Setting the Scene:

- A typical day in the office
- Scanning the schedule, the majority of your list are women
- ....And you have a few phone calls about abnormal Pap results, hot flashes, and bloating
Pap Smears:

- Bethesda Criteria:
  - ASC-US
  - ASC-H
  - AGCUS
  - LSIL
  - HSIL
Management of Women with Atypical Squamous Cells of Undetermined Significance (ASC-US)

- Repeat Cytology @ 6 & 12 mos
  - Both Tests Negative → Routine Screening
  - Both Tests Positive ≥ ASC (on either result) → Colposcopy
    - Endocervical sampling preferred in women with no lesions, and those with unsatisfactory colposcopy
    - NO CIN: HPV Unknown → Repeat Cytology @ 12 mos
    - NO CIN: HPV Positive* → Cytology @ 6 & 12 mos OR HPV DNA Testing @ 12 mos
    - CIN: ≥ ASC or HPV (+) → Repeat Colposcopy
    - CIN: HPV Negative → Routine Screening

- HPV DNA Testing*
  - Preffered if liquid-based cytology or co-collection available
  - HPV Positive* (managed in same manner as women with LSIL)
  - HPV Negative → Repeat Cytology @ 12 mos

*Test only for high-risk (oncogenic) types of HPV
Management of Adolescent Women with Either Atypical Squamous Cells of Undetermined Significance (ASC-US) or Low-grade Squamous Intraepithelial Lesion (LSIL)

Adolescent Women with ASC-US or LSIL (females 20 years and younger)

Repeat Cytology @ 12 months

< HSIL

Repeat Cytology @ 12 mos later

Negative ≥ ASC

Routine Screening

≥ HSIL

Colposcopy
Management of Women with Atypical Squamous Cells: Cannot Exclude High-grade SIL (ASC - H)

Colposcopic Examination

NO CIN 2,3

Cytology @ 6 & 12 mos OR HPV DNA Testing @ 12 mos

≥ ASC or HPV (+) → Colposcopy

Negative → Routine Screening

CIN 2,3

Manage per ASCCP Guideline
Management of Women with Low-grade Squamous Intraepithelial Lesion (LSIL) *

Colposcopic Examination*

Non-pregnant and NO Lesion Identified
Unsatisfactory Colposcopic Examination
Satisfactory Colposcopy and Lesion Identified

Endocervical Sampling “Preferred”
Endocervical Sampling “Preferred”
Endocervical Sampling “Acceptable”

NO CIN 2,3

Cytology @ 6 & 12 mos OR
HPV DNA Testing @ 12 mos

≥ ASC or HPV (+)
Negative

Colposcopy
Routine Screening

CIN 2,3

Manage per ASCCP Guideline

* Management options may vary if the woman is pregnant, postmenopausal, or an adolescent. (See text)
Management of Pregnant Women with Low-grade Squamous Intraepithelial Lesion (LSIL)

Pregnant Women with LSIL

- **Colposcopy**
  (Preferred approach for non-adolescent)

  - NO CIN 2,3

  - CIN 2,3

  - Postpartum Follow-up

  - Manage per ASCCP Guideline

- **OR**

  - **Defer Colposcopy**
  (Until at least 6 weeks postpartum)

^ In women with no cytological, histological, or colposcopically suspected CIN 2,3 or cancer
Management of Women with High-grade Squamous Intraepithelial Lesion (HSIL) *

**Immediate Loop Electrosurgical Excision**

OR

**Colposcopic Examination**
(with endocervical assessment)

- **NO CIN 2,3**
  - Satisfactory Colposcopy
    - All three approaches are acceptable
  - CIN 2,3

- **Unsatisfactory Colposcopy**

  - Diagnostic Excisional Procedure*
    - HSIL @ either visit
  - Diagnostic Excisional Procedure*
    - Negative Cytology @ both visits
    - Routine Screening

  - Observation with Colposcopy & Cytology
    - @ 6 mo intervals for 1 year
    - Other Results

  - Review Material*
    - Change in Diagnosis

  - Manage per ASCCP Guideline

* Not if patient is pregnant or an adolescent

* Includes referral cytology, colposcopic findings, and all biopsies

* Management options may vary if the woman is pregnant, postmenopausal, or an adolescent
Management of Adolescent Women (20 Years and Younger) with High-grade Squamous Intraepithelial Lesion (HSIL)

Colposcopic Examination
(Immediate loop electrosurgical excision is unacceptable)

NO CIN 2,3

Two Consecutive Negative Papss AND NO High-grade Colposcopic Abnormality

Observation with Colposcopy & Cytology * @ 6 mo intervals for up to 2 years

Other Results

High-grade Colposcopic Lesion OR HSIL
Persist for 1 year

Biopsy

CIN 2,3
If NO CIN 2,3 identified

CIN 2,3

Manage per ASCCP Guideline for Adolescents with CIN 2,3

Manage per ASCCP Guideline

Diagnostic Excisional Procedure

Routine Screening

Copyright 2006, 2007, American Society for Colposcopy and Cervical Pathology. All rights reserved.

* Preferred approach provided the colposcopic examination is satisfactory and endocervical sampling is negative. Otherwise a diagnostic excisional procedure should be performed.
Initial Workup of Women with Atypical Glandular Cells (AGC)

All Subcategories (except atypical endometrial cells)

Colposcopy (with endocervical sampling) AND HPV DNA Testing AND Endometrial Sampling (if > 35 yrs or at risk for endometrial neoplasia^)

Atypical Endometrial Cells

Endometrial AND Endocervical Sampling

NO Endometrial Pathology

Colposcopy

^ If not already obtained. Test only for high-risk (oncogenic) types.

* Includes unexplained vaginal bleeding or conditions suggesting chronic anovulation.
Subsequent Management of Women with Atypical Glandular Cells (AGC)

1. Initial Pap of AGC - NOS
   - NO CIN AND NO Glandular Neoplasia
     - HPV Status Unknown
       - HPV (-)
         - Repeat Cytology
           - @ 6 mos intervals for four times
       - HPV (+)
         - Repeat Cytology and HPV DNA Testing
           - @ 12 mos if HPV (-) @ 6 mos if HPV (+)
             - ≥ ASC or HPV (+)
               - Colposcopy
             - BOTH Tests Negative
               - Routine Screening
   - HPV (-)
     - Repeat Cytology
       - @ 6 mos if HPV (<)

2. CIN but NO Glandular Neoplasia
   - Manage per ASCCP Guideline

3. Glandular Neoplasia irrespective of CIN
   - NO Invasive Disease
     - Diagnostic Excisional Procedure

Initial Pap of AGC (favor neoplasia) OR AIS

*Should provide an intact specimen with interpretable margins. Concomitant endocervical sampling is preferred.*
Use of HPV DNA Testing * as an Adjunct to Cytology for Cervical Cancer Screening in Women 30 Years and Older

Cytology Negative

- HPV (-) → Routine Screening
  Not before 3 years

- HPV (+) → Repeat BOTH Tests
  @ 12 mos

  - Both Negative → Routine Screening
    @ 3 years
  - Cytology Negative HPV (+) → Colposcopy
  - Cytology Abnormal Any HPV Result → Manage per ASCCP Guideline

Cytology ASCUS or Greater

* Test only for high-risk (oncogenic) types of HPV

Prevalence: 2,274,000 women have cervical cancer¹
Incidence: 510,000 new cases each year¹

Estimated incidence of invasive cervical cancer by selected region²:

- 14,845 United States/Canada
- 21,596 Central America
- 49,025 South America
- 64,928 Europe
- 67,078 Africa
- 151,297 Central Asia
- 51,266 Eastern Asia
- 39,648 Southeast Asia
- 1,077 Australia/New Zealand

Mortality: Second leading cause of female cancer-related deaths (288,000 annually)¹

- 18 year old
- Routine physical - BCP refill
- Asymptomatic
- G0P0
- GC / Chlamydia screen negative
- STD exposure history negative
- Pap reported as ASCUS
What now?

- Repeat Pap in 3 months
- Repeat Pap in 6 months
- Wait for HPV reflex results
- Refer to Gyn for colposcopy (or perform yourself)
The Answer is:

- Wait for HPV results
Same patient

HPV results now available and are positive for high risk (oncogenic) HPV
What now?

- Repeat Pap in 3 months
- Repeat Pap in 6 months
- Refer to Gyn for colposcopy (or perform yourself)
The Answer is:

- Refer to Gyn for colposcopy (or perform yourself)
Same patient

HPV results now available and are negative for high risk (oncogenic) HPV
What now?

- Repeat Pap in 3 months
- Repeat Pap in 6 months
- Refer to Gyn for colposcopy (or perform yourself)
The Answer is:

- Repeat Pap in 6 months
27 year old

Symptoms of URI

Last seen 2.5 years ago

G0P0

GC / Chlamydia screen negative

STD exposure history negative

Pap reported as ASC-H
What now?

- Repeat Pap in 3 months
- Repeat Pap in 6 months
- Wait for HPV reflex results
- Refer to Gyn for colposcopy (or perform yourself)
The Answer is:

- Refer to Gyn for colposcopy (or perform yourself)
• 35 year old lawyer
• Routine annual
• Planning pregnancy in near future
• G0P0
• GC / Chlamydia screen declined
• STD exposure history negative
• Pap reported as AGCUS
What now?

- Repeat Pap in 3 months
- Request HPV testing
- Refer to Gyn for colposcopy (or perform yourself)
- Additional Gyn screening
The Answer is:

* B, C, & D
Initial Workup of Women with Atypical Glandular Cells (AGC)

All Subcategories (except atypical endometrial cells)

- Colposcopy (with endocervical sampling)
  - AND HPV DNA Testing ^
  - AND Endometrial Sampling
    (if > 35 yrs or at risk for endometrial neoplasia*)

Atypical Endometrial Cells

- Endometrial AND Endocervical Sampling

NO Endometrial Pathology

- Colposcopy

* If not already obtained. Test only for high-risk (oncogenic) types.
* Includes unexplained vaginal bleeding or conditions suggesting chronic anovulation.

Copyright 2006, 2007, American Society for Colposcopy and Cervical Pathology. All rights reserved.
Other: (the one that got away)

- Problems that we share – too busy, not enough time but if not us, who? And if not now, when?
- Mobile population, changing insurance, fragmented care
- Concept of the teachable moment
- Kaiser Northern California - paps
- Vaccination screening in hospital
17 year old G0P0 coming in for a precollege physical

A thorough exam was performed – no abnormalities were found – what was not done?
Three Preventable Futures:

- 23 year old receiving multiple caustic treatments for genital warts
- 27 year old – LEEP procedure for cervical dysplasia; premature delivery age 29 secondary to cervical incompetence – baby in NICU
- 34 year old – radical hysterectomy for adenocarcinoma of the cervix (90% - HPV types 16, 18)
HRT
The End of the Age of Estrogen

Women were told for decades that hormone-replacement therapy would protect their hearts and preserve their youth. Now the evidence is in, and an era is over.

Women who had been on hormone replacement therapy for years were told last week by Federal health officials that the drugs may do more harm than good.
It is Estimated that Over 4,000 Women in the US Enter Menopause Every Day

- Approximately 9 out of 10 of women experience the discomfort of hot flashes.
- Two-thirds of them feel their vasomotor symptoms are “moderate” or “severe.”
- In a survey of 771 women over the age of 45, 60% of women agreed when asked that vasomotor symptoms can have a “negative impact” on work productivity.
- Vaginal atrophy can be painful and disrupt relationships.

Source: Data on file, Wyeth Pharmaceuticals.
Feldman BM, Voda A. Res Nurs Health 1985;8:261-268
Individualizing Therapy:

(Goodbye One Size Fits All!)
47 year old CFO

Feels she is losing her ‘edge’ in the boardroom

Hot flashes, night sweats

Menses irregular but monthly

Consort has vasectomy

Slender

Exercises regularly
What now?

- Gyn consult
- Phytoestrogens
- FSH, TSH, Estradiol
The Answer is:

- FSH, TSH, Estradiol
The Diagnosis is:

- FSH = 35
- Estradiol = 82
- TSH = WNL
- Consistent with perimenopause

- now what?
Common Alternative Therapies Used to Treat Hot Flashes

- Over-the-counter products
  - Black cohosh
  - Ginseng
  - Phytoestrogens
    - Soy
    - Red clover
    - St John’s wort
- Pharmacologic agents
  - Clonidine
  - Progestins
  - Selective serotonin re-uptake inhibitors (SSRIs)
Efficacy of Phytoestrogens for the Treatment of Hot Flashes

Blinded, placebo-controlled studies

- 60 g soy protein (76 mg isoflavones) 45%
- Placebo 35%
- 400 mg soy protein (50 mg isoflavones) 40%
- Placebo 25%
- Australian study (118 mg) No effect

## Phytoestrogens: Summary of Actions

<table>
<thead>
<tr>
<th>Symptom/Organs</th>
<th>Clinical Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot flashes</td>
<td>Minimal to none</td>
</tr>
<tr>
<td>Vaginal atrophy</td>
<td>No effect</td>
</tr>
<tr>
<td>Heart (CHD)</td>
<td>Weak to modest</td>
</tr>
<tr>
<td>Bone (osteoporosis)</td>
<td>None</td>
</tr>
<tr>
<td>Brain (cognitive decline)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Breast</td>
<td>? protective</td>
</tr>
<tr>
<td>Endometrium</td>
<td>No effect</td>
</tr>
</tbody>
</table>
Alternative Therapies: Phytoestrogens

**Origin**
- Phytoestrogens occur naturally in certain plants
- Similar to human estrogen, but much weaker

**Types**
- Isoflavones occur mainly in soybeans and chickpeas
- Lignans occur mainly in seeds, grains, beans, vegetables, and fruits

**Therapeutic benefit**
- Most efficacy studies have shown mixed results
- Mayo Clinic Study showed no effect on hot flushes
- Further studies are needed to determine effectiveness

51 year old

No menses for one year

G3P3

No libido – worried about her marriage

~20 pounds overweight

Trying to ‘eat right’

Trying to exercise

One year history of vaginal dryness

Sleeps OK – no hot flashes
What now?

- Gyn consult
- Phytoestrogens
- FSH, TSH, Estradiol
- Local therapy
- Systemic therapy
The Answer is:

- D – Local therapy
The Diagnosis is:

- Dysepsia secondary to menopause
  - now what?
HORMONE REPLACEMENT THERAPY IMPROVES SEXUAL FUNCTION

Yale Mid-Life Study
51 year old

No menses for one year

G3P3

No libido – worried about her marriage

~20 pounds overweight

Trying to ‘eat right’

Trying to exercise

One year history of vaginal dryness

Disabling night sweats and daytime hot flashes
What now?

- Gyn consult
- Phytoestrogens
- FSH, TSH, Estradiol
- Local therapy
- Systemic therapy
The Answer is:

- E - Systemic therapy
Prevalence of Vasomotor Symptoms

- >75% of women report hot flashes within the 2-year period surrounding their menopause
- Primary reason women seek medical treatment
- 25% remain symptomatic for >5 years

Severity of Reported Vasomotor Symptoms

Severe 30%
Moderate 35%
Mild 34%

n= 5,213 women aged 39 to 60 years. Data are based on adapted mean percentages of women who reported hot flashes 1 year prior to menopause and 2 years following last menstrual period. Due to rounding, percentages may not add up to 100%.

More Moderate to Severe Symptoms With Surgical vs. Natural Menopause

- In women after removal of both ovaries vs. women with intact ovaries
  - Moderate to severe vasomotor symptoms almost 2 times more often (p < 0.001)
  - More moderate to severe local vaginal complaints (p < 0.01)

A Matter of Timing:
New Study Reassures Most Users of Hormones

• Timing of hormone use is key
  • 30% decrease in all cause mortality
  • between ages 50 to 59
  • No increase in heart attack risk or stroke
  • in newly menopausal patients

“Women close to menopause were at 24% lower risk of heart problems, while women 20 years or more past menopause faced a 28% higher heart attack rate.”

• P value changed from 0.05 to 0.01 after submission for publication

• Is this Kosher?
83 year old
Has used HRT for > 30 years
G3P3
Hysterectomy for fibroids age 45
Moderate hypertension – controlled
On a ‘statin’
Has tried to stop ERT and gets disabling hot flashes every time she does.
What now?

- Gyn consult
- Phytoestrogens
- FSH, TSH, Estradiol
- Local therapy
- Systemic therapy
- Cold Turkey
The Answer is:

* E - Systemic therapy
Does HRT Reduce Survival?

Estrogen users >6 years (n=232)

Non-Users (n=222) (matched for age and duration in HMO)

No Increase in Breast Cancer

After 7.1 years of unopposed estrogen there was noted a >20% decrease in invasive breast cancers as compared to placebo.

JAMA 2006; 295: 1647-1657.
HRT/ERT - 2012

- Be very clear about your therapeutic objectives when contemplating hormone replacement therapy

- Everything has risks versus benefits

- One size does not fit all – know the options and be prepared to individualize
Vital References


Sources for Additional Support

- American College of Obstetricians and Gynecologists (www.acog.org)
- Association of Professors of Gynecology and Obstetrics (www.apgo.org)
- The North American Menopause Society (www.menopause.org)
- National Osteoporosis Foundation (www.nof.org)
- Jacobs Institute of Women’s Health (www.jiwh.org)
Presenting Complaints:

- Pain – acute vs. chronic
- Bloating
- Increased Abdominal Girth
- Early Satiety
- None
Mass:

- You don’t know it's not there until you do the exam
- You may be this patient’s only chance
62 year old G2P2 - new patient

Booked as annual exam - asymptomatic

Fixed mass filling pelvis
What now?

- Sono
- CT
- CA-125
- CBC
- Colonoscopy
- Gyn vs Gyn Onc
The Answer is:

- A, B, C, D, E then F
The Diagnosis is:

- **Serous Cystadenocarcinoma** – ovary

- Was the patient truly asymptomatic?
  - A river in Egypt
  - If the Doctor can’t find it, it probably is nothing
As opposed to acute pain, chronic gyn pain problems such as severe dysmenorrhea associated with endometriosis gives you more options in arranging an office consultation.

However, an acute exacerbation of chronic pain mandates a fresh look as does bloating in the postmenopausal woman.
25 year old G1P1

Felt well ~ 3 am, went to bathroom, got sweaty and fainted

Menses normal, LMP 1 week ago

G0P0; looks unwell

No past history of pelvic infection

37 C, Hgb 10, WBC 9000, 110 bpm, 90/60, not orthostatic

Diffuse lower abdom tenderness, rebound +

Pelvic: 4+ CMT, patient stops exam

Pregnancy test negative
What now?

- Straight to the ER
- Sono
- Coital history
- Medical history
  - Heart valve
  - History of DVT
The Answer is:

- Straight to the ER
The Diagnosis is:

- Ruptured Ovarian Cyst

- Sono shows +/- cystic ovary; free fluid in pelvis
- Coital history suggestive of causation
- Observe for at least six hours
27 year old G0P0 – urgent add on

Severe RLQ pain after moving her desk at work, nausea when pain increases

Menses normal, LMP 1 week ago

Mod distress, 37 C, 140/84, 110 bpm

No past history of pelvic infection

Hgb 12.5, WBC 11,000

Hernia neg, Guarding only

Pelvic: 4+ CMT, patient stops exam

Pregnancy test negative
What now?

- Straight to the ER?
- Sono
The Answer is:

- Depends
The Diagnosis is:

- Ovarian Torsion

- Sono shows 5 cm cyst R ovary; reduced vascular flow
- Relatively rare, virtually unheard of without ovarian enlargement
- Laparoscopic surgery
- 35 year old G3P3, history of BTL
- Increasing LLQ discomfort x 36 hours
- Menses normal, LMP 1 week ago
- Mod distress, 37 C, 140/84, 110 bpm
- No past history of pelvic infection
- Hgb 12.5, WBC 11,000
- Guarding to deep palpation only
- Pelvic: 4+ CMT, patient stops exam
What now?

- Pregnancy test
- Straight to the ER
- Sono
The Answer is:

* A & C
The Diagnosis is:

- Ectopic Pregnancy
  - Sono shows 2.2 L ovarian cyst, uterus empty
  - BTL failure rate ~1%
  - ~33% of pregnancies after BTL are ectopic
  - Accounts for ~10% of all ectopics
  - Laparoscopic surgery vs. methotrexate
Discharge:

- Examine for trauma +/or lesions, i.e. herpetic cervicitis
- Chlamydia – common – PID, ectopic
- Pay for performance
- New partner since last visit
- New patient screening
• 71 year old with brownish discharge

• 83 year old with brownish discharge

• 76 year old with vaginal ‘irritation’
What now?

- Post menopausal bleeding – uterine ca
- Pelvic exam
- EMB? r/o infection then perform
- Culture(s) / wet prep
The Diagnoses are:

- 71 yo -> vaginal cancer
- 83 yo -> colovaginal fistula from diverticular disease
- 76 yo -> genital herpes (from her 55 yo personal trainer)
In Closing:

Efficient evaluation of the gyn patient is not rocket science but it does require focus and clear thinking.

As demonstrated in this presentation, the primary care physician can effectively handle the bulk of basic gyn problems if he or she chooses to do so.
Just One More Thing…

- The Foundation for Exxcellence in Women’s Health Care ->
- Pearls of Exxcellence – reviewing the most frequently missed concepts on ABOG oral exams
- http://www.exxcellence.org/pearls