Updates in Gynecologic Oncology

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I have no conflict of interest to report
## Endometrial Cancer: Risk Factors

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Relative Risk [X]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td></td>
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<tr>
<td>&gt;30 LBS</td>
<td>3</td>
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<tr>
<td>&gt;50 LBS</td>
<td>10</td>
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<tr>
<td>Nulliparous</td>
<td>2</td>
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<tr>
<td>Late Menopause</td>
<td>4</td>
</tr>
<tr>
<td>Unopposed Estrogen</td>
<td>9.5</td>
</tr>
<tr>
<td>Atypical Hyperplasia</td>
<td>29</td>
</tr>
<tr>
<td>Diabetes</td>
<td>2.8</td>
</tr>
<tr>
<td>Hypertension</td>
<td>1.5</td>
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</tbody>
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Evaluation of Abnormal Uterine Bleeding (AUB)

- Pre-menopausal
  - ANY inter-menstrual spotting
  - Menses lasting longer than 7 days
- Post-menopausal
  - Any bleeding at all, one spot counts as AUB
- Clinical definition of menopause: cessation of menses > 12 months
Evaluation of AUB

- **Pre-menopausal**
  - Office endometrial biopsy if >45 years of age
  - Anovulatory bleeding most common cause of AUB <45yo

- **Post menopausal**
  - Office endometrial biopsy for ANY bleeding at all ????????
  - TVUS: endometrial stripe ≤ 4mm 99% NPV for endometrial cancer
  - Endometrial stripe >4mm found incidentally in post menopausal female without AUB requires no further workup *
Evaluation of AUB Cont..

- For post menopausal women with AUB and a negative office endometrial biopsy......
  - MUST do hysteroscopy with D&C, this is cancer until proven otherwise
- Office endometrial biopsy only samples approximately 10% of the endometrial cavity
Interpretation of biopsy results

- Risk of progression to cancer
- Simple hyperplasia - 1%
- Complex hyperplasia - 10%
- Complex hyperplasia with atypia - 39% (risk of occult malignancy at time of hysterectomy)
AUB: special situations

- Tamoxifen
  - 2.2 RR of developing endometrial cancer
  - No screening indicated but any patient on tamoxifen with AUB needs an endometrial assessment (either office EMBx or hysteroscopy)

- Raloxifene
  - No increased risk

- Aromatase inhibitors
  - No increased risk
Pre-menopausal patients with AUB and obesity
- Clinical judgement needs to be used
- No definitive recommendations
- Safe to error of the side of more biopsies???
- 28 year old patient with endometrial cancer
Screening for HNPCC and significance in endometrial cancer

- Who to screen:
  - Endometrial or colorectal cancer (CRC) <50 yo
  - Endometrial or ovarian cancer with a CRC or other Lynch ass’d cancer
  - Endometrial or CRC and 1st degree relative with HNPCC ass’d tumor dx’d before age 50
  - Endometrial or CRC at any age with two or more 1st or 2nd degree with lynch ass’d cancer at any age
  - Evidence mismatch repair mutation in endometrial or CRC tumor specimen
Screening for HNPCC and significance in endometrial cancer

- IHC for mutations in mismatch repair genes (MLH1, MSH2, MSH6, PMS2), performed on all endometrial and CRCs
  - Proceed to germline testing if any abnormal proteins present (if MLH1 abnormal then need to test for promoter methylation)
- Microsatellite instability
  - Proceed to germline testing
- If HNPCC diagnosed
  - Endometrial biopsy every 1-2 years starting at age 35
  - Prophylactic hysterectomy and BSO at age 40 or at the conclusion of childbearing
Screening for HNPCC and significance in endometrial cancer

- Endometrial cancers with Mismatch repair deficiencies (MMRd) or Microsatellite instability (MSI) seem to be more recognizable by the host immune system.
- May 2017 Pembrolizumab approved for all solid tumors with MMRd or MSI
- >Ten years since novel drug approved for endometrial cancer
The USPSTF recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years. (A recommendation)

The USPSTF recommends screening every 3 years with cervical cytology alone, every 5 years with hrHPV testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting) in women aged 30 to 65 years. (A recommendation)
The USPSTF recommends against screening for cervical cancer in women younger than 21 years. (D recommendation)

The USPSTF recommends against screening for cervical cancer in women older than 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer. (D recommendation)

The USPSTF recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and do not have a history of a high-grade precancerous lesion or cervical cancer. (D recommendation)
Cervical Cytology Result: Atypical Glandular Cells Of Undetermined Significance

- 50% risk of high grade dysplasia or malignancy of the cervix or uterus
- Work-up consists of endocervical curettings, cervical conization, and hysteroscopy dilation and curettage
New Treatments in Cervical Cancer

- June 12, 2018, FDA approves Pembrolizumab for the treatment of patients with recurrent or metastatic cervical cancer who’s tumor express programmed death ligand-1 (PD-L1) and progressed on systemic chemotherapy
- 30% Clinical response rate (<10% with previous available drugs)
Indications for referral to Gynecologic Oncologist for women with adnexal mass

- Pre-menopausal
- CA-125 >200, U/S findings suspicious for malignancy, ascites, a nodular or fixed pelvic mass, abdominal or distant metastasis, strong family history of breast or ovarian cancer
- Post-menopausal
- Any elevation in CA-125, U/S findings suspicious for malignancy, ascites, a nodular or fixed pelvic mass, abdominal or distant metastasis, strong family history of breast or ovarian cancer
- Pre, or Post-menopausal with and elevated score on a formal risk assessment test (ROMA, RMI, etc)