The Gynecological Exam

Components of the exam vary by age and lifestyle:

1. Focused history
2. Physical exam
   - Pelvic exam
3. Screening
   - Pap smear for cervical cancer

Learning Objectives

- Describe pelvic examination details to a patient
- Set up an exam room and assist with a pelvic exam and Pap smear
- Answer patient questions about risk factors and screening guidelines for cervical cancer
- Differentiate normal and abnormal Pap results
- Explain the colposcopy process to a patient
- Discuss indications and benefits of the HPV vaccine with patients

Preparing the Patient for the Exam

- Address her concerns and questions prior to the exam.
- Ensure her bladder is empty.
- Ask her to undress completely (or from waist down if only doing a pelvic exam) and change into a front-opening gown.
- Vacate the room while she undresses. Ensure the curtain is pulled to cover the door and the door is locked.
- Pull out the foot rests and help her move down the exam table so her buttocks are on or near the edge.
- Ask her to bend her knees and guide her feet to the foot rests by supporting her lower legs. Adjust the stirrups for comfort.
- Ensure she is well-draped and put a pillow under her head.
- Explain the importance of relaxing her muscles, as tense muscles may make the exam uncomfortable.
- Inform her that she may feel some pressure or discomfort.
- Discuss relaxation techniques, such as deep breathing.

Setting Up the Exam Room

- Ensure the room has a table with foot rests, a privacy curtain, and a lockable door
- Place a gown and cover sheet on the exam table
- Ensure that a female chaperone is available; this is required regardless of provider gender
- Set up the supply tray →
Pap Collection Processes

Slide Preparation Method

Liquid Cytology Method

Which method does your facility use?

Pap Smear Collection Supplies

- Endocervical brush and spatula are always used together
  - Endocervical brush samples endocervix
  - Spatula samples ectocervix
- Broom-like device can be used alone
  - Longer, central bristles are inserted in cervical opening to sample endocervical canal
  - Shorter bristles sample ectocervix

Graves has 3 sizes. Bills are wider and curved. For women who have had intercourse (wider vaginal canals).

Pederson is flat and narrow. Best for:
- women with narrow vaginal canals
- elderly women
- women who have never had intercourse

Position yourself so the patient can see while you assist the provider.

Slide Preparation Method

- Have supplies ready before speculum is inserted. Ensure slide and fixative are available.
- Take time out to ensure labels match patient. Label slide BEFORE specimen is collected. Label dry slide with permanent marker or pencil, writing on frosted end of glass. Include:
  - Patient name
  - Last 4 digits of SSN
  - Sample type (cervical or vaginal)
  - Know what your cytology dept requires for labeling
- Spray slide (or place it in fixative) before it dries or you may result in unsatisfactory smear that is difficult to interpret.
Slide Preparation Method

Liquid
Cytology
Method

Perform time out to ensure labels match patient. Label vial before specimen is collected.

Vigorously swish Pap collection instrument(s) in vial to ensure cells transfer to the solution.

Goal of Pap is to identify abnormal cells from transformation zone at junction of ecto and endocervix where cervical dysplasia/cancers arise

ThinPrep® process results in better cell detail. Benefits include:
1. Better detection of glandular abnormalities
2. Allows reflex HPV testing (automatically performed following inconclusive Pap)
3. Pap smears can be performed during menstruation

Images provided courtesy of HOLOGIC, Inc. and affiliates

Poll Question

What can a Pap test detect?

A. Abnormal cervical cells
B. Precancerous cervical cells
C. Cancerous cervical cells
D. All of the above

Poll Answer

What can a Pap test detect?

A. Abnormal cervical cells
B. Precancerous cervical cells
C. Cancerous cervical cells
D. All of the above

If Pap test is inconclusive, or if patient is 30 or older, provider may also recommend HPV testing along with Pap. We’ll talk more about HPV later.

The Pelvic Exam

Bimanual Exam

Begin exams at age 21
Exam not necessary to start/renew hormonal contraception
Rectovaginal exam (one finger in vagina and one in rectum) is not recommended for normal GYN exam. Not sensitive enough to detect masses/disease.
Nursing role: help provider lubricate fingers with water-soluble lubricant.
**Cervical Cancer**

- 12,000 cases/year
- 11th cause of cancer death
- 85% death reduction due to Pap
- 50% of cases are in women who’ve never had a Pap
- 10% of cases are in women with no Pap in 5 years

**Risk Factors for Cervical Cancer**

- Chronic HPV infection
- At-risk for contracting HPV
  - Hx of multiple sexual partners
  - HIV/immunosuppression
  - Early age of first intercourse (<17)
  - Multiple pregnancies
  - Long-term oral contraceptive use
- Risks for not clearing HPV
  - Mother/sister with cervical cancer
  - Smoking
- In utero exposure to diethylstilbestrol (DES)
- Screening issues
  - Low socioeconomic status
  - Immigration from a country where screening is not the norm
- Risks for not clearing HPV
  - Mother/sister with cervical cancer
  - Smoking

**Human Papillomavirus (HPV) Facts**

- 1/3 of U.S. women infected by age 24
- 75% of sexually active women infected at some point
- Causes 100% of cervical cancers
- No screening test to check overall “HPV status”
  - Available HPV tests screen women for high-risk types of HPV of the cervix
  - No approved test to diagnose HPV on genitals or in mouth or throat

**What is HPV?**

- Group of >100 DNA viruses
- Two high-risk types (16 and 18) cause 70% of cervical cancers
- Persistent infection is necessary to develop cancer
- Low-risk subtypes (6 and 11) cause genital warts or mild cervical dysplastic changes that do not usually progress to cancer
- 70% of new HPV infections spontaneously clear within one year; up to 91% clear within two years.
- Patient may remain immune to that subtype for up to 3 years

**Cervical Intraepithelial Neoplasia (CIN)**

- Normal
- CIN 1
- CIN 2
- CIN 3
Cervical Cancer Screening

**GOALS**
- Prevent morbidity & mortality
- Detect those at risk
- Detect those not at risk (false positives are common and lead to additional testing, biopsies, and patient stress)

**How Frequently Should We Screen? Women Ages 21-29**
- Screen at 3-yr intervals with Pap alone
  - Not necessary to test for HPV; it is often present and most likely will resolve
- Screen high-risk women more frequently
  - High-risk = Hx of a high-grade cervical lesion, exposure to DES in utero, or immunocompromised

**How Frequently Should We Screen? Women Ages 30-65**
- **Option 1**
  - Co-testing...
  - Pap + HPV at 5-yr intervals
  - ↑ cancer detection over Pap alone
  - ↑ detection of high-grade lesions 17-31%
  - ↓ lifetime cancer deaths 0.2/1000
  - ↓ lifetime cancer incidence 1/1000
  - ↓ lifetime colposcopies 100-200/1000
- **Option 2**
  - Pap at 3-yr intervals if HPV co-testing not available
  - Check if HPV co-testing is available at your facility

**When to Stop Screening?**
- Discontinue at 65 with adequate recent screens AND no hx of high grade dysplasia or worse
- Do not resume screening once stopped
- Hx of high-grade lesion or cancer, screen routinely for 20 yrs after diagnosis

**Perform Paps After Hysterectomy?**
- No screening if cervix was removed and no previous high grade lesions/cancer
  - If a cervix is present, screen!
- Woman may not know if her cervix was removed. Provider may have to look.

**Start Screening at Age 21**
- Why 21?
  1. Invasive cervical cancer is very rare in women under 21 (<0.1%).
  2. Although the rate of HPV infection is high among sexually active adolescents, the immune system in most of these women clears the HPV infection in 1-2 years.
  3. Adolescents have a higher incidence of HPV-related precancerous dysplasia because the cervix is immature, but most lesions resolve without treatment.
  4. Women treated with excisional procedures for dysplasia have more premature births. Adolescents have most of their childbearing years ahead of them; thus it’s important to avoid unnecessary procedures that negatively affect the cervix.
Where Cervical Cancer Begins

Squamous cell carcinoma usually begins where squamous cells and glandular cells meet. It accounts for 85-90% of all cervical cancer cases.

Cervical cancer usually takes several years to develop.

Inadequate Specimen Reports

“Unsatisfactory for interpretation (not enough cells)”
or
“No endocervical cells identified or partially obscured”

Repeat Pap in 12 mos if normal exam + no risk factors
Repeat Pap in 6 mos if...
• Positive for HPV high-risk subtype 16 or 18 in last 12 mos
• Previous Pap abnormality
• Can’t see entire cervix or abnormal pelvic exam
• Patient is immunosuppressed
• Patient hasn’t been screened regularly

Pap reports may also mention...

Organisms
Trichomonas (treat)
Candida
Gardnerella (bacterial vaginosis). Not normally treated if seen on Pap smear, especially if exam was normal.
Actinomycyes (typically found in women with an IUD; does not treatment)

Changes seen with herpes (will be described as “multinucleated giant cells”)
Reactive Changes
Inflammation related to infection or irritation (organism is not usually identified). Repeat Pap in 6 mos if patient is HIV positive or immunocompromised.
IUD-related
Atrophy
Benign endometrial cells (investigate for endometrial cancer in women over 40)

How squamous cells look under the microscope as they progress toward cancer. Photos by Dianne Solomon, M.D.

Abnormal Pap Smear Terminology

<table>
<thead>
<tr>
<th>Abnormal Pap Terms</th>
<th>Lay Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC-US</td>
<td>Atypical squamous cells of uncertain significance</td>
</tr>
<tr>
<td>ASC–H</td>
<td>Refer to colposcopy. 1% malignant.</td>
</tr>
<tr>
<td>LSIL or LGSIL</td>
<td>Low-grade squamous intraepithelial lesion</td>
</tr>
<tr>
<td>HSIL or HGSIL</td>
<td>High-grade squamous intraepithelial lesion</td>
</tr>
<tr>
<td>AGC</td>
<td>Atypical glandular cells</td>
</tr>
<tr>
<td></td>
<td>Refer to colposcopy. 1-5% malignant.</td>
</tr>
<tr>
<td></td>
<td>Refer to colposcopy. 30% malignant.</td>
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</tbody>
</table>

Bethesda System of Pap Reporting

Specimen Adequacy
(satisfactory, unsatisfactory)
Descriptive Diagnosis
(conventional slide vs. ThinPrep)
General Categories
Negative for intraepithelial lesion or malignancy (“normal”)
Epithelial cell abnormality (will also indicate if it is glandular or squamous)
**Additionally, the following results would also need to be referred for colposcopy...**

- Normal Pap smears with HPV positive results two years in a row
- Patient with known high-risk HPV subtypes 16 and 18
- ASC-US Pap results with a positive HPV test
- Two ASC-US Pap results in a row without HPV testing done

**When Should We Test for HPV?**

- If ThinPrep was used, reflex testing for HPV can triage inconclusive ASC-US Pap results
  - Uses residual cells from ThinPrep® vial to test for high-risk HPV
  - If your facility still uses conventional Pap method (slides), ASC-US results can be triaged with repeat Pap, colposcopy referral, or ordering HPV test
- HPV testing is not useful for:
  - Females <30 (HPV is more likely to be present)
  - Prescreening for HPV vaccination
  - STI screening
  - Women >21 years of age with ASC-H, LSIL, HSIL results (refer for colposcopy regardless of HPV status)

**What if the exam of the cervix was abnormal, but the Pap report was normal?**

Dear Dr. GYN: Help!

Cervical cells may not have been sampled adequately!

**Many times, an abnormal Pap test result is triggered by a relatively harmless condition that resolves without treatment. Colposcopy allows us to get more information about the cause.**

**Causes of abnormal Paps:**

- Vaginal irritation
- HPV (most women don't develop precancerous lesions)
- Precancerous lesions (if left untreated these cells may, but do not always, lead to cervical cancer; there is a high rate of success when treated early)

**Patient Education for Colposcopy**

- Does she understand why she has been asked to return for a colposcopy?
- Does she have written information/educational materials on abnormal Pap results?
- Does she understand the procedure?
- Has she provided informed consent for the procedure?
- Does she know how and when the results will be communicated?
- Does she have the number for the 24-hour nurse line for after hours questions?
- Does she understand the post-procedure instructions and follow-up plan?

**HPV Vaccines**
HPV Facts

More effective if no prior HPV exposure
Protects 10 yrs; doesn’t replace regular screening
Well tolerated
Don’t test for HPV before vaccination
$125 per does, $375 for full series
Don’t restart series for missed dose
Gardasil on VA national formulary

Two HPV vaccines

Gardasil®
- HPV subtypes 6/11/16/18
- Women, men ages 9-26
- 3 separate 0.5-mL doses IM at 0, 2 mos, and 6 mos
- Prevents cervical cancer, genital warts, anal and vulvar cancers

Cervarix®
- HPV subtypes 16/18
- Women ages 9-26
- 3 separate 0.5-mL doses IM at 0, 1 mo, and 6 mos
- Less protection for genital warts

Why is the vaccine recommended only for younger women?

<table>
<thead>
<tr>
<th>Age group</th>
<th>Incidence of high-risk subtypes per 100 person years</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-29</td>
<td>7.4 (5.9 – 9.2)</td>
</tr>
<tr>
<td>30-34</td>
<td>3.6 (2.4 – 5.1)</td>
</tr>
<tr>
<td>35-39</td>
<td>2.4 (1.5 – 3.6)</td>
</tr>
<tr>
<td>40-45</td>
<td>1.9 (1.2 – 3)</td>
</tr>
</tbody>
</table>

Higher in younger women
Less likely in older age groups

HPV Vaccine Contraindications and Risks

Not for women with
- Pregnancy
- Moderate to severe acute illness
- Yeast allergy

Adverse events
- Fainting in adolescents likely due to injection process (keep in area for 15-20 mins)

Vaccine may be efficacious for women older than 26, but the data are unclear and this use is not FDA-approved

What is the role of nurses in a women’s health PACT teamlet?

Women’s Health PACT Teamlet Discussion
What is the role of nurses in a women’s health PACT teamlet?

- Teamwork
- Manage flow
- Check in – huddle before seeing patient
- Scrub patient appts
- Huddle
- Pre-op clinic
- PACT meeting
- Nursing clinic

As a PACT nurse how do you ensure your clinic and your provider(s) have all the necessary equipment for a pelvic and Pap exam?

- Know what the visit is for
- Have the necessary equipment and supplies available
- Ensure the curtain is pulled, door is locked, and foot of the exam table is facing away from the door
- Make sure a chaperone is in the room with the provider
- Ensure the patient is comfortable (pillow, empty bladder)
- Leave the room and give patient time to prepare for her exam
- Distract patient during the exam (hold her hand, start up conversation)
- Develop a trusting relationship with our patients

What is the nursing role in discussing Pap results with patients?

- Address the panic involved with abnormal results
- Provide educational materials
- Call the day before a follow-up appointment to ensure she knows where to go and to stress the importance of follow-up
- Use your WVPM as a source of information
- Ensure the patient knows how to reach you

How can nursing provide a less stressful experience for the trauma patient?
How can nursing provide a less stressful experience for the trauma patient?

- Build a good relationship
- Assess her anxiety
- Help her identify and employ coping strategies
  - Provide distraction
    - Ask: "What do you predict will be the worst part of the exam?"
- Ensure that the provider is female
- Explain the entire procedure
- Schedule her at a no-clinic time
- Involve the MST coordinator

Guidance on Clinical Preventive Services

VHA Guidance Statements on Clinical Preventive Services for screenings, immunizations, brief health behavior counseling, and preventive medications:


Information on Cervical Cancer Screening and HPV

- CDC. [Information on HPV Immunization for health care professionals and patients.] http://www.cdc.gov/vaccines/vpd-vac/hpv/default.htm#ed