

Management of Heavy Menstrual Bleeding (HMB)

Scope

Heavy Menstrual Bleeding (HMB) is 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. **The policy does not apply to post-menopausal or post-coital bleeding.**

Policy

It is the responsibility of referring and treating clinicians to ensure compliance with this policy. Referral proforma should be attached to the patient notes to aid the clinical audit process and provide evidence of compliance with the policy. For patients not meeting the policy criteria, clinicians can apply for funding to the Exceptional Cases Panel by completing the exceptional funding section of the [referral proforma](#).

- In women whose physical examination is normal, HMB should be managed in primary care with medical treatment (unless contraindicated), until all reasonable options have been exhausted, and are demonstrated to have failed.
- HMB is not a feature of endometrial cancer and biopsy is indicated only in certain womenⁱ.
- Hysteroscopy is first line imaging diagnostic testⁱⁱ when intrauterine pathologies such as endometrial polyps, submucosal fibroids, or other endometrial pathologies are suspected.
- Ultrasound is not part of routine examination, but can be used as diagnostic investigation for certain women with HMBⁱⁱⁱ
- Coagulation, Ferritin, Thyroid and female hormone testing should not be routinely undertaken.
- Dilatation and curettage (D&C) is not funded for the diagnosis or treatment of HMB.
- The CCG will fund referral for consideration of surgery (endometrial ablation, myomectomy, uterine artery embolisation or hysterectomy) as per the pathway overleaf ONLY if HMB symptoms have a severe impact on quality of life^{iv} AND where they *cannot* be adequately managed medically or medical treatment is contraindicated. Endometrial ablation is the first line treatment for women with HMB and fibroids of <3 cm in diameter, who have not responded to pharmacological treatment.
- Other interventions, such as uterine artery ligation, magnetic resonance-guided focussed ultrasound (MRgFUS) and myolysis, are not funded.

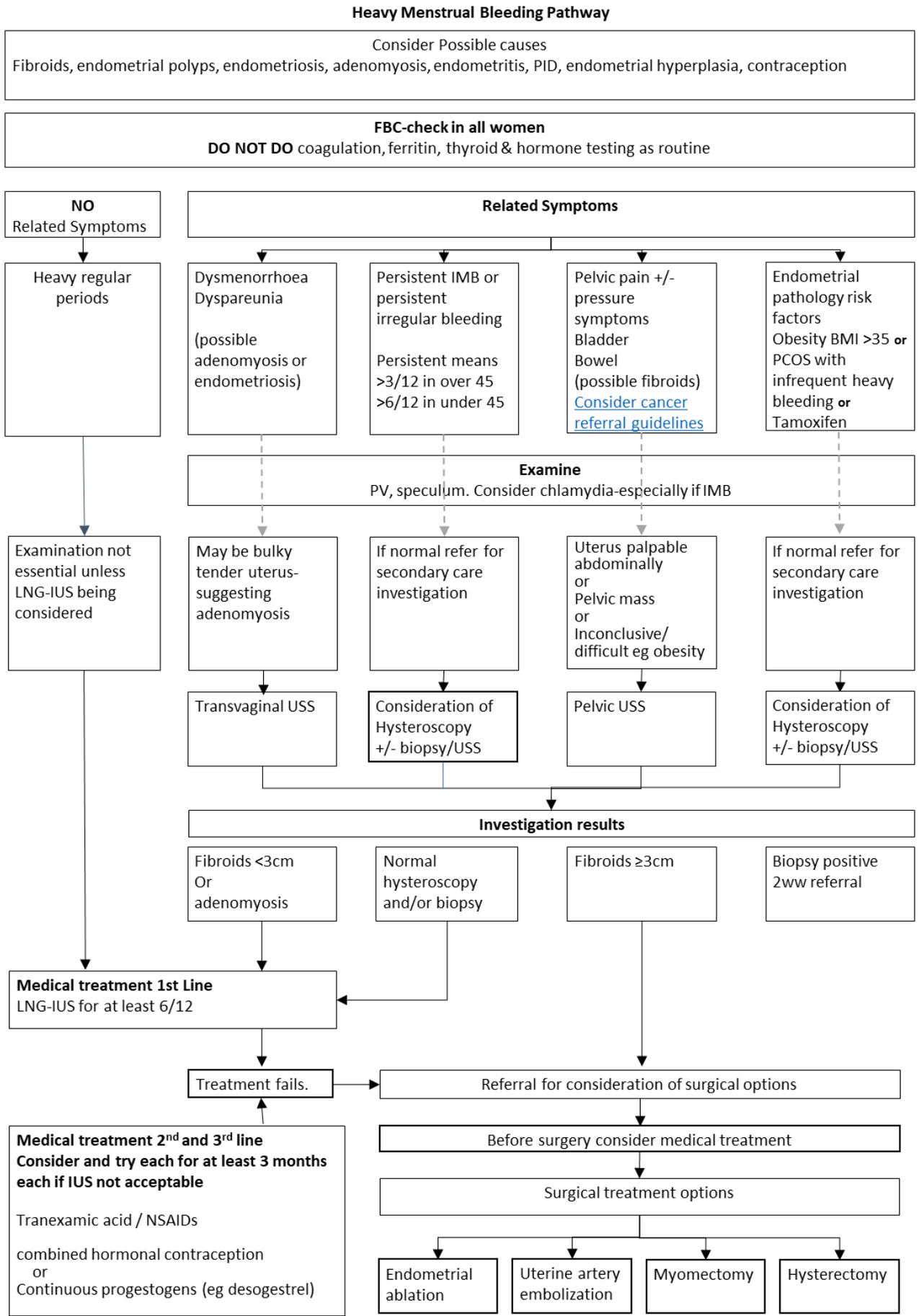
Smoking

Patients who smoke should be advised to attempt to stop smoking and referred to smoking cessation services – see [smoking cessation policy](#).

Notes:

- i. Endometrial cancer usually presents with post-menopausal bleeding which is not covered by this policy. Endometrial Biopsy should be considered if persistent intermenstrual bleeding OR irregular bleeding OR infrequent heavy bleeding and obesity or polycystic ovary syndrome (PCOS) OR taking tamoxifen OR if previous treatment for HMB has been unsuccessful.
- ii. Outpatient referral for Hysteroscopy if: Persistent intermenstrual bleeding OR Risk factors for endometrial pathology. Hysteroscopy may also be used as part of a treatment modality before ablative procedures.
- iii. Ultrasound referral if: Uterus is abdominally palpable, history or examination suggests a pelvic mass, significant dysmenorrhoea (period pain) or bulky, tender uterus on examination that suggests adenomyosis or in women with inconclusive or difficult examination, (ie in women who are obese).
- iv. Severe impact means: limitations in mobility which are clearly attributable to onset of HMB symptoms; limitations in ability to undertake activities of daily living such as lifting and carrying household items; persistent sleep deprivation; flooding requiring frequent changing of pads/tampons. The more limitations that are reported, the more the impact on quality of life may be considered to be severe.

Heavy Menstrual Bleeding Pathway



History

- History should include clinical symptoms, comorbidities, natural variability of menstrual bleeding, whether previous treatment for HMB has been tried, whether symptoms may be due to an intrauterine contraceptive device (IUCD) and impact of HMB on quality of life.
- Recognition of menstrual blood loss as a problem should be determined by the woman herself and not by measuring blood loss.
- It is important to elicit the presence of **HMB with any related symptoms**, that might suggest uterine cavity abnormality, histological abnormality, adenomyosis or fibroids:
 - Persistent intermenstrual bleeding.
 - Pelvic pain.
 - Pressure symptoms.

Examination

- Abdominal and PV examination should be considered if:
 - The woman has a history of HMB with other *related symptoms* (see above) and/or
 - Prior to Levonorgestrel-releasing intrauterine system (LNG-IUS) fitting.
- If the woman has a history of HMB without other *related symptoms*, consider pharmacological treatment without carrying out a physical examination (unless the treatment chosen is levonorgestrel-releasing intrauterine system (LNG IUS)).
- Physical examination should be performed in primary care before considering referral for further diagnostic investigations.

Laboratory Tests

- A full blood count should be carried out in all patients, in parallel with any HMB treatment.
- Testing for coagulation disorders should **only** be considered in women who have had HMB since menarche and have personal or family history suggesting a coagulation disorder (for example, Von Willebrand disease).
- Thyroid testing should **only** be carried out when other signs and symptoms of thyroid disease are present.
- A serum ferritin test **should not** routinely be carried out.
- Female hormone testing (FSH/LH) **should not** be carried out.

Investigations

Take into account the woman's history and examination when deciding whether to offer hysteroscopy or ultrasound as the first-line investigation.

Women may be referred to secondary care where the pathway indicates hysteroscopy is the first line approach, however secondary care clinicians may also request an ultrasound based on the clinical history.

Hysteroscopy

Offer outpatient hysteroscopy to women with HMB if their history suggests submucosal fibroids, polyps or endometrial pathology:

- Persistent intermenstrual bleeding or
- Risk factors for endometrial pathology:
 - Persistent intermenstrual bleeding or
 - Persistent irregular bleeding and infrequent heavy bleeding in women who are obese or diagnosed with polycystic ovary syndrome (PCOS).
 - Women taking tamoxifen
 - Women for whom treatment for HMB has been unsuccessful

Women with HMB who are offered outpatient hysteroscopy should be thoroughly explained what the procedure involves and possible alternatives.

If a woman declines outpatient hysteroscopy:

- Offer hysteroscopy under general or regional anaesthesia.
- Consider pelvic ultrasound, explaining the limitations of this technique for detecting uterine cavity causes of HMB.

Endometrial biopsy

- Endometrial biopsy should be considered at the time of hysteroscopy for women who are at high risk of endometrial pathology (as above).
- Endometrial sample should only be obtained in the context of diagnostic hysteroscopy. Do not offer 'blind' endometrial biopsy.

NICE states 'Ensure that outpatient hysteroscopy services are organised and the procedure is performed according to best practice, including:

- Advising women to take oral analgesia before the procedure
- Vaginoscopy as the standard diagnostic technique, using miniature hysteroscopes (3.5 mm or smaller).

Ensure that hysteroscopy services are organised to enable progression to 'see-and-treat' hysteroscopy in a single setting if feasible.

Ultrasound scan

Pelvic ultrasound should be offered to women with possible larger fibroids:

- The uterus is abdominally palpable.
- History or examination suggests a pelvic mass.
- Examination is inconclusive or difficult, for example in women who are obese.

Transvaginal ultrasound, in preference to transabdominal ultrasound or MRI, should be offered to women with suspected adenomyosis:

- Significant dysmenorrhoea (period pain) or
- Bulky, tender uterus on examination that suggests adenomyosis.

If a woman declines transvaginal ultrasound or it is not suitable for her, consider transabdominal ultrasound or MRI, explaining the limitations of these techniques.

The following investigations are not recommended:

- Direct or indirect menstrual blood loss measurements
- Serum ferritin levels
- Female hormone testing
- Thyroid testing (unless there are symptoms of thyroid disease)
- Saline infusion sonography as first-line diagnostic investigation
- MRI as first-line diagnostic investigation
- Dilatation and curettage (D&C)

Treatment

Provide information about all possible treatment options for HMB and discuss these with the woman.

Discussions should cover:

- The benefits and risks of the various options.
- Suitable treatments if trying to conceive.
- Whether she wants to retain fertility and/or uterus.

Pharmacotherapy

- Medical treatment should be considered as first line, in the following cases ^[1]:
- History/examination suggest low risk of fibroids, uterine cavity abnormality, histological abnormality or adenomyosis.
- Imaging showed no identified pathology or small fibroids <3cm or suspected/ diagnosed adenomyosis.
- Imaging showed fibroids of >3cm or more in diameter. Patient should be informed that the effectiveness of pharmacological treatments may be limited in women with fibroids that are substantially greater than 3 cm in diameter.

Medical treatments should be considered in the following order ^[1]

1. Levonorgestrel-releasing intrauterine system (LNG-IUS), at least 6 months.
2. Tranexamic acid/non-steroidal anti-inflammatory drugs (NSAIDs), for at least 3 menstrual cycles.
3. Combined oral contraceptives (COCs)/ Norethisterone (15mg) daily from days 5 to 26 of the menstrual cycle, for at least 3 menstrual cycles.

Some patients may prefer to try tranexamic acid, NSAIDs, COCs or norethisterone before trying LNG-IUS.

When a first pharmacological treatment has proved ineffective, a second and third line should be considered rather than immediate referral to surgery, unless contraindicated or declined by the patient.

Levonorgestrel intrauterine system (LNG-IUS)-Mirena®

Women offered a LNG-IUS should be advised to persevere for at least 6 menstrual cycles. A physical examination must be undertaken prior to treatment.

Contraindications to LNG-IUS:

- Severe anaemia (Hb < 8g/dl), unresponsive to transfusion or other treatment, whilst a levonorgestrel intrauterine system trial is in progress.
- Genital malignancy.
- Active trophoblastic disease.
- Pelvic inflammatory disease.
- Established or marked immunosuppression.

Tranexamic Acid or NSAIDs

- Ongoing use is recommended for as long as it is found to be effective.
- Treatment should be tried for at least three menstrual cycles.
- When HMB coexists with dysmenorrhoea, NSAIDs should be preferred to tranexamic acid.
- May be useful where hormonal treatments are not acceptable.

The following pharmacological treatments are not recommended:

- Oral progestogens in the luteal phase only.
- Ulipristal acetate (Esmya®) - It was removed from the recommendations because the European Medicines Agency (EMA)^[7] is reviewing its use for uterine fibroids and have introduced temporary safety measures.
- Danazol.
- Etamsylate.

Surgical procedures

Endometrial Ablation

- Consider second-generation endometrial ablation as the first line surgical treatment option for women with HMB and fibroids of <3 cm in diameter, who has failed pharmacological treatment, declined it or if pharmacological treatment is contraindicated.
- The patient should be fully informed about the need to avoid subsequent pregnancy (use effective contraception if required) and understands that, in 25% of women, HMB may not be resolved by endometrial ablation, such that more invasive surgery may be required.

Uterine Artery Embolisation (UAE)

In women with HMB, which is attributed to a uterine fibroid or fibroids of ≥ 3 cms in diameter, UAE may be considered if the following criteria are met:

- Medical management is demonstrated to have failed, was declined or contraindicated and bleeding is having a severe impact on a woman's quality of life.
- Patient selection has been made with the involvement of a multidisciplinary team, which should include a gynaecologist and an interventional radiologist.
- The patient understands the higher likelihood of minor complications (Appendix 1) and the increased possibility of hysterectomy being required, than if myomectomy had been carried out.

Prior to scheduling of Uterine Artery Embolization, the woman's uterus and fibroid(s) should be assessed by ultrasound. If further information about fibroid position, size, number and vascularity is needed, MRI should be considered.

Myomectomy

In women with HMB, which is attributed to a uterine fibroid or fibroids ≥ 3 cms in diameter, myomectomy should be considered where the following criteria are met:

- Medical treatment is demonstrated to have failed, was declined or contraindicated and bleeding is having a severe impact on quality of life.

- The patient accepts the risks to fertility and that, in a minority of women, HMB may not be resolved by myomectomy, such that hysterectomy may be required.

Prior to scheduling of myomectomy, the woman's uterus and fibroid(s) should be assessed by ultrasound. If further information about fibroid position, size, number and vascularity is needed, MRI should be considered.

Hysterectomy

Hysterectomy should be considered only when:

- other treatment options have failed, are contraindicated or are declined by the woman.
- there is a wish for amenorrhoea.
- the woman (who has been fully informed) chooses it above other treatments.
- the woman no longer wishes to retain her uterus and fertility.

Women offered hysterectomy should have a full discussion of the implication of the surgery before a decision is made. The discussion should include: sexual feelings, fertility impact, bladder function, need for further treatment, treatment complications, the woman's expectations, alternative surgery and psychological impact.

Women offered hysterectomy should be informed of the increased risk of serious complications (such as intraoperative haemorrhage or damage to other abdominal organs) associated with hysterectomy when uterine fibroids are present.

Women should be informed of the risk of possible loss of ovarian function and its consequences, even if their ovaries are retained during 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 or laparoscopic.

Ovary removal should be discussed with the patient on an individual basis and the age of the patient should also be taken into account. This should only be undertaken with the expressed wish and consent of the woman.

Pre-treatment with a gonadotrophin-releasing hormone analogue before hysterectomy and myomectomy should be considered if uterine fibroids are causing an enlarged or distorted uterus.

Other interventions

There is limited evidence on the role of other interventions such as uterine artery ligation, Magnetic Resonance guided Focussed Ultrasound (MRgFUS) and myolysis. MRgFUS is offered in some specialist centres. NICE assessment of MRgFUS indicates that although the procedure appears effective in the short term, there is a lack of evidence for its longer term effectiveness. **These procedures are not routinely funded.**

Rationale and Evidence

NICE published guidelines on the management of heavy menstrual bleeding in March 2018. This NICE guidance, along with other published Cochrane reviews, forms the basis of these policy recommendations.

According to NICE, hysterectomy should not be used as a first-line treatment solely for heavy menstrual bleeding (HMB) and removal of healthy ovaries at the time of hysterectomy should not be undertaken.

A Cochrane Systematic Review concluded that levonorgestrel intrauterine system/Mirena® coil improved the quality of life of women with menorrhagia as effectively as hysterectomy and a recent trial indicated better outcomes at two years with the coil than with medical treatment. The LNG-IUS device is less expensive than performing a hysterectomy, even if required for many years. A number of effective conservative treatments are available as second and third line medical treatments after failure of LNG-IUS or where it is contra-indicated. The levonorgestrel intrauterine system and other medical treatments should therefore be used before considering hysterectomy.

Endometrial ablation techniques, myomectomy and uterine artery embolisation offer a less invasive surgical alternative to hysterectomy and are broadly comparable in efficacy and safety (see Appendix 1).

References

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Glossary

Adenomyosis:	When endometrial cells are found in the myometrium and are associated with a heavy and painful menstrual loss.
Amenorrhoea:	Absence of menstruation.
COCs:	Combined oral contraceptives (COCs) contain estrogen and progestogen in combination and suppress ovulation.
Dilatation and Curettage (D&C):	D&C is a gynaecological procedure during which the lining of the womb is extensively sampled.
Endometrial ablation:	Destruction/removal of the lining of the womb.
Fibroid:	Benign tumour arising in the uterine wall (also known as a leiomyoma or myoma).
Hysterectomy:	Surgical removal of the uterus, which may also involve removal of the cervix, fallopian tubes, and/or ovaries (oophorectomy). Hysterectomy and Oophorectomy is an essential procedure in some instances such as malignancy, but there are conditions, such as menorrhagia and fibroids, where its effectiveness is less clear cut and alternative treatments may be preferred.
Hysteroscopy:	An examination of the uterus and the surface of the endometrium (mucous membrane lining the interior of the womb) using a hysteroscope. A hysteroscope is a thin, telescope-like instrument that is inserted into the uterus (womb) through the vagina and cervix (neck of the womb). This test can help find out what is causing symptoms such as unusual vaginal bleeding.
LNG-IUS:	The levonorgestrel-releasing intrauterine system (LNG-IUS) is an intrauterine, long-term progestogen-only method of contraception licensed for 5 years of use.

Menorrhagia:	Increased menstrual blood loss (more than 80mls blood loss per period).
Myomectomy:	The surgical removal of uterine fibroids while preserving the uterus.
Ultrasound:	The use of ultrasonic waves for diagnostic or therapeutic purposes, specifically to image an internal body structure, monitor a developing foetus, or generate localised deep heat to the tissues.
Uterine Artery Embolisation (UAE):	A procedure carried out under local anaesthetic (but not conscious sedation) which works by blocking the blood vessels that supply blood to the fibroids, causing them to shrink. During the procedure a small tube is inserted through a blood vessel in the groin and guided toward the uterine artery from where microspheres are injected which block the circulation to the fibroid.

Policy originated:	In line with IPAC terms of reference GB to acknowledge reviewed policy 2 July 2019 Reviewed policy approved by IPAC 28 May 2019 Reviewed policy approved by CPF 14 May 2019 Policy adopted by CCG on 1 April 2013
Policy effective from:	June 2019
Policy to be reviewed:	June 2021
Reference:	<i>onedrive\CPF Pols & Working Area\Surg Threshold Pols\CCG Policies\HMB\Agreed\HMB JUNE 2019 V4</i>

NICE NG88

Women should be given the following information on potentially unwanted outcomes:

Treatment	Potential unwanted outcomes experienced by some women (Common: 1 in 100 chance; less common: 1 in 1000 chance; rare: 1 in 10,000 chance; very rare: 1 in 100,000 chance)
Levonorgestrel-releasing intrauterine system	<p>Common: irregular bleeding that may last for over 6 months; hormone-related problems such as breast tenderness, acne or headaches, which, if present, are generally minor and transient.</p> <p>Less common: amenorrhoea.</p> <p>Rare: uterine perforation at the time of insertion.</p>
Tranexamic acid	Less common: indigestion; diarrhoea; headaches.
Non-steroidal anti-inflammatory drugs	<p>Common: indigestion; diarrhoea.</p> <p>Rare: worsening of asthma in sensitive individuals; peptic ulcers with possible bleeding and peritonitis.</p>
Combined oral contraceptives	<p>Common: mood changes; headaches; nausea; fluid retention; breast tenderness.</p> <p>Very rare: deep vein thrombosis; stroke; heart attacks.</p>
Oral progestogen (norethisterone)	<p>Common: weight gain; bloating; breast tenderness; headaches; acne (but all are usually minor and transient).</p> <p>Rare: depression.</p>
Injected progestogen	<p>Common: weight gain; irregular bleeding; amenorrhoea; premenstrual-like syndrome (including bloating, fluid retention, breast tenderness).</p> <p>Less common: small loss of bone mineral density, largely recovered when treatment discontinued.</p>
Gonadotrophin-releasing hormone analogue	<p>Common: menopausal-like symptoms (such as hot flushes, increased sweating, vaginal dryness).</p> <p>Less common: osteoporosis, particularly trabecular bone with longer than 6-months' use.</p>
Endometrial ablation	<p>Common: vaginal discharge; increased period pain or cramping (even if no further bleeding); need for additional surgery.</p> <p>Less common: infection.</p> <p>Rare: perforation (but very rare with second generation techniques).</p>
Myomectomy	<p>Less common: adhesions (which may lead to pain and/or impaired fertility); need for additional surgery; recurrence of fibroids; perforation (hysteroscopic route); infection.</p> <p>Rare: haemorrhage.</p>
Hysterectomy	<p>Common: infection.</p> <p>Less common: intraoperative haemorrhage; damage to other abdominal organs, such as the urinary tract or bowel; urinary dysfunction – frequent passing of urine and incontinence.</p> <p>Rare: thrombosis (DVT and clot on the lung).</p> <p>Very rare: death.</p> <p>(Complications are more likely when hysterectomy is performed in the presence of fibroids.)</p>
Uterine artery embolisation	<p>Common: persistent vaginal discharge; post-embolisation syndrome – pain, nausea, vomiting and fever.</p> <p>Less common: need for additional surgery; premature ovarian failure particularly in women over 45 years old; haematoma.</p> <p>Rare: haemorrhage; non-target embolisation causing tissue necrosis; infection causing septicaemia.</p>
Oophorectomy at time of hysterectomy	Common: menopausal-like symptoms.