Red Flags

- Tamoxifen use

Background

About Postmenopausal Bleeding

Postmenopausal bleeding (PMB) is defined as vaginal bleeding after more than 12 months amenorrhoea, around expected age of menopause.

One in 10 women with PMB will have endometrial cancer.

Common causes:

- Atrophy (60 to 80%)
- Hormone replacement therapy (HRT) (15 to 25%)
- Polyps (cervical or endometrial) (2 to 12%)
- Endometrial cancer (10%)
- Endometrial hyperplasia (10%)

The gold standard for investigation of PMB is endometrial biopsy, usually performed during hysteroscopy.

Assessment

1. Consider possible causes.

   Possible causes

   - Atrophic vaginitis
   - Hormone replacement therapy (HRT) or exogenous oestrogen
   - Polyps (endometrial, cervical)
   - Endometrial hyperplasia
   - Endometrial cancer
   - Cervical cancer
   - Genital tract malignancy, other
   - Vaginal trauma
   - Bleeding from non-gynaecological sites

2. Take a history.

   History

   Ask the patient about:

   - Duration, pattern, volume, other pelvic symptoms, pain, weight loss
   - Urinary and bowel symptoms to ensure reported bleeding is vaginal
   - Risk factors for endometrial cancer
**Risk factors for endometrial cancer**

- Weight 90 kg or more, particularly with co-morbid hypertension and diabetes
- History of chronic anovulation, polycystic ovarian syndrome (PCOS), or infertility
- Nulliparity
- Exposure to unopposed oestrogen, either prescribed over-the-counter (OTC) or bioidentical
- Exposure to tamoxifen
- Endometrial thickness over 4 mm in postmenopausal women
- Pelvic ultrasound showing cystic endometrial changes
- Strong family history of endometrial or colon cancer

➢ If using hormone replacement therapy (HRT):
  - Type – cyclical or continuous, combined or oestrogen alone, bioidentical
  - Recency of starting continuous HRT (breakthrough bleeding common in first 6 months)
  - Medicines or supplements that affect HRT metabolism – St John’s wort, grapefruit juice, carbamazepine, phenytoin, rifampicin
  - Alternative supplements with hormone effects – phytoestrogens e.g., soy, red clover

3. Perform abdominal and pelvic examination:
   - Carefully inspect urethra, vulva, vagina, and cervix
   - Inspect perineum and anus to help exclude non-vaginal cause of bleeding
   - Check for masses, tenderness, cervical excitation, mobility of organs, and other abnormalities

4. Investigations:
   - Perform cervical co-test (HPV and liquid based cytology) if either:
     - previous cervical screening > 6 months ago,
     - previous result was abnormal, or
     - if only HPV screen (and not co-test) at previous test.
   - Arrange sexually transmitted infection (STI) screen if relevant
   - Consider FBE
   - Arrange transvaginal ultrasound scan – within one week if high-risk features

**Transvaginal ultrasound scan**

➢ A specialist gynaecology ultrasound is recommended.
➢ A transabdominal pelvic ultrasound can be performed for a patient who has not become sexually active or has declined a transvaginal pelvic ultrasound.
➢ Assess for focal endometrial lesions, polyps, thickened endometrium (more than 4 mm in postmenopausal woman).

5. If on hormone replacement therapy (HRT), investigate bleeding if the patient is taking:

   ➢ continuous combined HRT, if bleeding occurs more than 6 months after starting treatment or is unusually heavy.
➢ cyclical combined HRT, if bleeding is heavy or prolonged or occurs outside the established regular cycle.

**Management**

1. If uncontrolled vaginal bleeding or haemodynamic instability, refer for immediate gynaecology assessment or admission.

2. Refer for urgent or routine gynaecology assessment if any of:
   - endometrial thickness more than 4 mm, polyp, or focal endometrial lesions on ultrasound.
   - abnormal cervical screening.
   - suspicion of malignancy – high-risk features on history, examination, or ultrasound.

3. If the patient has a history of exposure to tamoxifen, they are at increased risk of endometrial cancer. A normal ultrasound is not reassuring. Refer for urgent or routine gynaecology assessment in all cases.

4. If a non-endometrial cause is identified, treat depending on cause:
   - If *atrophic vaginitis* is identified (and all other examinations and investigations are normal), consider topical oestrogen treatment. If postmenopausal bleeding persists after 2 months, refer for urgent or routine gynaecology assessment.

**Atrophic vaginitis**

Atrophic vaginitis is the most common benign cause of postmenopausal bleeding. Options for treatment are:

- Oestriol vaginal cream 1 mg/g (Ovestin) 1 applicator intravaginally at bedtime nightly for 3 weeks, then continued at a maintenance dose of twice a week.
- Oestradiol pessary 10 micrograms (Vagifem Low) 1 pessary intravaginally at bedtime nightly for 3 weeks, then 1 twice a week thereafter.

- If other cervical or vaginal abnormality is identified, refer for urgent or routine gynaecology assessment if indicated.

5. A watch-and-review approach may be taken if:
   - continuous HRT started less than 6 months ago. Consider return to cyclical HRT or increasing progestogen to stabilise breakthrough bleeding.
   - low-risk history and normal findings – examination, cervical screen test, swabs, endometrium 4 mm or less on ultrasound.

6. If persistent or recurrent episodes of postmenopausal bleeding, refer for urgent or routine gynaecology assessment.
Referral

- If uncontrolled vaginal bleeding or haemodynamic instability, refer for immediate gynaecology assessment or admission.
- Refer for urgent or routine gynaecology assessment if any of:
  - endometrial thickness more than 4 mm, polyp, or focal endometrial lesions on ultrasound.
  - abnormal cervical screening.
  - suspicion of malignancy – high-risk features on history, examination, or ultrasound.
  - exposure to tamoxifen.
  - atrophic vaginitis is treated and postmenopausal bleeding persists after 2 months.
  - other cervical or vaginal abnormality is identified.
  - persistent or recurrent postmenopausal bleeding, despite normal findings.

Information

For health professionals

Further information

- Patient – HRT: Follow-up Assessments
- The Royal Australian and New Zealand College of Radiologists – Abnormal Vaginal Bleeding In Pre- and Peri-menopausal Women

For patients

- Australian Menopause Society – Fact Sheets
- Health Translations – Women's Health
- The Royal Women's Hospital:
  - Bleeding After Menopause
  - Investigations and Treatment

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