UTERINE CANCER

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Overview

Uterine cancer is the most common gynecologic malignancy with adenocarcinoma of the endometrium being the most common type. Uterine cancer typically presents as abnormal uterine bleeding, often in postmenopausal women. Occasionally, it may present as abnormal cervical cytology in the absence of abnormal uterine bleeding. A Pap smear showing adenocarcinoma or atypical glandular cells is likely of uterine origin and warrants further investigation.

Diagnostic Considerations

<table>
<thead>
<tr>
<th>Age</th>
<th>When to Investigate</th>
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<td>&lt; 45 years</td>
<td>Persistent abnormal uterine bleeding, history of unopposed estrogen exposure (obesity, chronic anovulation), failed medical management of vaginal bleeding, high risk of endometrial cancer (Lynch syndrome)</td>
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<td>45 to Menopause</td>
<td>Any abnormal uterine bleeding (including intermenstrual bleeding and frequent, heavy, prolonged periods in ovulatory women). Prolonged periods of amenorrhea in anovulatory women.</td>
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<tr>
<td>Postmenopausal</td>
<td>Any bleeding, including spotting or staining.</td>
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Risk Factors

- Long-term unopposed estrogen (increases risk of endometrial hyperplasia by up to 15 times)
- Onset of menarche < age 12
- Menopause > age 50
- Age >40
- Weight ≥90 kg (200 lbs)
- Anovulatory cycles (ie PCOS)
- Nulliparity
- Infertility
- Tamoxifen use
- Family history of endometrial, ovarian or colon cancer (Lynch syndrome II)

Investigations

Pelvic ultrasound to determine endometrial thickness:
- thickness < 4 mm, likelihood of endometrial cancer is extremely low
- thickness > 4 mm, further investigate with endometrial biopsy

If the endometrial biopsy is not diagnostic or where endometrial aspiration cannot be completed, patients should be referred to gynecology for a dilation and curettage (D&C) or hysteroscopy. A D&C does not sample the entire endometrium, missing up to 10% of disease whereas hysteroscopy allows direct visualization of the endometrial cavity. Patients diagnosed with uterine cancer should be referred to a gynecologic oncologist.

No further treatment is required for normal biopsy results such as those indicating proliferative or secretory endometrium unless bleeding persists.

Prognosis

75% of patients with endometrial cancer have cancer confined to the uterus (stage 1). The 5 year survival for stage 1 endometrial carcinoma is approximately 80 to 90%.

Poor prognostic factors include:
- Increasing age, large uterus, myometrial invasion, certain cell histologies (adenosquamous, serous and clear cell adenocarcinoma), vascular space involvement, peritoneal cytology, and absence of estrogen or progesterone receptors

Management

Endometrial cancer is typically managed surgically by total hysterectomy, bilateral salpingoophorectomy, and assessment of lymph nodes with the addition of chemotherapy and radiation for unfavorable histologies. Treatment by stage is as follows:

Stage 1 or 2: confined to the endometrium, surgery alone is often curative with no further treatment

Stage 3: at high risk for nodal involvement, may require adjuvant pelvic radiotherapy to reduce vaginal or pelvic recurrence but radiotherapy does not improve survival

Stage 4: extensive metastatic disease, often incurable, is treated on a case by case basis with one or a combination of surgical cytoreduction, chemotherapy and radiation

Post-treatment Follow-up and Surveillance

The majority of recurrences of endometrial carcinoma occur within 3 years after treatment. Surveillance includes:
- Discussion with family physician regarding ongoing symptoms, sexual dysfunction, psychological distress
- Symptom monitoring for vaginal bleeding, abdominal or pelvic pain, persistent cough, unexplained weight loss and a pelvi-rectal examination
- Review of symptoms and physical examination should be done every 3-6 months for 2 years, then annually
- Vaginal cytology should be done every 6 months for 2 years, then annually
- There is no evidence for following CA 125 or imaging studies in asymptomatic women

Bottom Line

Early diagnosis of uterine cancer is key, requiring prompt and appropriate investigations of abnormal uterine bleeding.

References can be found online at http://www.dfcn.utoronto.ca/programs/postgraduateprograme/OnePager_Project_References.htm