CLINICAL GUIDELINES

Menstrual Disorders including Heavy Menstrual Bleeding (HMB), Gynaecology

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

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Greater Glasgow and Clyde
Gynaecology Guidelines

Menstrual Disorders including Heavy Menstrual Bleeding (HMB)

Definition

Excessive menstrual blood loss which interferes with a woman's physical, social, emotional and/or material quality of life. It can occur alone or in combination with other symptoms. It is a common cause of morbidity with menstrual disorders accounting for 12% of referrals to gynaecology.

History

Include the following factors:

- Impact on quality of life.
- Menstrual pattern (how long, how frequent, regular or irregular).
- Clots and /or flooding.
- Intermenstrual or post coital bleeding.
- Pelvic pain, dysmenorrhoea, dyspareunia, pressure symptoms.
- Previous treatment for menstrual problems.
- Cervical smear history.
- Obstetric history (particularly caesarean deliveries).
- Contraceptive or fertility requirements.
- Iatrogenic causes (copper IUD, warfarin, clopidogrel)
- Significant medical or surgical history including history suggestive of coagulation disorder.
- History of breast cancer or tamoxifen used.
- History of PCOS or unopposed oestrogen.
- Family history of breast, colon or endometrial cancer.

Initial Assessment (for all patients):

- Measure BMI.
- Check FBC (unless tested within last 3 months), Ferritin should NOT be routinely measured
- Testing for coagulation disorder ONLY if HMB since menarche AND personal or family history suggestive of disorder
- Thyroid function testing is NOT required unless additional symptoms are present
- Smear where required/due
- Consider STI and screen appropriately.

In primary care, instigating initial treatment prior to physical exam is acceptable if there are no additional symptoms or risk factors. However, physical examination should be performed before referral to secondary care to allow appropriate triaging of referral. If women are referred without examination, GPs will be advised that this should be completed. If this cannot be completed in Primary care then the referral may need to be vetted as urgent rather than routine.

Investigations:

Investigations will be determined by clinical history and examination findings. Prior to invasive investigation such as hysteroscopy or endometrial biopsy, consideration should be made to performing a urinary pregnancy test.

Transvaginal Ultrasound Scan (TVUS)

This can be a useful examination particularly where history and examination suggest fibroids, pelvic mass or adenomyosis. Additionally, if examination is inconclusive or difficult e.g. in women who are obese, transvaginal scanning should be considered.

In GG&C, a one stop clinic service allows for consultant delivered scanning in conjunction with history taking, examination and outpatient hysteroscopy, as required, at one clinic visit. TVUS should therefore be considered first line investigation, and is used to screen patients to identify those requiring further investigation with hysteroscopy.

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

Hysteroscopy

Where TVUS suggests the need for further investigation of the endometrium (when a normal, clear midline echo cannot be seen), outpatient hysteroscopy, using a vaginoscopic technique where possible, should be offered in the first instance. Where assessment of the endometrial cavity is not possible as an outpatient procedure, hysteroscopy under regional or general anaesthetic should be offered. Waiting times for investigation are detailed below in 'referral guidance' section.

Endometrial biopsy

An endometrial biopsy should be taken in the following patients.

1. Women who are under 45 where after a TVS has been performed and the midline echo is clear but endometrial thickness is ≥7mm.
2. Women who are under 45 where a TVS has been performed and the endometrium looks abnormal or is poorly visualized. In these cases, a hysteroscopy should be performed prior to obtaining biopsy.
3. **All** women who are ≥45 year of age. The biopsy should be taken **after** the TVS +/- hysteroscopy has been performed.

Where a focal abnormality is viewed on hysteroscopy, a targeted biopsy of the lesion in addition to a pipelle biopsy should be obtained.

Referral Guidance

1. **Women ≥40 years of age with HMB** should be seen in a 'one stop' clinic where TVS, hysteroscopy, biopsy and treatment facilities are available.

2. **Women <40years of age with HMB** could be seen in a general gynaecology clinic in the first instance.

3. **Women with HMB <45 years of age with HMB with no other risks for endometrial pathology and normal examination** can be seen routinely within **12 weeks**. Investigations and treatment that cannot be completed at the clinic appointment can be arranged on a 'routine' basis.

4. **Women with HMB 40-44 years of age with HMB *and* persistent PCB or IMB with no other risk for endometrial pathology** can be seen routinely within **12 weeks** as the risk of pathology is still very low. Investigations and treatment that cannot be completed at the clinic appointment can be arranged on a 'routine' basis.

5. **Women with HMB 40-44 years of age *and* persistent PCB or IMB *and* one other risk for endometrial pathology,** namely PCOS, BMI ≥ 40, current or previous use of Tamoxifen, family history of breast, colon or endometrial cancer, or treatment failure (continuous use of hormonal method for 6months) should be seen within **2 weeks of referral** (14 working days). Investigations and treatment that cannot be completed at the clinic appointment should be arranged on an 'urgent' basis.

6. **Women with HMB ≥ 45 years of age with no irregular bleeding and no other risks for endometrial pathology and normal examination** can be seen routinely within 12 weeks, as risk of endometrial pathology is still low. Investigations and treatment that cannot be completed at the clinic appointment should be arranged on a 'routine' basis.

7. **Women with HMB ≥ 45 years of age with 1 other risk for endometrial pathology** namely PCOS, BMI ≥ 40, current or previous use of Tamoxifen, family history of breast, colon or endometrial cancer, persistent IMB (>3months), persistent PCB (>3months) or treatment failure (continuous use of hormonal method for 6months) should be seen within **2 weeks of referral** (14 working days). Investigations and treatment that cannot be completed at the clinic appointment should be arranged on an 'urgent' basis.

Treatment Options for Heavy Menstrual Bleeding: See Flow diagram for summary of options

Heavy menstrual bleeding has a major impact on a woman's quality of life. The patient's assessment of treatment response is paramount. Medical management should be the first line treatment for the majority of women.

Considerations include, the woman's needs and preferences, future fertility wishes, previous treatments and their effects, and any potential contraindications to treatments.

Pharmacological Managements

Pharmacological treatments should be considered for all women, with the exception of levonorgestrel intrauterine system (LNG-IUS) where rates of expulsion are higher with fibroids >3cm, particularly where there is distortion of the uterine cavity.

When a first pharmaceutical treatment has proven to be ineffective, a second pharmaceutical treatment can be considered rather than immediate referral for additional review.

Pharmacological (non-hormonal)

Tranexamic Acid

- 1g TID oral with menstruation, max 3-4 days.
- It is an anti-fibrinolytic and reduces bleeding by approximately 50%.
- Suitable as a long term treatment but alternative treatments should be considered if no improvement after 3 cycles.
- Not suitable for patients with a personal history of venous thromboembolic disease.
- Suitable for use where fertility is desired.

NSAIDS:

- Naproxen, ibuprofen and mefenamic acid have similar efficacy in the treatment of HMB and can reduce bleeding by 20-50%
- Mefanamic acid is licenced for the treatment of HMB, where the other NSAIDS are licenced for menstrual bleeding associated with pain.
- NSAIDs can be used in conjunction with Tranexamic Acid.
- NSAIDs are not suitable for patients who are sensitive to their effects e.g. gastic ulcers, aspirin sensitive asthma
- Suggested regimes include
- **Naproxen** 500mg oral initially, followed by 250mg 6-8 hourly (max 1.25g/day) with menstruation or
- **Ibuprofen** 300–400 mg 3–4 times a day with menstruation or
- **Mefenamic Acid** 500mg TID oral with menstruation.

Pharmacological (Hormonal)

Levonorgestrel Intra-Uterine System (LNG-IUS, Mirena ®)

- Reduces menstrual loss by up to 90% after 6 months of use.
- Can be initiated as a first line option if at least one year of use is expected.

- Erratic vaginal bleeding is common in the first 4-6 months of use but rarely heavy or painful.
- There are very few contraindications to LNG-IUS.
- Systemic effects are uncommon and often improve after the first 2-3 months.
- LNG-IUS is a highly effective contraceptive and can also be used as the progestogen component of Hormone replacement therapy (5 years).
- Expulsion is higher where there are fibroids >3cm.

Combined Hormonal Contraception

- Highly effective in reducing menstrual blood loss and associated menstrual pain.
- Tailored regimes with shorter hormone free intervals (HFI) have shown a greater improvement in symptoms of HMB. Examples of tailored regimens are shown in the table below (from FSRH Guideline Combined Hormonal Contraception, November 2020)
- **There are a number of common contraindications see** UK Medical Eligibility Criteria for Contraceptive Use (UKMEC)] **at www.ffprhc.org.uk for further information.**

Table 1: Standard and tailored regimens for use of combined hormonal contraception (CHC)

Type of regimen	Period of CHC use	HFI
Standard use	21 days (21 active pills or 1 ring, or 3 patches)	7 days
Tailored use		
Shortened hormone-free interval (HFI)	21 days (21 active pills or 1 ring, or 3 patches)	4 days
Extended use (tricycling)	9 weeks (3 x 21 active pills or 3 rings, or 9 patches used consecutively)	4 or 7 days
Flexible extended use	Continuous use (≥21 days) of active pills, patches or rings until breakthrough bleeding occurs for 3–4 days	4 days
Continuous use	Continuous use of active pills, patches or rings	None

Progestogens

The progesterone only pill (POP)

- Can be used where oestrogen is contra-indicated.
- Irregular bleeding is common.
- Desogestrel preparations (e.g.Cerazette®, Cerelle®) appear to be more effective in reducing menstrual loss and for contraceptive protection than other progesterone only preparations.

Progestogen-only injectables: depot medroxyprogesterone acetate (DMPA)

- Many women are rendered amenorrhoeic by DMPA (e.g. Depo Provera® 150mg, 12 weekly as an intramuscular injection).
- Erratic bleeding is common in the first few months of use however often improves with time.

CSM advice

The CSM has advised that:

- In adolescents DMPA be used only when other methods of contraception are inappropriate.
- In all women, benefits of using DMPA beyond 2 years should be evaluated against risks.
- In women with risk factors for osteoporosis a method of contraception other than DMPA should be considered.

Cyclical Progestogens

- Norethisterone (5mg TID, days 5 to 26 of the menstrual cycle)

- Can significantly reduce menstrual loss.
- Can inhibit ovulation, but should not be considered an effective form of contraception.
- Use limited by the common progestogenic side effects such as breast tenderness, bloating and acne.
- There is an effect on clotting and high dose progestins are contraindicated for patients at high risk for VTE. (10-20mg of Norethisterone a day equates to 20-30μg ethinylestradiol)

Surgical Management - Normal pelvic anatomy or fibroids <3cm with no distortion of endometrial cavity

Endometrial Ablation

- Successful reduction in menstrual blood loss in up to 90% of women, with 25-35% of women experiencing amenorrhoea.
- Suitable for women with a uterus sounded at ≤10cm size with fibroids of up to 3cm which do not distort the cavity.
- Can be performed as an outpatient or daycase procedure.
- This procedure should only be considered in women who have completed their family and contraception should be continued post procedure.
- Women with a previous caesarean delivery should have a scar thickness measured with transvaginal ultrasound of ≥8mm. Where scar is ≤7mm, it is possible to treat, the technique is described in endometrial ablation guideline.
- An endometrial biopsy should be obtained ideally in advance of the procedure.

Hysterectomy

- Total hysterectomy is the only procedure that will guarantee amenorrhoea and has high patient satisfaction rates.
- Hysterectomy has a 4 in 100 risk of major complication.
- Preoperative consideration should be given to smear history (where a subtotal procedure is required) and previous surgery particularly caesarean delivery.
- Oophorectomy should not be performed routinely if ovaries are healthy.
- Patients should be advised that ovarian failure is earlier following hysterectomy.
- Where there is a suggestion of ovarian dysfunction e.g. premenstrual syndrome, a trial of pharmaceutical ovarian suppression for at least 3 months should be used as a guide to the need for oophorectomy.
- The optimal surgical approach (abdominal, vaginal or laparoscopic) will depend on discussion between the patient and her gynaecologist.
- Ensure patient understands the differences between sub-total, total hysterectomy and hysterectomy with bilateral salpingo-oopherectomy (BSO).

Pharmacological Hormonal Management - Fibroids 3 cm or more in diameter, normal endometrial histology

Gonadotrophin Releasing Hormone Analogues (GnRHa)

- The use of GnRHa may be considered prior to surgery or when all other treatment options for uterine fibroids are contraindicated.
- These preparations will stop the menstrual cycle as they induce a temporary menopause.

- Vasomotor symptoms are very common but add-back HRT can be used to treat side effects.
- These preparations are only licensed for 6 months of use and should only be used in the context of a formal management plan following discussion with a consultant.

Surgical Management - Fibroids 3 cm or more in diameter, normal endometrial histology

Women who wish to preserve their uterus

• **Hysteroscopic Resection of sub-mucous fibroids**
- Referral to gynaecologist with special interest for management

• **Myomectomy**
- Suitable for women who wish to preserve her fertility.
- There is a small risk that emergency hysterectomy may be performed.
- Consider pretreatment with a GnRHa for 3 to 4 months.
- The uterus and fibroids should be assessed by ultrasound prior to the procedure, with MRI considered where information about fibroid position, size, number and vascularity is required

Uterine Artery Embolisation (UAE).
- Women who wish to avoid surgery should be referred to interventional radiology for assessment.
- There is a small (about 10%) risk of ovarian failure due to the effect of embolisation on the collateral supply of the ovary.
- Referrals should be made to **Dr Ram Kahsturi or Dr Andrew Christie, Consultant Interventional Radiologists, Glasgow Hospitals**
- It is useful to organise MRI imaging at the same time as referring to the interventional radiology team as it allows full counseling and assessment.

Hysterectomy
- See details above
- Pretreatment before hysterectomy with a GnRHa for 3 to 4 months should be considered particularly where uterine fibroids are causing an enlarged or distorted uterus.

References

- Nice Clinical Guideline 88 : Heavy Menstrual Bleeding: Assessment and Management 2018, updated 2020
  https://www.nice.org.uk/guidance/ng88
- RCOG: Advice for Heavy Menstrual Bleeding (HMB) Services and Commissioners 2014 https://www.rcog.org.uk/globalassets/documents/guidelines/research--audit/advice-for-hmb-services-booklet.pdf
- British National Formulary, https://www.bnf.org/
- Abdominal Hysterectomy for benign conditions, Consent Advice No.4, Royal College of Obstetricians and Gynaecologists, May 2009
- UK Medical Eligibility Criteria for Contraceptive Use (UKMEC)] at www.ffprhc.org.uk
- FSRH Guideline Combined Hormonal Contraception, January 2019 (amended November 2020) https://www.fsrh.org/standards-and-guidance/documents/combined-hormonal-contraception/

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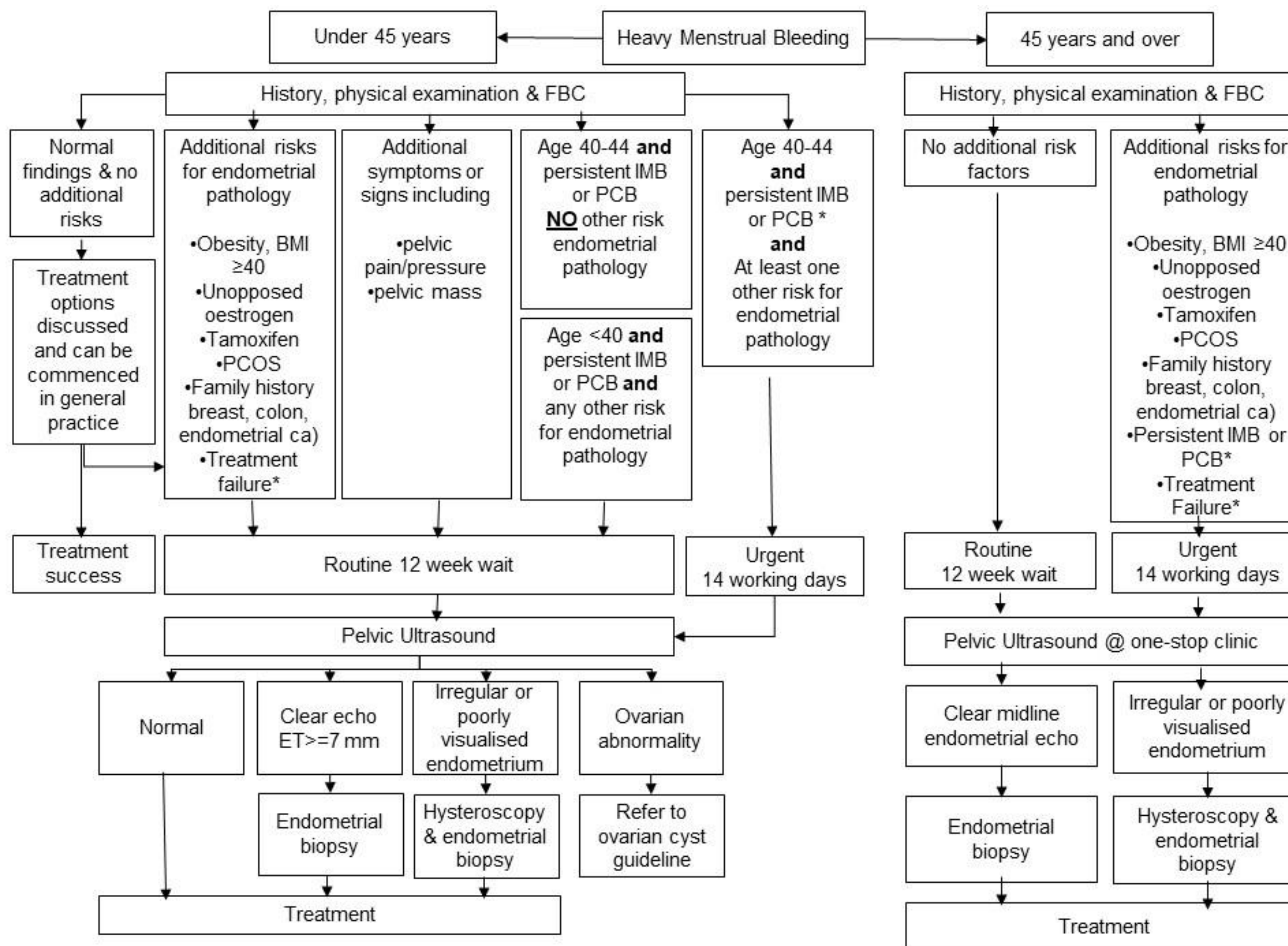
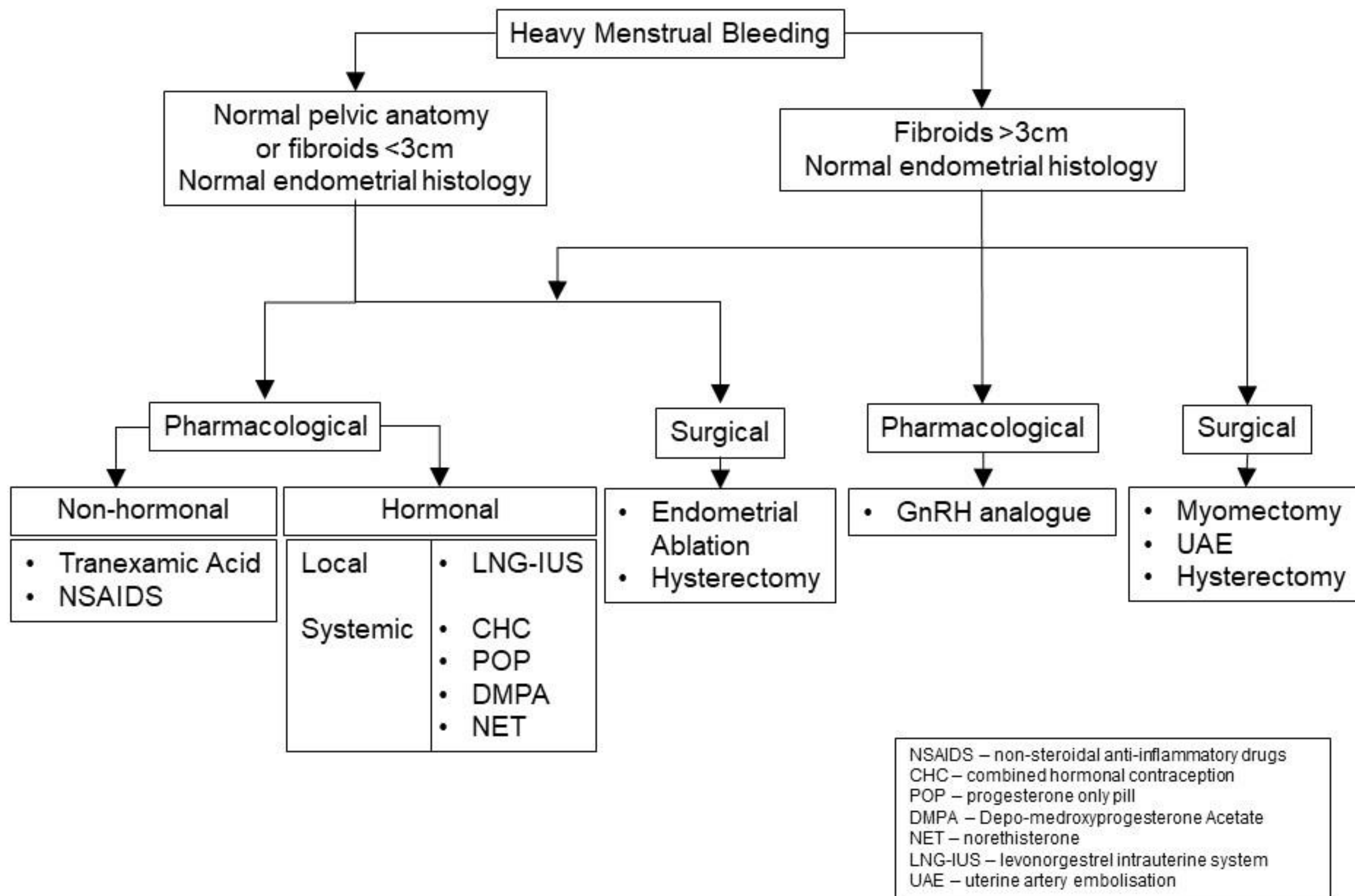
Date:



* See text for definition


Heavy Menstrual Bleeding
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Pharmacological
Surgical
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Surgical
Non-hormonal
Hormonal
• Tranexamic Acid
• NSAIDS
Local
• LNG-IUS
Systemic
• CHC
• POP
• DMPA
• NET
• Endometrial Ablation
• Hysterectomy
• GnRH analogue
• Myomectomy
• UAE
• Hysterectomy
NSAIDS – non-steroidal anti-inflammatory drugs
CHC – combined hormonal contraception
POP – progesterone only pill
DMPA – Depo-medroxyprogesterone Acetate
NET – norethisterone
LNG-IUS – levonorgestrel intrauterine system
UAE – uterine artery embolisation