VAGINAL BLEEDING IN POST-MENOPAUSAL WOMEN

A diagnostic guide for General Practitioners and Gynaecologists

This guide was developed to assist general practitioners and gynaecologists in assessing post-menopausal women with vaginal bleeding, to maximise diagnostic accuracy for endometrial cancer. This is a general guide to appropriate practice to be followed subject to the clinicians' judgement in each individual case, and is based on the best available evidence and expert consensus (February 2011). The Commonwealth does not accept any legal liability or responsibility for any loss or damages incurred by the reliance on, or interpretation of, information contained in this guide.

RISK FACTORS

Risk factors for endometrial cancer include:
- History of chronic anovulation
- Exposure to unopposed oestrogen
- Polycystic ovary syndrome (PCOS) associated with chronic anovulation
- Exposure to tamoxifen
- Strong family history of endometrial or colon cancer (Lynch syndrome)
- Nulliparity
- Obesity often with diabetes and hypercholesterolemia
- Endometrial thickness > 4mm

NB ‘Endometrial’ hormones
- There is no evidence of sufficient quality around the safety and efficacy of natural or pro-hormone endometrial thickness is associated with an increased risk of endometrial cancer, however, some studies have shown a small increase in risk.
- Endometrial thickness in the range of 4mm to 6mm is considered normal.

PRACTICE POINTS

Tamoxifen
- Endometrial biopsy should be used to assess women on tamoxifen experiencing vaginal bleeding, as this has been shown to be neither sensitive nor specific for neoplasia in these women.

HRT
- Vaginal bleeding or spotting may be an expected side effect of HRT, thus routine evaluations of the endometrium are not essential in the first 6 months. However, if bleeding persists after the initial 6 months, evaluation should be undertaken. Bleeding outside the time frame of progestin withdrawal is deemed atypical for women using cyclic progestins, and requires investigation.

HISTORY

- All vaginal bleeding should be investigated.
- Dark blood stains or 'unsual for the woman' discharge is a possible symptom of endometrial cancer. However, clear or yellow vaginal discharge is usually not indicative of a malignant condition.
- Review the patient's history, especially with regard to risk factors, pattern of bleeding, the relationship between bleeding and the use of HRT.

INVESTIGATIONS

Pelvic Exam
- All women presenting with post-menopausal bleeding should have a pelvic examination. The examination should include a bimanual examination and inspection of the vulva.

Ultrasound
- Ultrasoundography of endometrial thickness alone, using best quality studies cannot be used to accurately rule out endometrial hyperplasia or carcinoma.

Transvaginal Ultrasonography (TVUS)
- TVUS is an initial screening tool for identifying high and low risk; it is not a diagnostic tool.
- TVUS should be performed by an experienced examiner using high quality ultrasound equipment and a standardized measurement technique.
- When a TVUS is ordered, GPs should request that the report includes the endometrial thickness. The GP should also indicate on the report any change in the endometrial thickness of the patient (e.g. pre, peri or post).
- For patients on sequential HRT, TVUS measurements should take place during the first half of the cycle.

DEFINITIONS

Post-menopausal bleeding: spontaneous vaginal bleeding that occurs more than one year after the last episode of bleeding.

Endometrial Biopsy
- Invasive procedures should be undertaken, where possible, by the relevant specialist gynaecologist, gynaecological oncologist.
- If a patient has post-menopausal bleeding and an endometrial thickness of greater than 4mm, an endometrial biopsy should be undertaken with an endometrial sampling device.
- Adequate samples from biopsies are more likely to be obtained if performed simultaneously with a hysteroscopy.

Diagnosing Hysteroscopy
- Diagnostic hysteroscopy is a highly specific, accurate, safe and clinically useful tool for detecting intrauterine abnormalities and to direct treatment at the specific pathology while avoiding unnecessary surgery.
- Understanding a hysteroscopy at the same time as a biopsy increases the chance of an adequate sample.
- Hysteroscopy with biopsy is preferable as the first line of investigation in women taking tamoxifen.
- Patients recover significantly faster from outpatient hysteroscopy than from day case hysteroscopy, though this may not always be available as a diagnostic tool in all areas.
- Aerosol fumigation on the cervix significantly reduces pain and discomfort.

Dilation and Curettage (D&C)
- If a D&C is undertaken, a concurrent hysteroscopy should be performed.

GP SURVEILLANCE
- Practitioners should ask their patients to come back for a follow up appointment if they notice any changes, have any concerns or experience further bleeding.

Ongoing repeat TVUS is not recommended for women in the absence of ongoing symptoms.
ABNORMAL VAGINAL BLEEDING IN PRE- AND PERI-MENOPAUSAL WOMEN

A diagnostic guide for General Practitioners and Gynaecologists

This guide was developed to assist general practitioners and gynaecologists in assessing pre- and peri-menopausal women with abnormal vaginal bleeding, to maximise diagnostic accuracy for endometrial cancer. This is a general guide to appropriate practice to be followed subject to the clinician’s judgement in each individual case, and is based on the best available evidence and expert consensus (February 2011). The Commonwealth does not accept any legal liability or responsibility for any loss or damages incurred by the reliance on, or interpretation of, information contained in this guide.

**Risk Factors:**
- History of chronic anovulation
- Exposure to unopposed oestrogen
- Polycystic ovary syndrome (PCOS) associated with chronic anovulation
- Exposure to tamoxifen
- Strong family history of endometrial or colorectal cancer (e.g. Lynch syndrome)
- Nulliparity
- Obesity often with diabetes and hypertension
- High ‘natural’ hormones

**Definition:**
- Abnormal vaginal bleeding: an increase in frequency, duration or volume of blood loss.
- Invasive treatment: use of hormone therapy or non-hormonal pharmacological therapy to reduce heavy bleeding, and control irregular bleeding. More aggressive treatment options include the surgical options of hysterectomy or subtotal hysterectomy.

**Pre-menopausal:**
- Characterised by continuation of regular menstrual cycles without any changes in the symptoms of menstruation transition or hormonal variables.
- Any cycle may last 1-3 years, with 1% of cycles lasting over 3 years.

**Menopausal:**
- Invasive procedures should be undertaken when possible by the relevant specialist (gynaecologist, gynaecological oncologist).
- If insufficient material is obtained for a histological diagnosis, no further investigation is required in the absence of ongoing bleeding unless the woman has an endometrial thickness over 10mm for pre-menopausal women and 5mm for perimenopausal women.
- Adequate samples from biopsies are more likely to be obtained if performed simultaneously with a hysterectomy.

**Investigations:**
- Pelvic Examination
- A pelvic examination should be undertaken when a woman presents with abnormal vaginal bleeding. The speculum examination should include the cervix and vagina, and inspection of the vulva.

**Hysteroscopy and D&C**
- Negative

**Malignant**
- Refer to gynaecological oncologist

**Benign**
- Refer to gynaecologist for endometrial biopsy (with or without hysteroscopy).
- Appointment should ideally be within 6 weeks of referral.

**Risk Factors:**
- Family history of endometrial cancer includes:
  - History of chronic anovulation
  - Exposure to unopposed oestrogen
  - Polycystic ovary syndrome (PCOS) associated with chronic anovulation
  - Exposure to tamoxifen
  - Strong family history of endometrial or colorectal cancer (e.g. Lynch syndrome)
  - Nulliparity
  - Obesity often with diabetes and hypertension
  - High ‘natural’ hormones

- There is no evidence of sufficient quality around the safety and efficacy of natural or bio-identical hormones. However, many of these preparations contain estrogens and are likely to carry the same risks as other types of HRT. Bio-identical hormones come in the form of, oestrone, oestradiol or oestriol.

- A medical history of the woman should be taken including the menopause, the nature of the current bleeding problem, the patient’s quality of life with respect to the current problem and any other related symptoms.
- Heavy bleeding and irregular bleeding patterns is required in the absence of ongoing bleeding unless the woman has an endometrial thickness over 10mm for pre-menopausal women and 5mm for perimenopausal women.
- Adequate samples from biopsies are more likely to be obtained if performed simultaneously with a hysterectomy.

**Dilation and Curettage (D&C)**
- If a D&C is undertaken, a concurrent hysterectomy should be performed.

**Routine GP Surveillance**

**Endometrial thickness**
- Less than 12mm for Pre
- Less than 5mm for Peri
- Greater than 12mm for Pre
- Greater than 5mm for Peri

**REFERENCES**
- To Gynaecologist for Endometrial Biopsy (with or without Hysteroscopy).
- Appointment should ideally be within 6 weeks of referral.

**Lifestyle Changes:**
- A hysteroscopy undertaken at the same time as an endometrial biopsy increases the chance of an adequate sample.
- A diagnostic hysteroscopy should be performed if a TVS is inconclusive or suggests intrauterine pathology.
- Avoidance of drugs can significantly reduce pain and discomfort.

**Diagnosis:**
- Diagnostic hysteroscopy is a highly specific, accurate, safe and clinically useful tool for detecting intrauterine abnormalities and is the direct treatment at the specific pathology while avoiding needless surgery.
- A thick endometrium can be observed in the pelvic cavity, so as to achieve optimal visualization diagnostic hysteroscopy should be performed in the follicular phase of the cycle.

**Routine Surveillance**
- Practitioners should ask their patients to come back for a follow-up appointment if they notice any changes or have any concerns about their menstrual/bleeding pattern. Patients should be reassured that if they are concerned about a change in their bleeding pattern, they should contact their healthcare provider for assessment.

**Endometrial Thickness in Perimenopausal Women:**
- In general, the endometrial thickness in the peri-menopausal woman is dependent on the time of the menstrual cycle during which the ultrasound is performed. Most accurate results are achieved if performed on days 6-7 of the menstrual cycle, when women have ceased ovulation.

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