SEXUALITY AND REPRODUCTIVE PATTERNS
NURSING CARE OF FEMALE CLIENTS WITH REPRODUCTIVE STRESSORS
Florence Mullarkey

Female Reproductive Stressors
Cervical Cancer/Pathophysiology
- Preinvasive: limited to the cervix, described on a continuum from dysplasia to carcinoma in situ (CIS) – the most advanced premalignant change
  - May also be described by the severity of cervical intraepithelial neoplasia (CIN)
    - CIN 1: mild - CIN 111: severe dysplasia to carcinoma in situ
- Invasive: in the cervix and other pelvic structures

Incidence/Prevalence
- National Cancer Institute figures
  - 11,000 new cases (excluding CIS) annually in US
  - 3,600 deaths annually in US
  - Invasive cervical cancer rates have decreased over the last several decades, however, in recent years, it has increased in females younger than 50 (ACS, 2007)
  - Peak incidence of CIN, clients in mid 20’s
  - CIS in clients about 30
  - Invasive cancer most common late 40’s

Etiology/Risk factors
- Viral infections: Herpes type II, CMV, HPV
- DES exposure in utero
- Family history of cancer
- Early sexual activity: multiple partners
- Chronic cervicitis
- Nutritional deficiencies-vitamin A, C, folate
- Smoking

Cervical Cancer Screening
- Begin screening 3 years after initial vaginal intercourse, but no later than 21 years
- Annual pap test or every 2 years with liquid based tests
- At or after age 30, with 3 normal tests in a row, may get screened every 2-3 yrs.
- At or after age 70, women who have had 3 or more consecutive normal tests in last 10 yrs may choose to stop cervical cancer screening.
- High risk females (HIV, immunocompromised) will get screened more frequently

CERVICAL CANCER PREVENTION
- Stop smoking
- Monogamous sexual partners
- Barrier protection and/or spermicidal gel during sexual intercourse (not 100% effective)
- Vaccination with Gardasil to prevent cervical cancer, precancerous genital lesions and genital warts due to human papillomavirus (HPV) types 6, 11, 16 and 18 (dominant types that account for >70% of cancers)
- Gardasil given in 3 doses over 6 months: 2nd dose given 2 months after 1st and 3rd dose given 6 months after 1st.
- Screening via Gynecologic Examinations and Cytologic Screening even if vaccinated with above because there are >100 strains of HPV
What's new
- Clinical trials underway to evaluate use of Gardasil in males
- Cervarix, a second vaccine that targets only HPV 16 and 18 in the works by GlaxoSmithKline.

8 Collaborative Management
- Assessment
  - Preinvasive-often asymptomatic
  - Invasive
    - painless irregular vaginal bleeding, most often postcoital
    - As malignancy progresses see heavier bleeding, foul smelling vaginal discharge and pelvic pain
    - Obstructive uropathy, back pain, and leg swelling are manifestations of late-stage disease.

9 Collaborative management
- Diagnostic evaluation
  - Pap smear (papanicolaou test)
    - >90% of early asymptomatic cases of CIN detected preclinically by Pap cytology If atypical cells, repeat Pap
  - Colposcopy
    - Suspicious lesions biopsied directly via colposcopy
  - Cervical conization biopsy
    - Cone shaped area of cervix removed & sent for pathology
- Invasive cervical cancer
  - Staging, metastatic survey using cystoscopy, sigmoidoscopy, IVP, chest and skeletal x-rays (for early stage-1B, CXR may be all that is needed)

10 Prognosis and Treatment
- Preinvasive or microinvasive squamous cell carcinoma of cervix
  - Conization with biopsy, laser or cryotherapy is usually adequate treatment.
- Invasive: localized for a considerable time
  - 5 year survival rates:
    - 80-90% for stage 1 (limited to cervical wall)
    - 50-65% for stage 11 (in cervix and vagina)
    - 25-35% for stage 111 (spread to pelvic wall)
    - 0-15% for stage IV (in adjacent organs, rectum and bladder)
- Prognosis adversely affected by lymph node involvement, tumor size, vascular invasion etc

11 Treatment of Invasive Cervical Cancer
- Chemotherapy: performs poorly in treatment of cervical cancer. Indicated for unresectable recurrent tumors or disseminated metastatic disease. Cisplatin & 5-fluorouracil some response
- Radiation therapy: for cancer that has not extended beyond the pelvic wall, radiation therapy is as effective as radical hysterectomy.
  - External beam used in combination with intracavitary, former to shrink tumor before implant

12 Treatment of Invasive Cervical Cancer
- Surgery: depends on extent of disease and whether the client wants to have children
  - Conization: definitive treatment for microinvasive cervical cancer. Cone shaped area of tissue removed and analyzed
  - Potential Complications: hemorrhage, uterine perforation, incompetent cervix, cervical stenosis, preterm labor for pregnancies
  - Hysterectomy: removal of uterus, usually done vaginally
  - Radical hysterectomy/TAH: removal of uterus, cervix, fallopian tubes, ovaries and bilateral lymph nodes
Surgical Interventions

- Laser –
  - Small amt of bleeding, light vaginal discharge
  - Heals in 6-12 weeks
- Cryotherapy - freezing, Slight cramping
  - Heavy watery discharge for several weeks
- Loop electrocautery excision (LEEP)
  - Lesions totally removed. Treatment of choice
  - Little discomfort, spotting, mild cramping

Client Education

Local cervical ablation therapy (restrictions for 3 weeks or as directed by physician)
- No intercourse
- No douching
- No tampons
- No heavy lifting
- Report heavy vaginal bleeding, odor, fever.

Surgical Interventions

- Hysterectomy - removal of uterus
- Total Hysterectomy - uterus and cervix
- Panhysterectomy - (TAH BSO) (total abdominal hysterectomy - bilateral salpingo-oophorectomy - uterus, cervix, fallopian tubes and ovaries)
- Pelvic exenteration - radical hysterectomy, total vaginectomy, removal of bladder with diversion and resection of bowel with colostomy

Surgical Interventions Cont’d

- Pelvic exenteration: radical procedure performed for recurrent cancers if there is no evidence of tumor outside the pelvis and no lymph node involvement. Radiation is usually tried first
  - Anterior exenteration: removal of all pelvic organs except bowel
  - Posterior exenteration: removal of all pelvic organs except bladder
  - Total exenteration: removal of all pelvic organs

Exenteration procedures

- Cure rate up to 50%.
- Recent refinements in this operation include continent urostomy, low anterior rectal anastomosis without colostomy, omental carpet to close the pelvic floor and vaginal reconstruction with gracilis or rectus abdominis myocutaneous flaps.

Nursing care

- Selected nursing diagnosis
  - Pain
  - Risk for impaired skin integrity
  - Body image disturbance
  - Impaired sexuality pattern
  - Impaired respiratory pattern
  - Fear
  - Impaired nutrition
  - Altered urinary/bowel elimination
Preoperative care
- Assessment of preop anxiety
- Concerns re: impact on sexual functioning
- Ability to adjust to body image changes
- Involvement of family in postop management
- Selection of stoma site
- Extensive bowel prep
- Extensive lab and x-ray studies
- Postop teaching

Postoperative care
- Cardiovascular complications: hemorrhage, shock, DVT, PE
- Pulmonary complications: atelectasis, pneumonia
- Fluid & electrolyte imbalances
- Renal and urinary complications
- Pain
- GI: paralytic ileus
- Wound: infection, dehiscence or evisceration

Endometrial/Uterine Cancer
- One of the most commonly occurring reproductive cancers. Over 40,000 new cases each year. 1 of every 100 females in the US annually
- Age range 50’s to 70’s
- Adenocarcinoma - 75-80% of cases
- Metastatic spread via lymphatics to adjacent organs and by hematogenous spread to liver, lungs or bone
- With early dx, 5-year survival rate >90%

Screening Guidelines
- At menopause, inform women of risks and symptoms of endometrial cancer
- Report unexpected bleeding or spotting
- Annual endometrial biopsy offered to women age 35 who have or at risk for hereditary nonpolyposis colon cancer (HNPCC)

Etiology/Risk Factors
- Risk factors
  - Obesity
  - Diabetes mellitus
  - Hypertension
  - Early menarche and late menopause
  - History of infertility
  - Nulliparity
  - Polycystic ovary disease
  - Use of menopausal estrogen therapy and long term tamoxifen use
  - Familial history of hereditary nonpolyposis colon cancer (HNPCC)
Collaborative Management

- **Assessment/Diagnosis**
  - Primary symptom is painless post-menopausal vaginal bleeding
  - Watery serosanguineous vaginal discharge
  - Low back, abdominal or pelvic pain
  - Palpable uterine mass on pelvic exam
  - Pap and uterine biopsy - definitive diagnosis
  - Late s/s of metastasis to peritoneal cavity, lungs, liver and bone
  - Basic diagnostic tests plus metastatic workup if indicated
  - Staging for treatment

**Interventions**

- Chemotherapy
  - Used as palliative treatment in recurrent disease – Doxorubicin (adriamycin), cisplatin and cyclophosphamide (cytoxan)
- Radiation
  - External and internal radiation may be used pre or post-operatively or as adjuvant treatment to chemotherapy & surgery in advanced cases

**INTERVENTIONS**

- Other drug therapy
  - Hormonal therapy for stage I and II that are estrogen dependent and for palliative treatment of stage III
  - Medroxyprogesterone acetate (Depo-Provera)
  - Megestrol acetate (Megace)
  - Tamoxifen (nolvadex)

**Interventions**

- Surgery (standard for tumors that are Grade I and II)
  - Total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAH-BSO) for stage I tumors
  - Radical hysterectomy with bilateral pelvic node dissection for stage II tumors
  - Pre and post-op care is similar to that of any surgery and many issues are similar to those of the client with cervical cancer

**Review specifics for clients post hysterectomy**

**Ovarian cancer**

- “The disease that whispers”
- Highest mortality of all gynecologic cancers
- Survival rates continue to be low r/t inability to detect cancer in early stage, 20% found early
- Prevalence highest in industrialized countries – suggests environmental factor or high fat diets

**ASSESSMENT**

- **PATHOPHYSIOLOGY**
  - Serous adenocarcinoma most common type, grows rapidly, spreads quickly, often bilateral
  - Cause unknown - familial association
  - Hormonal association, decreased incidence in oral contraceptive use

**Etiology/Risk factors**

- Age over 40
Family history of ovarian cancer (greatest risk)
- Personal or family history of endometrial, breast, ovarian or colon cancer
- Environmental factors r/t products of industry or diets high in fat
- Hormonal-increased incidence with menopause
- Nulliparity, infertility and miscarriages
- <5% r/t inherited mutations of BRCA1 or BRCA2 genes

31 Prevention Strategies
Increased surveillance:
- ACS recommends annual pelvic exams beginning at 18-sooner if sexually active-to assess size, shape and consistency of ovaries
- High risk groups, in addition to above-annual or semiannual, beginning at age 30 and ongoing:
  - Bimanual rectovaginal pelvic exam
  - Transvaginal ultrasonography
  - CA-125 levels to be commenced between ages 25-35
  - Prophylactic surgery: option available for those with BRCA1 or BRCA2 gene mutations(bilateral salpingo-oophorectomy) controversial, limited studies & carries no guarantees

32 Collaborative Management
  - Assessment
    - (75%) present with advanced-stage disease.
    - Vague, nonspecific symptoms: dyspepsia, bloating, early satiety, anorexia, gas pains, and backache.
    - Most common early finding is an adnexal mass, which is often solid, irregular and fixed
    - Occasionally, client presents with severe abdominal pain r/t torsion of the ovarian mass.
    - Late stage: pelvic pain, anemia, cachexia, abdominal swelling r/t ovarian enlargement or ascitic fluid

33 Ovarian Cancer S/S:

<table>
<thead>
<tr>
<th>Early S/S</th>
<th>Late S/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early satiety</td>
<td>Anorexia</td>
</tr>
<tr>
<td>Mild pressure,</td>
<td>Nausea, vomiting</td>
</tr>
<tr>
<td>pain, fullness</td>
<td></td>
</tr>
<tr>
<td>lasting&gt;4-5 days</td>
<td></td>
</tr>
<tr>
<td>Diarrhea/constipation,</td>
<td>increased abdominal</td>
</tr>
<tr>
<td>Incomplete emptying</td>
<td>girth, decreased weight</td>
</tr>
<tr>
<td>Frequent urination</td>
<td>Ascites</td>
</tr>
<tr>
<td>Dull back pain</td>
<td>persistent abdominal</td>
</tr>
<tr>
<td></td>
<td>or pelvic pain</td>
</tr>
</tbody>
</table>

34 Collaborative management
  - Assessment
    - Pelvic exam-Palpable ovarian mass in post-menopausal female is highly suspicious
    - CA125, (tumor marker for germ cell malignancy) elevated in 80% of cases, however, it is not specific to ovarian cancer. May be elevated in endometriosis, PID, pregnancy. Measures treatment response
    - Ultrasonography used to measure mass size, cannot discriminate benign or malignant state
    - Staging done after surgery-necessary for treatment and prognosis

35 INTERVENTIONS
  - Chemotherapy
    - New combinations that include recently developed drugs such as topotecan and gemcitabine are being tested
    - Cisplatin, carboplatin, taxol, ifosfamide, doxorubicin, methotrexate and 5-FU used alone or in combination
    - Intraperitoneal- infusion of chemotherapy into peritoneal cavity- thought to have increased cytotoxic effects on tumor
Angiogenesis inhibiting drug: Bevacizumab (Avastin) has been able to shrink or slow the growth of advanced ovarian cancers.

Immunotherapy - cytokines (protein-like substances that activate immune system cells). Several of these substances such as interferon, interleukins, and tumor necrosis factor are being tested.

Monoclonal antibodies: Oregovomab, which is directed against CA-125, has been studied; directed against specific sites on the cancer cell.

36 Interventions

Surgery
- Treatment of choice. TAH/BSO for all stages of ovarian cancer. Either complete removal or debulking of large tumors to improve efficacy of adjunctive therapy
- 5 year survival rate is 70-100% for clients with stage I disease (confined to ovaries) depending on tumor grade, and 50-70% for patients with stage II disease (confined to pelvic cavity)
- Clients with stage III or IV disease have median survival of 2.5 to 3.5 years after surgery and chemotherapy.

37 Interventions

Radiation therapy-alone or in combination with chemo and surgery
- External-used post-operatively if tumors have spread to other organs
- Intracavitary radiation with P32, a primary beta-emitter in colloid form, injected into abdominal cavity through a surgically placed catheter. Client is repositioned frequently to expose the cavity to the radiation.

38 Nursing care

Issues related to ovarian cancer are similar to those of cervical and endometrial cancer
- Gravity of the diagnosis and prognosis engenders denial, anger, grief and many other emotions
- Encouragement and support are priorities
- Education regarding options