Postmenopausal bleeding should be referred urgently

CAUSES
Postmenopausal bleeding is a common problem and occurs in up to 10% of women aged over 55 years. The majority of cases have a benign cause. There is no evidence to indicate whether different patterns of postmenopausal bleeding such as one-off bleeding or more frequent bleeds are more likely to be associated with malignancy.

Possible causes of postmenopausal vaginal bleeding are listed in table 1, p14.

PRIMARY CARE ASSESSMENT
The aim of assessment and investigation of postmenopausal bleeding is to identify a cause and exclude cancer. Assessment should start by taking a detailed history with identification of risk factors for endometrial cancer (see table 2, p14) as well as a medication history covering use of HRT, tamoxifen and anticoagulants.

Abdominal and pelvic examinations should be carried out to look for masses. Speculum examination should be performed to:

- see if a source of bleeding can be identified
- assess atrophic changes in the vagina
- look for evidence of cervical malignancy or polyps.

The woman is usually clear where the bleeding has come from i.e. from the vagina, urethra or rectum. When there is uncertainty about the origin of the bleeding a tampon can be inserted to confirm the bleeding is vaginal rather than rectal or urethral.
Other causes

Table 1

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<th>Causes of postmenopausal bleeding</th>
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<tr>
<td>Endometrial carcinoma</td>
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<td>Cervical carcinoma</td>
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<tr>
<td>Vaginal atrophy</td>
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<tr>
<td>Endometrial hyperplasia ± polyp</td>
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<tr>
<td>Cervical polyps</td>
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<tr>
<td>Hormone-producing ovarian tumours</td>
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<td>Other causes</td>
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If a source of bleeding is identified on speculum, treatment for this should be initiated. The woman should have an ultrasound scan arranged to check the endometrial thickness. If the endometrial thickness is <5 mm on ultrasound scan and the postmenopausal bleeding has stopped, then no further action need be taken.

DIAGNOSIS

All women who have an episode of postmenopausal bleeding should be seen under the two-week referral rule. Endometrial cancer should be excluded. Ultrasound scan and endometrial biopsy are complementary. Ultrasound scan can define endometrial thickness and identify structural abnormalities of the uterus, endometrium and ovaries. Endometrial biopsy provides a histological diagnosis.

Transvaginal ultrasound scan

Most evidence at present advocates the use of transvaginal ultrasound scan (TVUS) as the initial investigation of postmenopausal bleeding. TVUS can reliably assess the thickness of the endometrium and identify structural abnormalities such as polyps or submucous fibroids. It is also a valuable diagnostic tool in excluding ovarian malignancy.

The measurement of endometrial thickness aims to identify which women postmenopausal bleeding are at significant risk of endometrial cancer. The thicker the endometrium, the higher the chance of endometrial cancer being present. The chance of finding endometrial cancer in a woman with an endometrial thickness of ≤4 mm is 0.8%. The thinner the endometrial thickness chosen as a cut-off, the fewer cases of endometrial cancer will be missed. A higher cut-off will result in more cases of endometrial cancer being missed but will mean fewer unnecessary investigations. The SIGN guidelines advise that an endometrial thickness of <3 mm can be used to exclude endometrial cancer in women who:

- have never received HRT
- have not used HRT for a year or more
- are on continuous combined HRT

A recent meta-analysis suggested that a cut-off of 5 mm was a reasonable compromise. It is important to remember that no endometrial thickness completely excludes cancer and the disease can present in women without postmenopausal bleeding. If the examination is normal, the bleeding has stopped and the endometrial thickness is <5 mm on TVUS, no further action need be taken. If bleeding recurs, referral for hysteroscopy would be indicated.

Endometrial biopsy

Endometrial sampling is an effective screening test for endometrial cancer but misses benign structural abnormalities such as endometrial polyps. Blind endometrial biopsy techniques can be used to obtain samples. Endometrial

Table 2

<table>
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<th>Risk factors for endometrial cancer</th>
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<td>Age</td>
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- peak incidence for endometrial cancer is between 65 and 75 years
- 93% of cases of endometrial cancer are diagnosed in women aged 50 years and over

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<tr>
<th>Past medical history of endometrial hyperplasia or polyps</th>
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<tr>
<td>Endogenous oestrogen excess</td>
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</tbody>
</table>
- obesity
- early menarche (<12 years)
- late menopause (>50 years)
- nulliparity — pregnancy reduces the risk of endometrial cancer by 30% after the first birth and by 25% with each subsequent birth
- PCOS

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<th>Drug history of exogenous oestrogen excess</th>
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- unopposed oestrogen replacement therapy
- tamoxifen (risk increases with increasing dose/duration of therapy)

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<th>Personal history of diabetes</th>
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<th>Past medical history of breast or ovarian carcinoma</th>
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<tr>
<td>Family history of hereditary nonpolyposis colon cancer (HNPCC)</td>
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<tr>
<td>patients have an 80% lifetime risk of developing endometrial carcinoma</td>
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Cervical polyps can usually be removed easily in outpatients.

The aim of assessment and investigation of postmenopausal bleeding is to identify a cause and exclude cancer. Assessment should start by taking a detailed history, with identification of risk factors for endometrial cancer, as well as a medication history covering use of HRT, tamoxifen and anticoagulants. Abdominal and pelvic examinations should be carried out to look for masses. Speculum examination should be performed to see if a source of bleeding can be identified, assess atrophic changes in the vagina and look for evidence of cervical malignancy or polyps.

The peak incidence for endometrial carcinoma is between 65 and 75 years of age. Risk factors include a past medical history of endometrial hyperplasia or polyps, obesity, early menarche, late menopause, PCOS, a drug history of exogenous oestrogen excess, diabetes, or a past medical history of breast or ovarian carcinoma. Patients with hereditary nonpolyposis colon cancer (HNPPC) have an 80% lifetime risk of developing endometrial carcinoma.

Ultrasound scan and endometrial biopsy are complementary. Ultrasound scan can define endometrial thickness and identify structural abnormalities of the uterus, endometrium and ovaries. Endometrial biopsy provides a histological diagnosis. The measurement of endometrial thickness aims to identify which women with postmenopausal bleeding are at significant risk of endometrial cancer. If the examination is normal, the bleeding has stopped and the endometrial thickness is < 5 mm on transvaginal ultrasound scan, no further action need be taken. If bleeding recurs, referral for hysteroscopy would be indicated. Endometrial sampling is an effective screening test for endometrial cancer but misses benign structural abnormalities such as endometrial polyps. Hysteroscopy and curettage is the gold standard investigation as it allows direct visualisation and assessment of the endometrial cavity.

Vaginal atrophy can be treated using topical oestrogens. Vaginal atrophy can be treated using topical oestrogens and there is minimal systemic absorption. Our preferred approach is to use vaginal oestrogen daily for two weeks and then once or twice weekly for maintenance. This can be continued long term without the need for any monitoring. If other menopausal symptoms are present then HRT may be used.

Cervical polyps usually can be removed easily as an outpatient procedure. Sponge forceps are used to twist the pedicle gradually until the polyp comes away. Endometrial polyps should be removed hysteroscopically.

Endometrial polyps should be removed hysteroscopically. Endometrial hyperplasia without atypia has a good response rate when treated with progestagens. Complex endometrial hyperplasia with atypia progresses to endometrial carcinoma in 23% of cases and should therefore be treated as endometrial cancer.

Endometrial cancer

The treatment for endometrial cancer is hysterectomy. Endometrial cancer is staged using the FIGO staging system, and treatment is determined by the stage of the cancer.

Stage 1 (cancer confined to the uterus) is treated with hysterectomy and bilateral salpingooophorectomy. Stage 2 or high-risk stage 1 cancer requires lymph node dissection. Adjuvant therapy (usually radiotherapy) with or without chemotherapy may be offered depending on the final histological diagnosis and staging.

Conclusions

Postmenopausal bleeding is a relatively common presentation that usually has a benign cause. Endometrial cancer is present in approximately 10% of cases. All women with postmenopausal bleeding should be referred to the gynaecology department under the two week rule. First-line investigation is a TVUS, which provides valuable information to identify which women need to undergo more extensive investigations. A normal TVUS is reassuring, and if examination is normal further investigation is not required, providing the bleeding has stopped.

References

9. Patient information leaflets on endometrial cancer

Useful information

If you would like to comment on this article or have a question for the authors, write to:
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