Objectives

Identify the incidence of ovarian, cervical, vulvar and endometrial cancer
Identify common signs and symptoms of gynecological cancers
Be able to order appropriate testing to diagnose gynecological cancers
Identify when to refer patients to gynecological oncologists

What is Gynecological Cancer?

Any cancer that originates in a women’s reproductive organs
- Ovarian, fallopian or primary peritoneal cancer
- Uterine or endometrial cancer
- Vaginal cancer
- Vulvar cancer
- Cervical cancer
Anatomy

Uterus/Cervix
Adnexa
  • Fallopian Tube
  • Broad Ligaments
  • Structures in B.L.
  • Ovaries

What is a Gynecologic Oncologist?

Obstetrician/gynecologists who specialize in treating women with reproductive tract cancers
Comprehensive management of gynecologic cancers, including:
  • Surgery
  • Chemotherapy
  • Clinical Trials
What is the Incidence of Gynecological Cancers?

Estimated Female Cancers/Deaths 2013

<table>
<thead>
<tr>
<th>Estimated New Cases</th>
<th>Estimated Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>252,367</td>
</tr>
<tr>
<td>Lung</td>
<td>21,128</td>
</tr>
<tr>
<td>Liver &amp; bile ducts</td>
<td>35,150</td>
</tr>
<tr>
<td>Prostate</td>
<td>22,525</td>
</tr>
<tr>
<td>Colorectal</td>
<td>46,397</td>
</tr>
<tr>
<td>Cervical cancer</td>
<td>24,905</td>
</tr>
<tr>
<td>All Cancers</td>
<td>687,690</td>
</tr>
</tbody>
</table>

American Cancer Society
American Cancer Society 2013 Estimates

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>Diagnosis</th>
<th>Deaths</th>
<th>Surviving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uterine</td>
<td>49,560</td>
<td>8,190</td>
<td>41,370</td>
</tr>
<tr>
<td>Ovary</td>
<td>22,240</td>
<td>14,030</td>
<td>8,210</td>
</tr>
<tr>
<td>Cervix</td>
<td>12,340</td>
<td>4,030</td>
<td>8,310</td>
</tr>
<tr>
<td>Vulva</td>
<td>4,700</td>
<td>990</td>
<td>3,710</td>
</tr>
<tr>
<td>Vagina</td>
<td>2,890</td>
<td>840</td>
<td>2,050</td>
</tr>
</tbody>
</table>

Cervical Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival
Cervical Cancer in the United States

12,340 diagnosed per year
4,030 die from cervical cancer
2% decrease in incidence per year from 2000 to 2009
The rate of death from cervical cancer has decreased by 2.0% per year from 2000 to 2009

Cervical Cancer: Epidemiology / US

Cervical Cancer: Causes

The central cause of cervical cancer is human papillomavirus or HPV:
- HPV is sexually transmitted
- HPV detected today could have been acquired years ago
- HPV 16 and 18 cause approximately 70% of cervical cancer
- HPV 6 and 11 cause approximately 90% of genital warts
Do All HPV infections lead to cancer?

NO!

70% of new HPV infections clear within 1 year
Approximately 90% clear within 2 years
Only women with persistent HPV are at risk for cervical cancer

How Common is HPV?

Most men and women who have had sex have been exposed to HPV
80% of sexually active women will have acquired HPV by age 50
6.2 million new HPV infections occur every year among persons aged 14-44 years

Who is At Risk?

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 6 sexual partners</td>
<td>2.2 x</td>
</tr>
<tr>
<td>First Intercourse &lt; 18</td>
<td>1.6 x</td>
</tr>
<tr>
<td>Smoking</td>
<td>3.4 x</td>
</tr>
<tr>
<td>Multiparity</td>
<td>1.5-5.0 x</td>
</tr>
<tr>
<td>Immunosuppression</td>
<td>5.7 x</td>
</tr>
</tbody>
</table>
HPV Vaccine

- Gardasil - 6, 11, 16, 18
  - Recommended for both boys and girls
- Cervarix - 16 and 18
  - Recommended for girls only

Highly effective - long term data on cervical cancer reduction not yet available

Cervical Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival

Cervical Cancer: Screening

- Pap smear/HPV testing
  - The HC2 High Risk test is approved for triage of abnormal pap test
  - ACS and ACOG recommend use of the HC2 High Risk test - adjunct to regular Pap screening of women aged >30 years
  - If both tests are negative - rescreen no more frequently than every 5 years
    (CDC - recommendations of ACIP)
Cervical Cancer: Have we decreased the incidence in the U.S.?

With the advent of the Pap smear, the incidence of cervical cancer has dramatically declined.

The curve has been stable for the past decade because we are not reaching the unscreened population.

Cervical Cancer: Screening / Dysplasia

Considered to be a pre-cancerous lesion

Progression to cancer occurs in HGSIL

- 15% progress
- 60% persist
- 25% regress

Cervical Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival
Cervical Cancer: Symptoms

Abnormal bleeding
• Between periods
• With intercourse
• After menopause

Unusual vaginal discharge

Other symptoms
• Leg pain
• Pelvic pain
• Bleeding from the rectum or bladder

Not unusual for women to have no symptoms
• Early stage disease

Cervical Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival
Cervical Cancer: Workup / History

- Assess risk factors
- Assess possible causes
- Assess for metastasis

Cervical Cancer: Workup / Assess Situation

Bleeding
- How much/long
- Odor
- Symptoms of anemia
- Other etiologies (fibroids, trauma, bladder/rectal bleeding)

Cervical Cancer: Physical Exam

- Pelvic exam
- Rectal exam
- Assess lymph nodes
- Assess lower extremities for edema
Cervical Cancer: Tissue Acquisition

- Colposcopy
- Punch biopsy
- Conization

Cervical Cancer: Diagnosis / Metastasis

- Pelvic pain
- Blood in urine or stool
- Leg swelling
- Back pain

Cervical Cancer: Imaging

- CT or IVP
  - look for hydronephrosis
- CT
  - detects 33% of para aortic lymph node involvement
- CXR
  - look for lung metastasis
Cervical Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Cervical Cancer: Treatment

Depends on Stage

Cervical Cancer: Staging

Staging Is Clinical
Cervical Cancer: Treatment

Stage I
- confined to the cervix

Stage II
- Extends beyond cervix but not pelvic sidewall

Stage III
- Spread to the pelvic sidewall, lower 1/3 vagina, hydronephrosis

Stage IV
- Extends beyond true pelvis

Cervical Cancer: Recto-Vaginal Exam

Cervical Cancer: Treatment Options

Find a gynecologic oncologist
Discuss treatment options
- Conization
- Hysterectomy
- Trachelectomy
- Radical hysterectomy
- Radiation with chemotherapy
Ask about clinical trials (Gynecologic Oncology Group)
Other considerations
- Preserve fertility
- Preserve ovaries
Cervical Cancer: Treatment

Surgery
- For Stage IIA or earlier

Radiation
- Adjuvant after some surgery (positive margins)
- Chemo/Radiation
  - For locally advanced cancer

Cervical Cancer: Radical Hysterectomy

Treatment option - early stage cancer
- Surgical removal of uterus, cervix and upper vagina with surrounding tissues
- Lymph nodes are removed
- Removal of ovaries is not required
- Done either by laparoscope or laparotomy

Cervical Cancer: Chemo-Radiation

Standard of care for advanced cancer
- Treatment requires
  - External radiation
  - Internal radiation
  - Low dose chemotherapy given at the same time
  - Magee research study GOG 274 - assess traditional chemo-RT vs adjuvant chemotherapy with chemo-RT.
Hysterectomy

Cervical Cancer: Survival Rates

<table>
<thead>
<tr>
<th>FIGO Stage</th>
<th>5 Year Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>81-96%</td>
</tr>
<tr>
<td>Stage II</td>
<td>65-87%</td>
</tr>
<tr>
<td>Stage III</td>
<td>35-50%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>15-20%</td>
</tr>
</tbody>
</table>

Cervical Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?
Cervical Cancer: Take Home Message

Pap smears have reduced the incidence of cervical cancer and the rate of death from cervical cancer.
It is not unusual for women to have no symptoms with cervical cancer.
If they do have symptoms - generally include irregular bleeding.
Refer to a gyn - oncologist if you diagnosis cancer.

Endometrial Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?
Endometrial Cancer
Most common gynecological cancer
Affects almost 50,000 women a year
Incidence is rising

Endometrial Cancer: Risk Factors
Obesity
Nulliparous/Infertility
Late menopause
Diabetes and HTN
Tamoxifen Use
Unopposed Estrogen Use
Hereditary Risk - Lynch Syndrome
Complex Atypical Hyperplasia
Menopausal women

What is Endometrial Cancer?
Abnormal growth of cells in lining of uterus - endometrium
Most common cancer of female reproductive organs in US
Most common type of cancer of uterus
Endometrial Cancer

Who gets it?

- How do you screen for it?
- What are the signs and symptoms?
- How do you work it up?
- How do you treat it?
- What are the chances of survival?

Endometrial Cancer: Screening

- No specific screening tests
- Pap smears may detect endometrial cancer but are NOT a screening tool
- Most women present with symptoms
- 75% of women with endometrial cancer are post menopausal
Endometrial Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Endometrial Cancer: Symptoms

90% of women with endometrial cancer experience
abnormal bleeding
Vaginal bleeding or spotting after menopause
Late menopause
New onset of heavy menstrual periods
Bleeding between periods
A watery pink vaginal discharge
Pain in the lower abdomen or pelvis can occur
Endometrial Cancer: Diagnosis

Assess symptoms
Complete pap smear and pelvic exam
Complete pelvic ultrasound
Tissue procurement

Endometrial Cancer: Diagnosis

Endometrial Biopsy
• Sampling endometrial lining
• Performed during office visit
• Excellent (97%) accuracy compared to dilation and curettage
• Recommended test to evaluate most abnormal bleeding

Endometrial Cancer: Diagnosis

Dilation & Curettage (D&C)
• Scraping endometrial lining
• Performed in operating room
• Often done if office biopsy is not feasible
Endometrial Cancer

Who gets it?
How do you screen for it
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?
Endometrial Cancer: Staging

Stage I
- confined to uterus

Stage II
- spread to cervix

Stage III
- adnexae, vaginal or pelvic nodes

Stage IV
- spread outside true pelvis

Endometrial Hyperplasia

Abnormal thickening of the endometrial lining

Hyperplasia which contains abnormal cells is pre-cancerous (atypical)

Often treated by hysterectomy -30-40% chance of underlying malignancy (in complex atypical hyperplasia)
- referral to gyn-oncology

May be treated by hormonal therapy if preserving fertility

Similar risk factors as endometrial cancer

Endometrial Cancer: Types

Type I - Endometrioid cell type
- Often occurs in the presence of hyperplasia
- Related to hormones
- Excellent overall prognosis
Types of Endometrial Cancer

Type II - Serous, Clear cell and other cell types
  - Often occurs in the presence of a thin endometrium
  - Not related to hormones
  - More likely to spread

Endometrial Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Endometrial Cancer: Treatment Options

Surgery
Chemotherapy
Radiation
Hormone Therapy
Endometrial Cancer: Role of Surgery

Endometrial Cancer: Surgical Options
Hysterectomy
- Mostly done laparoscopically
- Can be done by laparotomy

Factors affecting surgical approach
- Pelvic anatomy on examination
- Prior surgical history
- Other medical conditions
- Tumor cell type
Endometrial Cancer: Additional Treatment

Sometimes required to reduce opportunity for disease re-growth
Called adjuvant treatment
May include radiation and chemotherapy
Based on final results of pathology

Endometrial Cancer: Additional Treatment

Advanced disease may have upfront treatment (neoadjuvant) with chemotherapy and/or radiation followed by surgery
Advanced disease and co-morbid conditions may be treated with chemotherapy and radiation alone, sometimes followed by hormonal therapy

Endometrial Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?
Endometrial Cancer: Survival Rates

<table>
<thead>
<tr>
<th>FIGO Stage</th>
<th>5 Year Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>90-95%</td>
</tr>
<tr>
<td>Stage I G3</td>
<td>79%</td>
</tr>
<tr>
<td>Stage II</td>
<td>66%</td>
</tr>
<tr>
<td>Stage III</td>
<td>44%</td>
</tr>
<tr>
<td>Stage IV</td>
<td>16%</td>
</tr>
</tbody>
</table>

Endometrial Cancer: Take Home Message

Most women will present with abnormal bleeding

Endometrial biopsy is an effective tool to diagnose endometrial cancer and can easily be done in office

Refer to a gyn-oncologist if you diagnose cancer

Ovarian Cancer
Ovarian Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Ovarian Cancer
Second most common gynecologic malignancy in the US
Responsible for 22,000 cases annually
14,500 deaths annually
Most lethal gynecologic malignancy
70% of patients present with advanced disease

Ovarian Cancer: Types
Ovarian Cancer: Disease by Distribution

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Mean Age</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epithelial Low Malignant</td>
<td>44 yr</td>
<td></td>
</tr>
<tr>
<td>Epithelial Malignant</td>
<td>56 yr</td>
<td>Rare &lt; 40 yr</td>
</tr>
<tr>
<td>Germ Cell Tumors</td>
<td>12-25 yrs</td>
<td></td>
</tr>
<tr>
<td>Sex Cord Stromal</td>
<td>25 yrs to post menopausal</td>
<td></td>
</tr>
</tbody>
</table>

Ovarian Cancer: Risk Factors

<table>
<thead>
<tr>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>OCPs</td>
</tr>
<tr>
<td>Family history</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>Infertility/low parity</td>
<td>Tubal ligation</td>
</tr>
<tr>
<td>Personal cancer history</td>
<td>Breast-feeding</td>
</tr>
</tbody>
</table>
Ovarian Cancer: Hereditary Risks

<table>
<thead>
<tr>
<th>Family History of Ovarian Cancer</th>
<th>Lifetime Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1.5%</td>
</tr>
<tr>
<td>1 first-degree relative</td>
<td>5%</td>
</tr>
<tr>
<td>2 first-degree relatives</td>
<td>7%</td>
</tr>
<tr>
<td>Known BRCA1 or BRCA2 germline mutation</td>
<td>35-65%</td>
</tr>
</tbody>
</table>

Ovarian Cancer: Hereditary Syndromes

Account for only 10% of Epithelial Ovarian Cancer
Inherited from either parent
Associated with breast, colon, prostate and endometrial cancers

Ovarian Cancer: Staging

Stage I: Confined to ovaries
Stage II: Confined to pelvis
Stage III: Confined to abdomen
Stage IV: Distant spread
Ovarian Cancer

Who gets it?

How do you screen for it?

What are the signs and symptoms?

How do you work it up?

How do you treat it?

What are the chances of survival?

---

Ovarian Cancer: Screening

There is not an effective screening tool for ovarian cancer

Most women present with symptoms
  • ‘The Cancer That Whispers’
  • Family History on all Female patients

---

Ovarian Cancer: Screening / NIH Consensus Statement

Comprehensive family history on all patients

None or 1 family member
  • Annual rectovaginal pelvic exam

2 or more family members
  • Genetic counseling
  • Annual rectovaginal pelvic exam, CA125, transvaginal ultrasound

Consider clinical trial participation
Ovarian Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Ovarian Cancer: Symptoms

95% of women DO report symptoms
Gynecological symptoms are the LEAST common symptoms with ovarian cancer
80-90% of women with EARLY stage disease will report symptoms for SEVERAL MONTHS

Symptoms can be vague and not gynecologic:
• Abdominal bloating, increased girth
• Fatigue
• Gastrointestinal disturbances/bowel changes
• Urinary symptoms
• Abdominal/pelvic pain
• Menstrual irregularities
Ovarian Cancer: Symptoms

Women who have symptoms daily for 2-3 weeks should be assessed for ovarian cancer.

Ovarian Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?
**Ovarian Cancer: Diagnosis**

- Complete history
- Family history
- Vaginal - rectal exam
- Transvaginal ultrasound
- CA 125 blood test
- CT abdomen/pelvis WITH contrast

**Ovarian Cancer: CA125 Testing**

- Is elevated in greater than 80% of advanced EOCs
- Is elevated in 25-50% of Stage I cancers
- Has poor specificity, especially in premenopausal women
- NOT a screening test for the general population

**Ovarian Cancer: CA 125**

<table>
<thead>
<tr>
<th>Stage</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>50%</td>
</tr>
<tr>
<td>II</td>
<td>83%</td>
</tr>
<tr>
<td>III</td>
<td>90%</td>
</tr>
<tr>
<td>IV</td>
<td>98%</td>
</tr>
</tbody>
</table>
Ovarian Cancer: Use of CA 125

- If elevated – appropriate referral
- If not elevated – stratification based on radiographic findings
- Not an effective screening tool in asymptomatic low risk woman

Ovarian Cancer

- Who gets it?
- How do you screen for it?
- What are the signs and symptoms?
- How do you work it up?
- How do you treat it?
- What are the chances of survival?

Ovarian Cancer: The Importance of Specialty Care

- Gynecologic oncologists are 5 times more likely to completely remove ovarian tumors
- 80% of ovarian cancer patients receive inadequate surgical staging from non-gynecologic oncologist surgeons
- Survival outcomes vastly improved with gynecologic oncologists
Ovarian Cancer: Survival by Residual Disease

- PR 92, microscopic
- PR 92, <1 cm
- PR 97, <2 cm
- PR 97, >2 cm

Months from Entry to Study

GOG Protocols: 98, 99, and 97

Ovarian Cancer: Specimen en bloc

Ovarian Cancer: Surgical Treatment

Optimal therapy: TAH BSO + staging
- pelvic and paraaortic lymph nodes
- omentectomy
- bowel resection
- biopsies as indicated

In younger women, reproductive conservation may be appropriate
Ovarian Cancer: Chemotherapy

All patients should receive a taxane and a platinum

73% response rate

Median survival: 63 months for Stage III/IV

Many new agents being tested

Encourage clinical trial participation
Ovarian Cancer: Chemotherapy

Some patients may receive up front chemotherapy (neoadjuvant)
Used with advanced disease - make tumor more easily resectable
Patients will require chemotherapy after surgery

Ovarian Cancer: Recurrence

75% of patients relapse
Treatment options include
- Secondary cytoreduction
- Retreatment with platinum/taxane
- Second-line therapies, including chemo, radiation, targeted agents
- Encourage clinical trials

Ovarian Cancer: Future Directions

Cost-effective screening
Prevention
Reversing chemoresistance
Dose dense chemotherapy
Gene therapy
Target based therapy
Ovarian Cancer: Intraperitoneal Therapy

**Rationale**
- Major route of spread within the peritoneal cavity
- Residual peritoneal tumor exposed to increased concentration of drug for prolonged period of time

**Limitations**
- Poor tumor penetration of bulk disease
- Less exposure of extra-peritoneal disease to drug
- Tolerability

**Complications**
- Obstruction to flow or inadequate distribution
- Infection: peritonitis, abdominal wall or catheter
- Intestinal perforation
Ovarian Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Ovarian Cancer: Survival

<table>
<thead>
<tr>
<th>Stage</th>
<th>Percent</th>
<th>5 Year Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>24</td>
<td>95%</td>
</tr>
<tr>
<td>II</td>
<td>6</td>
<td>65%</td>
</tr>
<tr>
<td>III</td>
<td>55</td>
<td>15-30%</td>
</tr>
<tr>
<td>IV</td>
<td>15</td>
<td>0-20%</td>
</tr>
<tr>
<td>Overall</td>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>

Ovarian Cancer: Take Home Message

Pay attention to symptoms - 90% of women with ovarian cancer are symptomatic

With suspicion, clinical exam should include a rectovaginal exam and diagnostic testing can include a CA 125 and transvaginal ultrasound

Refer to a gyn-oncologist
Vulvar Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Vulvar Cancer

Account for less than 5% of all gynecologic cancers
Usually symptomatic
4700 new cases - 2013
990 deaths - 2013
Vulvar Cancer: Risk Factors

- Age - average age of diagnosis 65
- HPV exposure
- Smoking
- Immunosuppression
- Dysplasia vulva
- Skin conditions of the vulva (lichen sclerosis/planus)

Vulvar Cancer: Other Etiologies

Chronic vulvar inflammatory lesions
- vulvar dystrophy
- lichen sclerosis
- squamous intraepithelial lesions

32% of non-HPV related vulvar cancer had lichen sclerosis

Vulvar Cancer & Lichen Sclerosis
Vulvar Cancer: Pathology

- Squamous cell carcinoma
- Verrucous carcinoma
- Basal-cell carcinoma
- Malignant Melanoma
- Vulvar Paget’s Disease
- Transitional cell carcinoma
- Adenocarcinoma
- Adenosquamous

Vulvar Cancer: Staging

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Carcinoma in situ</td>
</tr>
<tr>
<td>I</td>
<td>Tumor confined to the vulva, 2 cm or less in diameter</td>
</tr>
<tr>
<td>II</td>
<td>Tumor confined to vulva, greater than 2 cm</td>
</tr>
<tr>
<td>III</td>
<td>Tumor of any size with spread to the lower urethra, vagina, anus, or unilateral positive regional nodes</td>
</tr>
<tr>
<td>IVA</td>
<td>Tumor invades upper urethra, bladder mucosa, rectal mucosa, fixed to pelvic bone, or bilateral positive regional nodes</td>
</tr>
<tr>
<td>IVB</td>
<td>Distant metastasis including pelvic lymph nodes</td>
</tr>
</tbody>
</table>

Vulvar Cancer

- Who gets it?
- How do you screen for it?
- What are the signs and symptoms?
- How do you work it up?
- How do you treat it?
- What are the chances of survival?
Vulvar Cancer: Screening

Complete history
Complete vulvar exam

Vulvar Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Vulvar Cancer: Symptoms

Itching
Pain/tenderness
Bleeding (not menstrual)
Skin changes (lightening/darkening of the skin)
Lesion or Wart
Vulvar Cancer: Symptoms

Early stage - pruritus and recognizable lesion
Advanced - Surface drainage, pain, bleeding
Optimal management - Biopsy any suspicious lesion in office, do not delay diagnosis

Vulvar Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?
Vulvar Cancer: Diagnostic Evaluation

Complete history
Complete physical exam
Biopsy suspicious lesions
  • Punch biopsy in the office
  • Exam under anesthesia if uncomfortable

Vulvar Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?
Vulvar Cancer: Treatment

Based on Stage

- 59% localized
- 31% regional spread
- 5% distant spread
- 5% unstaged

Microinvasive Tumors – Excisional procedure w/ negative margins only

Stage I/II – Radical vulvectomy w/ Sentinel lymph node biopsy or inguinofemoral lymphadenectomy
Stage III – Neoadjuvant chemoradiation then surgery
Stage IVA – Neoadjuvant chemoradiation then surgery
Stage IVB – Palliative approach

Vulvar Cancer: Evolution of Surgical Procedure

1912 – Bassett described vulvectomy w/ groin dissection - 25% survival
Stanley Way described en bloc radical resection of mass and groin nodes
Taussig – Modified Way method to include three incisions
Radical Vulvectomy
as described by Way

Vulvar Cancer:
“Current” Radical Vulvectomy

Utilizes a triple incision technique
Incision carried to the deep perineal fascia with 2 cm margins desired
Separate incision for inguinal lymph node dissections
• Ipsilateral, unless midline or lymph nodes positive
Decreased the incidence of wound breakdown from 50% to 15-20%
Vulvar Cancer: Radiation Therapy

Initially thought little role in treatment of disease
Poor surgical candidate
Positive margins
Treating locally advanced disease
Treating regional disease to prevent recurrences

Vulvar Cancer: Chemotherapy

SCC only cell type with reproducible information for the value of cytotoxic therapy
Concomitant use with radiation therapy
Combinations for inoperable or recurrent disease
Vulvar Cancer

Who gets it?
How do you screen for it?
What are the signs and symptoms?
How do you work it up?
How do you treat it?
What are the chances of survival?

Vulvar Cancer: Survival by Stage

<table>
<thead>
<tr>
<th>Stage</th>
<th>5 year survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>93%</td>
</tr>
<tr>
<td>II</td>
<td>87%</td>
</tr>
<tr>
<td>III/IV</td>
<td>43%</td>
</tr>
<tr>
<td>Lymph Node Status</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>64%</td>
</tr>
<tr>
<td>Negative</td>
<td>96%</td>
</tr>
</tbody>
</table>

Vulvar Cancer: Take Home Message

Patients will present with symptoms
Biopsy any suspicious lesions
Refer to gyn-oncologist
Resources

Gyn Oncologist - 800-444-4441
UPP Gyn-Oncology - 412-641-5411
NOCC - www.ovarian.org

THANK YOU