— If taking a combined preparation, give an additional progestogen (100 mg MP, 10 mg MPA or 5 mg NET) for three months. If unscheduled bleeding settles with use, but recurs with cessation, discuss long-term use (with the potential increased effect on breast tissue and clot risk) if other options are not acceptable or efficacious.
— If separate oral norethisterone leads to cessation of bleeding but the 5 mg dose causes adverse progestogenic side effects, consider off-license use of x3 noriday tablets (1.05 mg norethisterone in total) for 10-14 days in combination with low or standard dose estrogen.
— Re-offer the 52 mg LNG-IUD.

- If a woman reports spotting before the withdrawal bleed, this may represent inadequate stromal formation and increasing the estrogen can, in women taking low dose preparations, be of benefit.[96] Ensure the progestogen dose is in proportion to the estrogen dose.
- Reduce the estrogen dose and offer non-hormonal alternatives (lifestyle, complementary, pharmacological).

Managing unscheduled bleeding with continuous combined preparations (ccHRT)

- Starting ccHRT in women who are perimenopausal can lead to irregular bleeding patterns. Switching to sHRT would be appropriate in women who had menstrual cycles in the 12 months preceding HRT initiation.
- If switching to ccHRT from sHRT, amenorrhoea may be achieved more quickly if a washout period (1 month) is offered to women who have recurrent unscheduled bleeding on sHRT[97, 98] – but this advice needs to be balanced with a transient deterioration in menopausal symptoms.
- Lower dose HRT achieves greater rates of amenorrhoea and if women have mild symptoms, this could be considered (particularly in women > 60 years).
- If using micronised progesterone (MP), prescribe daily use, rather than days 1-25 to reduce administration errors.
- Increasing the progestogen dose or changing the progestogen type can be beneficial:
  — Increase MP to 200 mg per day.[24, 25]
  — Increase MP to 200 mg on days 1-25 of a 28-day cycle (ensure understanding to reduce adherence errors)
  — Consider using 200 mg MP vaginally (off-license use)
  — Change to transdermal estrogen and either oral MPA or NET (if they do not absorb estrogen through an oral route, find a 52 mg LNG-IUD unacceptable, have recurrent bleeding despite adjustments in MP and are low-risk for thrombosis).
  — If taking a combined preparation, an additional progestogen dose can be given (100 mg MP, 5 mg MPA or 5 mg NET). Trial for three months to reduce endometrial proliferation and if this leads to amenorrhoea during use, but bleeding recurrence on cessation, then discuss long-term use (with the potential increased effect on breast tissue and clot risk) if other options are not acceptable or efficacious.

— If separate oral norethisterone leads to cessation of bleeding but the 5 mg dose causes adverse progestogenic side effects, consider daily off-license use of x3 noriday tablets (1.05 mg norethisterone in total) in combination with low or standard dose estrogen.
— Re-offer the 52 mg LNG-IUD.

— If at 4 years of use, new unscheduled bleeding develops, offer a change of 52 mg LNG IUD, if cancer exclusion investigations are normal – particularly in women using more than high dose estrogen and in those with a BMI ≥ 40.

- Oral preparations may achieve greater cumulative rates of amenorrhoea than transdermal. If older than age 60, oral preparations are a risk factor for thrombosis, but if stopping HRT and switching to non-hormonal alternatives is not acceptable, because of quality-of-life effects, then the pros and cons of combined ultra-low and low-dose oral preparations, which contain micronised progesterone or dydrogesterone (lower breast and thrombotic effects), may be of benefit.
- If unscheduled bleeding persists, despite trying multiple adjustments, discuss changing to a sequential regimen for 6-12 months.
- Discuss reducing the estrogen dose and offer non-hormonal alternatives (lifestyle, complementary, pharmacological).

Surgical options

Hysteroscopic myomectomy

This can be considered an option in women with heavy bleeding and a normal endometrial assessment who have submucosal fibroids which prevent insertion of a 52 mg LNG-IUD. Consider if changes to the HRT preparation are not acceptable or efficacious. After informed counselling, small, non-vascular and mostly intracavity submucosal fibroids (FIGO type 0 and 1) may be suitable for resection in an outpatient setting with appropriate pain-relief. However, most submucosal fibroids require removal as a day case procedure under regional or general anaesthesia. Preparation for hysteroscopic myomectomy may require assessment of fitness for a general anaesthetic, a degree of intravascular fluid absorption as well as a laparoscopy if uterine perforation occurs. It may also require down-regulation (GnRH analogues) with a potential reduction in estrogen dose if moderate or high-dose preparations are currently used (which can affect menopause symptom control).

Endometrial Ablation

This day case / outpatient procedure is not recommended as a management option in women who have recurrent unscheduled bleeding. Uterine cavity adhesions after endometrial ablation often prevent further endometrial evaluation with ultrasound, hysteroscopy and/or endometrial biopsy if further episodes of unscheduled bleeding occur (which may then necessitate a hysterectomy).

Hysterectomy

This is a major operation and risks of the procedure (bleeding, infection, hernia formation, risk of prolapse and bladder dysfunction, plus injury to surrounding structures including bladder, bowel and ureters) need to outweigh the benefits (management of unscheduled bleeding). All avenues of managing the bleeding pattern, including reducing the estrogen dose, stopping HRT with consideration of non-hormonal options / lifestyle measures and reasons for 52 mg LNG-IUD non-acceptability, if relevant, should be explored and documented before considering hysterectomy. Medical and individual comorbidities (such as an elevated BMI) can increase intraoperative and postoperative surgical and anaesthetic risks; these factors would need to be optimised before considering major elective surgery (which may in itself improve unscheduled bleeding episodes).

Abbreviations and key terms

Term	Description
BGCS	British Gynaecological Cancer Society
BSGE	British Society for Gynaecological Endoscopy
Direct access	When an assessment is done by primary care, who then retain clinical responsibility throughout, including acting on the result
BMS	British Menopause Society
ccHRT	Continuous combined HRT: estrogen and progestogen every day
ET	Endometrial thickness
HRT	Hormone replacement therapy
Hyperplasia	Precancerous change
LNG IUD	52 mg levonorgestrel Intrauterine Device
MP	Micronised progesterone
NICE	National Institute of Clinical Excellence
PMB	Postmenopausal bleeding
Progestogen	Encompasses synthetic progestogens and progesterone unless specifically stated otherwise
RCOG	Royal College of Obstetricians and Gynaecologists
RCT	Randomised control trial
sHRT	Sequential (also known as cyclical) HRT: estrogen every day and, depending on the specific preparation, a progestogen for 10 to 14 days per month
Synthetic progestogens: NET MPA Livial	 Norethisterone Medroxyprogesterone acetate Tibolone
TCRF	Transcervical resection of fibroids
Tricycling / Long-cycle	Estrogen daily and a reduced progestogen course (every three months)
TVS	Transvaginal ultrasound
TAS	Transabdominal ultrasound
Urgent pathway	Investigation to be complete within 6 weeks
USCP	Urgent suspicion of cancer pathway
VTE	Venous thromboembolism

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