance

The following investigations are not recommended:

- Direct or indirect menstrual blood loss measurements
- Serum ferritin test
- Female hormone testing
- Thyroid testing
- Saline infusion sonography as first-line diagnostic investigation
- MRI as first-line diagnostic investigation
- Dilatation and curettage (D and C)

The following treatments are not recommended:

- Oral progestogens in the luteal phase only
- Danazol
- Etamsylate
- Dilatation and curettage (D and C)

Implementation

NICE has developed tools to help organisations implement this guidance (listed below). These are available on our website (www.nice.org.uk/CG044).

- Slides highlighting key messages for local discussion.
- Implementation advice on how to put the guidance into practice and national initiatives which support this locally.
- Costing tools:
  - costing report to estimate the national savings and costs associated with implementation
  - costing template to estimate the local costs and savings involved.
- Audit criteria to monitor local practice.

Further information

You can download the following documents from www.nice.org.uk/CG044

- The quick reference guide (this document) – a summary of the recommendations for healthcare professionals.
- 'Understanding NICE guidance' – information for patients and carers.
- The NICE guideline – all the recommendations.
- The full guideline – all the recommendations, details of how they were developed, and summaries of the evidence they were based on.

For printed copies of the quick reference guide or 'Understanding NICE guidance', phone the NHS Response Line on 0870 1555 455 and quote:

- N1180 (quick reference guide)
- N1181 ('Understanding NICE guidance').

All NICE clinical guidelines are reviewed. Please check our website for updates.

Related guidance

NICE has issued clinical guidelines on long-acting reversible contraception, referral guidelines for suspected cancer, and the classification and care of women at risk of familial breast cancer in primary, secondary and tertiary care.

NICE has issued technology appraisal guidance on fluid-filled thermal balloon and microwave endometrial ablation techniques for heavy menstrual bleeding.

NICE has issued interventional procedure guidance on uterine artery embolisation for fibroids; magnetic resonance image-guided percutaneous laser ablation of uterine fibroids; laparoscopic laser myomectomy; photodynamic endometrial ablation; endometrial cryotherapy for menorrhagia.

You can download all NICE guidance from our website.

NICE is developing interventional procedure guidance on laparoscopic hysterectomy and hysteroscopic laser myomectomy. Check our website for publication dates.

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