GOALS

- Review common women’s health issues
- Discuss basic workup and treatment
- Discuss the newest updated recommendations for each condition

USPSTF GUIDELINES FOR PAP

- Ages 21-65: screen with Pap smear (cytology) every 3 years
- Ages 30-65: screen with Pap smear every 3 years or Pap with HPV testing every 5 years
- Ages 65+: No further testing if last 3 Paps were normal
- s/p hysterectomy with removal of cervix and no high grade precancer or cervical cancer: No further testing
- Ages <30: Do not screen with HPV alone or with cytology
ABNORMAL PAP:
UNSATISFACTORY CYTOLOGY

- HPV unknown (any age)
- HPV negative (age ≥ 21 years)
- HPV positive (age ≥ 21 years)

**Management Options:**
- Repeat Cytology 2-4 months
- Colposcopy

**Cases:**
- Abnormal
- Negative
- Unsatisfactory

Routine screening (HPV unknown) or Cotesting @ 1 year (HPV+)

Manage per ASCCP guidelines

---

ABNORMAL PAP:
WOMEN ≥ AGE 30, CYTOLOGY NEG, HPV+

- Cytology – ASC or HPV +
- HPV DNA testing (Acceptable)
- HPV 16 or 18 positive
- HPV 16 or 18 negative

**Management Options:**
- Repeat Cotesting @ 3 years
- Manage per ASCCP guidelines

Routine screening (HPV unknown) or Cotesting @ 1 year (HPV+)

---

ABNORMAL PAP:
ATYPIcal squamous cell of uncertain significance (ASCUS)*

- Repeat cytology @ 1 year acceptable
- HPV DNA testing (Preferred)
- HPV 16 (manage the same as LSIL)
- HPV negative

**Management Options:**
- Negative ≥ ASC
- Routine screening @ 3 years interval

Endocervical sampling preferred in women with no lesions, and those with inadequate colposcopy; acceptable for others

Manage per ASCCP guidelines

---
ABNORMAL PAP:
MANAGEMENT OF WOMEN AGES 21-24 WITH ASC-US OR LOW GRADE SQUAMOUS INTRAEPITHELIAL LESION (LSIL)

- Repeat cytology @12 months preferred
- Reflex HPV testing (Acceptable for ASC-US only)
  - HPV positive
  - Negative, ASC-US or LSIL
  - Repeat cytology @12 months preferred
  - ≥ ASC-H, AGC, HSIL
  - HPV negative
  - Routine screening
- Negative x2
  - ≥ ASC
  - Colposcopy
  - Repeat cytology @12 months preferred

ABNORMAL PAP:
LOW GRADE SQUAMOUS INTRAEPITHELIAL LESION (LSIL) AGES ≥ 30

- LSIL, with neg HPV test: Among women ≥30 with co-testing
  - Preferred
  - Repeat co-testing @1 year
  - Cytology & HPV negative
  - ≤ ASC or HPV positive
  - Colposcopy
  - Manage per ASCCP guidelines
- LSIL with no HPV testing: Among women ≥30 with co-testing
  - Acceptable
  - HPV DNA testing (Preferred)
  - Colposcopy
  - Repeat co-testing @1 year
  - ≤ ASC or HPV positive
  - Cytology & HPV negative
  - Non-pregnant & no lesion
    - Endocervical sampling preferred
    - Inadequate colposcopic exam: preferred
    - Endocervical sampling acceptable
    - Adequate colposcopy & lesion: acceptable
  - CIN 2 or 3
    - Manage per ASCCP guidelines
- Repeat co-testing @3 years

ABNORMAL PAP:
ATYPICAL SQUAMOUS CELL CANNOT EXCLUDE HIGH GRADE SIL (ASC-H) *

- Colposcopy Regardless of HPV status
  - No CIN 2 or 3
    - Manage per ASCCP guidelines
  - CIN 2 or 3
    - Manage per ASCCP guidelines

*Management options may vary if the woman is ages 21-24
ABNORMAL PAP:
HIGH GRADE SQUAMOUS INTRAEPITHELIAL LESIONS (HSIL) *

- Immediate Loop Electrosurgical Excision†
- Colposcopy with endocervical assessment

No CIN 2 or 3
- CIN 2 or 3
- Manage per ASCCP guidelines

*Management options may vary if the woman is pregnant, postmenopausal, or ages 21-24
†Not if patient is pregnant or ages 21-24

ABNORMAL PAP:
ATYPICAL GLANDULAR CELLS (AGC)

- All subcategories (except atypical endometrial cells)
- Atypical Endometrial Cells
- Colposcopy with endocervical sampling & Endometrial sampling (≥ 30yrs or at increased risk for endometrial hyperplasia)

No endometrial pathology

*Includes unexplained vaginal bleeding or conditions suggesting chronic anovulation

ABNORMAL PAP SMEAR:
RESOURCES

American Society for Colposcopy and Cervical Pathology
- Free download
- ASCCP app

Copyright 2013 ASCCP
CONTRACEPTION

The **ONE KEY QUESTION INITIATIVE:**

- Ask every woman of childbearing age (18-50 years old) at every patient encounter if she desires to be pregnant within the next year
- About ¾ of all teenagers who did not plan on getting pregnant were not on any form of birth control

  - Review coverage of contraception with the Affordable Care Act
  - Review how to use contraception:
  - 40% of unintended pregnancies due to incorrect contraception use


CONTRACEPTION: RESOURCES

APPS for patients:
1. Clue
2. Period Tracker

CONTRACEPTION: FOR SPECIAL POPULATIONS

- App for special populations
- Summary charts:
  - [http://www.cdc.gov/reproductivehealth/unintendedpregnancy/usmec.htm](http://www.cdc.gov/reproductivehealth/unintendedpregnancy/usmec.htm)
CONTRACEPTION: EFFECTIVENESS

- 12 month longitudinal cohort study of adolescent girls and women (N=1,387) aged 15-24 years old attending public family planning clinics
- Started on patch, ring, depo medroxyprogesterone acetate and pills
- Assessment at 3, 6, 12 months
- RESULTS:
  - Discontinuation rate low for all methods: lowest for patch and Depo
  - Discontinuation rate higher for younger age at initiation
  - Continuation rate equal for ring and pill and higher for women with greater intent to use the method, who are working or going to school
  - Pregnancy rate (per 100 person year) highest for Patch and ring (30.1 and 30.5) and comparable for pill and Depo (16.5 and 16.1; P< 0.001)


CONTRACEPTION: LONG ACTING REVERSIBLE CONTRACEPTION (LARC)

- In a study of 4,167 women age 14-45 years old, the continuation of LARC was 86% at 12 months vs. 55% for short acting contraception
- LARC is safe to use in adolescents: conduct urine pregnancy test and swab for STI prior to insertion
- Treat if STI +, no need to remove LARC
- Counsel to expect changes in menses for the first month post insertion: treat with NSAID or short course of combined OCs
- No evidence of weight gain except for Depo
- Can be inserted post partum or post abortion immediately except for septic abortion

ACOG Committee on Adolescent Health Care 2007 reaffirmed 2014
POLYCYSTIC OVARIAN SYNDROME: PREVALENCE

- 6-7% prevalence in reproductive age females
- One study from Spain found 28% prevalence in obese or overweight female referred for dietary counseling at the endocrine clinic
- Polycystic ovaries common on U/S based on one cohort study:
  - 124 healthy young female, 33% had polycystic ovaries on U/S
  - The more clinical sx, more likelihood of insulin resistance
- Affects about 5 million reproductive age females in the US

POLYCYSTIC OVARIAN SYNDROME: DIAGNOSIS

- Endocrine Society and the NIH (in 2013) recommends using the Rotterdam Criteria, which requires 2 or the following 3 criteria:
  1. Oligomenorrhea or anovulation
  2. Hyperandrogenism: hirsutism or biochemical hyperandrogenism
  3. Polycystic ovaries on ultrasound
  - Adolescents:
    - clinical or biochemical evidence of hyperandrogenism with
    - persistent oligomenorrhea (after excluding other pathologies)
  - Perimenopausal or menopausal female: presumptive dx if well documented h/o oligomenorrhea & hyperandrogenism during reproductive years
  - Rule out: thyroid, nonclassical congenital adrenal hyperplasia, hyperprolactinemia

POLYCYSTIC OVARIAN SYNDROME: DIAGNOSIS *

1. Testosterone level: either very high or very low can differentiate between women with or without PCOS
   - Total testosterone <400ng/dL (1.39 nmol/L) may suggest absence of PCOS
   - Combo serum estrone >50pg/ml and free testosterone >3.3pg/ml
2. LH ≥ 6.5 units/L may identify PCOS in women with oligomenorrhea/amenorrhea and high likelihood of PCOS
   - LH/FSH ratio higher in PCOS but of uncertain utility
3. DHEA-S may not identify females with PCOS
4. TSH: rule out thyroid as cause for sx
5. Prolactin: mild elevations common with PCOS
6. 17-hydroxyprogesterone: rule out congenital adrenal hyperplasia
7. OGTT (fasting glucose >100 mg/dL and 2 hour 75gm oral glucose load >140mg/dL), A1c is low quality evidence
8. Dexamethasone suppression test or 24 hour urinary free cortisol to rule out Cushing syndrome if appropriate

*Level 2 Evidence
POLYCYSTIC OVARIAN SYNDROME: TREATMENT

- Hormonal contraception as first line therapy to manage menstrual abnormalities and hirsutism & acne
- Clomiphene citrate or letrozole for anovulatory infertility with metformin use as adjuvant therapy to prevent ovarian hyperstimulation syndrome when undergoing in vitro fertilization
- Metformin not be used as first line for cutaneous manifestation, prevention of pregnancy complications, or obesity

POLYCYSTIC OVARIAN SYNDROME: LATEST ISSUES

1. Literature review done 2016 shows:
   - Effectiveness of metformin with combined oral contraception to decrease weight, BMI, testosterone and SHBG levels, increased menstrual cycles and improved sleep in adolescents
   - Improved cardiometabolic outcomes in adults with combined therapy

2. PCOS associated with 34% increased risk for asthma regardless of body weight in 8,612 women ages 28-33
   - After adjustments for age, BMI, and smoking status, the researchers found that women who had PCOS were still more likely to have asthma compared with women who did not have PCOS (OR 1.34, 95% CI 1.004-1.79, P=0.047)
   - Hypothesis that inflammation ties the 2 conditions

BINGE EATING DISORDER

Prevalence of BED

BED is the most prevalent formal ED diagnosis

Medscape. Education Psychiatry & Mental Health CME. Jun 2016
BINGE EATING DISORDER

DSM-5® Criteria for Binge Eating Disorder

Recurrent binge eating  Binge eating episodes have 23 of 5 features:  Additional Criteria

- Recurrent episodes of binge eating ≥ 1 weekly for 3 months
- Binge eating is characterized by 2 main features:
  1. Eating an unusually large amount of food during a discrete time frame (2-hour period)
  2. Sense of lack of control of eating during the specific episode (feeling unable to stop eating or control what foods or how much food)

- Binge eating episodes have 23 of 5 features:
  1. Eating until feeling uncomfortably full
  2. Eating large amounts of food when not physically hungry
  3. Eating much more rapidly than normal
  4. Eating alone because of embarrassment about the quantity eaten
  5. Feeling disgusted, depressed, ashamed, or guilty after eating

- Additional Criteria:
  • Marked distress regarding binge eating
  • Binge eating is not associated with inappropriate compensatory behaviors, such as purging
  • Binge eating does not occur exclusively during the course of bulimia nervosa or anorexia nervosa
  • Severity can be based on frequency of binge eating

APA, Diagnostic and Statistical Manual of Mental Disorders, 5th Ed. 2013.

BINGE EATING DISORDER: IMPORTANT DISTINCTION

- Secretive and done in isolation
- Unusually large amounts, but sometimes small amounts
- Loss of control
- Associated with negative moods: anxiety disorder, mood disorder
- Associated with marked distress with strong feelings of shame and guilt
**BINGE EATING DISORDER**

- 30% normal weight
- 45% obese to morbidly obese (BMI >40)

- Comorbid conditions:
  - 65% Anxiety and 46% mood disorder, 23 % substance use, 43% impulse control disorder
  - DM2, HTN, metabolic syndrome, headache, chronic pain, fibromyalgia, IBS

**BINGE EATING DISORDER: DIAGNOSIS**

**Screening tools:**
- BEDS-7
- SCOFF questionnaire
- Questionnaire of Eating and Weight Patterns-Revised

**Screening questions:**
- Can you tell me about any eating patterns or behavior that concerns you?
- Have you ever felt like your eating is out of control or that you couldn’t stop eating?

**BINGE EATING DISORDER: TREATMENT**

- Cognitive Behavioral Therapy (CBT) or Interpersonal Therapy (IPT) over 12 to 16 weeks results in 50% abstinence rate, but not weight loss, maintained over 2-4 years
- Behavioral weight loss literature with mixed results: some weight loss with reduction in binge eating and maintenance
- Guided self-help CBT short-term results
- 23 RCTs each with N>40 on medication treatment with minimal weight loss
  - Topiramate can be used off-label but limited due to side effects
  - Lisdexamfetamine recently approved by FDA for moderate to severe BED
BINGE EATING DISORDER: TREATMENT WITH LISDEXAMFETAMINE (VYVANSE)

- 3 large RCTs
- 12 week treatment with Lisdexamfetamine decreased binge eating days by 85% vs. 50% in placebo (35% remission vs. 20% for placebo)
- High addiction and abuse potential

ZIKA VIRUS: SHORT HISTORY

- Discovered in 1947 in the Zika forest in Uganda
- First outbreak in humans in 1952
- Outbreaks spread from Africa to SE Asia and Pacific Islands
- Pan American Health Organization reported the first possible outbreak in Brazil in May 2015
- Confirmed as Zika in Feb 1, 2016

ZIKA VIRUS: LABORATORY-CONFIRMED ZIKA VIRUS DISEASE CASES REPORTED TO ARBONET BY STATE OR TERRITORY—UNITED STATES, 2015–2016 (AS OF MARCH 23, 2016)

**ZIKI VIRUS: AT A GLANCE**

- **US States**
  - Travel-associated Zika virus disease cases reported: 346
  - Locally acquired vector-borne cases reported: 0
  - Of the 346 travel-associated infections, 32 were pregnant women and 7 were sexually transmitted & 1 had Guillain-Barre Syndrome

- **US Territories**
  - Travel-associated cases reported: 3
  - Locally acquired cases reported: 351
  - Of the 354 cases reported, 37 were pregnant women and 1 had Guillain-Barre Syndrome

---

**ZIKI VIRUS**

- Flavivirus
- Spread by *Aedes* *Aegypti* mosquitoes: daytime AND night time
  - Spreading Dengue and Chikungunya as well
- Exact incubation time unknown, although CDC is saying to watch for sx within 2 weeks of exposure
- Transmission:
  1. Mother to child: intrauterine, not with breastfeeding
  2. Sexually transmitted: vaginal & anal
  3. Blood transfusion: ?

---

**ZIKI VIRUS: SYMPTOMS**

- 80% asymptomatic
- Symptoms:
  - Fever, rash, joint pain and conjunctivitis
  - Muscle pain and headache
  - Guillain Barre syndrome
  - Congenital microcephaly

---

**CDC Zika Virus website:** As of April 6, 2016

**CDC Zika Virus website:** As of March 23, 2016 (5 am EST)

---

**DermNetNZ**

[Lifenews.com](http://www.dermnetnz.org/viral/zika.html)
ZIKA VIRUS: PREVENTION

- Wear long sleeved shirts and long pants
- Stay in air conditioned places or places with mosquito screens or nets
- Apply sunscreen first then insect repellent with DEET
- Use insect repellent only on infants and children over 2 months old
- Spray repellent on adult hands, then apply on children’s face
- Cover cribs, strollers or carriers with mosquito netting
- Treat clothing or gear with permethrin
- After returning from Zika infested areas, prevent mosquito bites at home for 3 weeks to prevent spread of virus in home region


ZIKA VIRUS: TESTING

- During first week of symptoms, can use Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) on serum
- After the first week, antibodies can cross-react with Yellow Fever or Dengue Fever
- Should test for Dengue and Chikungunya viruses as well
- 2 authorized tests: Zika MAC-ELISA and Trioplex Real-Time RT-PCR Assay
- Call Philadelphia Department of Public Health (PDPH) at 215-685-6742


ZIKA VIRUS: RECOMMENDATIONS FOR SEXUALLY ACTIVE COUPLES

- Couples who include a man who has been diagnosed with Zika or had symptoms of Zika should consider using condoms or not having sex for at least 6 months after symptoms begin. This includes men who live in and men who traveled to areas with Zika.
- Couples who include a man who traveled to an area with Zika but did not develop symptoms of Zika should consider using condoms or not having sex for at least 8 weeks after their return.
- Couples who include a man who lives in an area with Zika but has not developed symptoms of Zika should consider using condoms or not having sex while there is Zika in the area.

ZIKA VIRUS: OTHER RECOMMENDATIONS

- Women who have had Zika virus infection should wait at least 8 weeks prior to attempting conception.
- No evidence that women who have had Zika virus will put future pregnancies at risk.
- Men who have had Zika virus infection should wait 6 months after symptom onset prior to attempting conception.
- No reported cases of Zika virus transmission through Assisted Reproductive Technology, but theoretically possible.

ZIKA VIRUS: TREATMENT

- No vaccines currently
- Hydrate well
- Rest
- Acetaminophen
- NO NSAID or ASA: due to increased risk of bleeding
- Stay indoor during the first week of symptoms to prevent mosquitoes from biting you and getting the virus.

REFERENCES


CDC contraception & Zika Virus website


DynaMed


Medscape Family Medicine website