

Obstetrics and Gynecology Cases – An Update for Primary Care Providers

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Disclosures

I have no relevant relationships with ineligible companies to disclose within the past 24 months.

Note: Ineligible companies are defined as those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Educational Objectives

At the conclusion of the session participants should be able to:

1. Interpret results of Pap Test pathology and feel empowered to know what the next step in care would be
2. Describe and implement utilization of preventative care including mammograms and bone scans during annual wellness visits
3. Discuss different contraceptive options with their patient and tailor the discussion for needs of specific patient populations
4. Outline the basics of postmenopausal hormone replacement therapy management

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TAKE HOME POINTS

Summary of high yield take home points

01

CASE NO. 1

Intermenstrual Bleeding

Case No. 1 - Intermenstrual Bleeding

A 38-year-old woman presents for her routine gynecologic visit. She denies any acute complaints and notes that she is sexually active with her wife.

Recently, she has been having recurrent episodes of intermenstrual bleeding, especially after sexual intercourse. She notes that she would describe the bleeding and some moderate spotting.

Pt denies history of abnormal pap tests but notes that she has not gotten a pap test done in the past 8 years. She is currently taking combined oral contraceptive pills for dysmenorrhea.

PMHx includes a distant history of chlamydia which was treated. Denies other STIs including genital herpes.

Case No. 1 - Intermenstrual Bleeding

General appearance: alert, in no acute distress

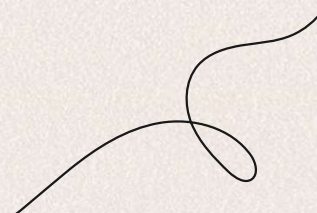
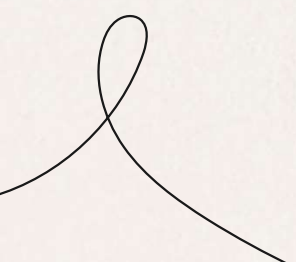
Heart: RRR

Lungs: Clear to auscultation bilaterally

Pelvic: normally developed genitalia without external lesions or eruptions. Vagina and cervix show no obvious lesions, inflammation, discharge or tenderness. Bimanual exam shows an anteverted uterus. No cervical motion tenderness. No palpable masses.

Case No. 1 - Intermenstrual Bleeding

What
should your
next step
be?



Case No. 1 - Intermenstrual Bleeding

What
should your
next step
be?

- Pap Testing w/ HPV Test
- Testing for vaginitis
- CBC
- Urine pregnancy Test (if applicable)
- Thyroid function tests
- Gonadotropins and prolactin
- Transvaginal Ultrasound

Case No. 1 - Intermenstrual Bleeding

What are
your top
differential
diagnosis?

Case No. 1 - Intermenstrual Bleeding

What are
your top
differential
diagnosis?

Polyp
Adenomyosis
Leiomyoma
Malignancy and hyperplasia
Coagulopathy
Ovulatory dysfunction
Endometrial disorders
Iatrogenic
Not otherwise classified

Case No. 1 - Intermenstrual Bleeding

Overall, the workup for the patient is within normal limits. Swabs for chlamydia, gonorrhea, trichomonas, and yeast were negative.

The patient's pap testing results came back as follows:

- Cells present: satisfactory with transformation zone present
- Hormonal evaluation: normal
- Inflammation: none
- Smear Characteristics: **low-grade squamous intraepithelial lesion noted**
- Reflex HPV testing was **positive for HPV Type 16**



What does this
pap mean?

USPSTF Recommendations

Population	Recommendation	USPSTF Recc. Grade
Aged less than 21 years	No Screening	D
Aged 21-29 years	Cytology alone every 3 years	A
Aged 30-65 years	Any one of the following: <ul style="list-style-type: none"> • Cytology alone every 3 years • FDA-approved primary hrHPV testing alone every 5 years • Cotesting (hrHPV testing and cytology) every 5 years 	A
Aged greater than 65 years	No screening after adequate negative prior screening results	D
Hysterectomy with removal of the cervix	No screening in individuals who do not have a history of high-grade cervical precancerous lesions or cervical cancer	D

Cervical Cytology Terminology

Squamous Lesions	Glandular Lesions
Atypical Squamous Cells (ASC)	Atypical glandular cells (AGC)
Low-grade squamous intraepithelial lesions (LSIL)	Atypical glandular cells, favor neoplastic
High-Grade Squamous intraepithelial lesions (HSIL)	Endocervical adenocarcinoma in situ (AIS)

Cervical Cytology Terminology

Negative Intraepithelial Lesions or Malignancy (NILM): a specimen that is adequate for evaluation and in which no epithelial abnormality is identified.

Atypical Squamous Cells (ASC):

- **ASC- undetermined significance (ASC-US):** cells that display abnormalities more marked than simple reactive changes but qualitatively or quantitatively do not fulfill criteria for a squamous intraepithelial lesion; in some cases these lesions are associated with cervical intraepithelial neoplasia (CIN).
- **ASC- cannot exclude high-grade squamous intraepithelial lesions (ASC-H):** cells that alone (or in combination with low-grade squamous intraepithelial lesion (LSIL) share cytologic features with high-grade squamous intraepithelial lesions (HSIL). Cytologies termed ASC-H can reflect the presence of true high-grade squamous intraepithelial lesion and other entities that mimic such lesions.

Cervical Cytology Terminology

Low-Grade Squamous Intraepithelial lesions (LSIL): lesions associated with human papillomavirus (HPV) infection. These tend to be associated with transient changes that regress over time.

High-grade squamous intraepithelial lesions (HSIL): lesions associated with high-risk types of HPV and that have a high risk of CIN 2,3 outcome, persistence, or progression to cancer.

Cervical Cytology Terminology

Atypical glandular cells (AGC): either endocervical (AEC), endometrial, or not otherwise specified is noted as a subcategory. This replaces the previous term of atypical glandular cells of undetermined significance (AGUS).

Atypical glandular cells, favor neoplastic: endocervical is the only subcategory. This designation is for specimens that show feature suggestive of, but not sufficient for, an interpretation of adenocarcinoma.

Endocervical adenocarcinoma in situ (AIS): normal glandular architecture of the endocervical glands may be preserved, but the glands are lined by atypical columnar epithelial cells similar to those of invasive cervical adenocarcinoma but without stromal invasion.

What do we do
with HPV Type
16+ LSIL?

Pap Testing Management

Pap Test Results	21-24 y/o	25-29 y/o	≥ 30 y/o HPV Negative	≥ 30 y/o HPV Positive
Normal pap test result	Pap test every 3 years	Pap test every 3 years	- Co-Testing every 5 years preferred - Pap test Q3 years accepted	- Co-testing in 1 year acceptable - HPV Testing acceptable
ASC-US	- Pap test in 1 year preferred - Reflex HPV test acceptable	- Pap test in 1 year acceptable - Reflex HPV Test preferred	Repeat Co-testing in 3 years	Colposcopy
LSIL	Repeat pap test in 1 year	Colposcopy	Repeat pap test in 1 year preferred Colposcopy acceptable	Colposcopy
ASC-H	Colposcopy	Colposcopy	Colposcopy	Colposcopy
HSIL	Colposcopy	Excisional treatment or colposcopy	Excisional treatment or colposcopy	Excisional treatment or colposcopy

Pap Testing Management

Pap Test Results	21-24 y/o	25-29 y/o	≥ 30 y/o HPV Negative	≥ 30 y/o HPV Positive
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ASC-H	Colposcopy	Colposcopy	Colposcopy	Colposcopy
HSIL	Colposcopy	Excisional treatment or colposcopy	Excisional treatment or colposcopy	Excisional treatment or colposcopy

Colposcopy Terms to Know

Colposcopy: diagnostic procedure in which a lighted magnifying instrument is used to examine the cervix, vagina, and vulva.

Cervical Intraepithelial Neoplasia (CIN) is the primary premalignant squamous lesion of the uterine cervix diagnosed by cervical biopsy and histologic exam.

- CIN 1 - low grade involves less than $\frac{1}{3}$ of the epithelium
- CIN-2 and CIN-3 - considered high-grade and progress to include the entire thickness of the epithelium.

Management of CIN

CIN-1	<u>Initial</u> – observation and co-testing repeated in 1 year <u>Persistent</u> —If it occurs for longer than 2 years treatment is recommended
CIN-2	Requires prompt treatment
CIN-3	Requires prompt treatment
Special Circumstances	Treatment recommended if there is more than 1 degree difference between pap and biopsy results.

Procedural Treatment for High Grade CIN

Ablative Therapy

Cryosurgery
Laser Ablation (CO2 laser)

Excisional Therapy

Loop Electrosurgical Excision Procedure
(LEEP)
Cold Knife Conization
Laser Conization

Follow-up for CIN-2 and 3

CIN-2 or greater:

- Pap test and HPV testing 12 and 24 months after the procedure
- Positive margins: repeat cytology testing in 4-6 months with endocervical curettage

Practice Pearls

Download the ASCCP APP

Become trained for colposcopy through ASCCP

A screenshot of the ASCCP mobile application interface. The top status bar shows 'Carrier', signal strength, '10:38 PM', and battery level. The app header has 'Patient Information' and a 'Home' link. Below the header is the ASCCP logo and tagline: 'The society for lower genital tract disorders since 1964'. The main content area is titled 'Key Patient Information' and contains three rows of input fields: 'Age:' with a text input field; 'HPV Status:' with three buttons labeled '?', '-', and '+'; and 'Pregnant:' with two buttons labeled 'No' and 'Yes'. Below this is the 'Initial Testing Information' section, which includes 'Cytology Result:' with a text input field. A large 'NEXT' button is positioned below the input fields. At the bottom right of the main content area is an information icon (i). The bottom navigation bar contains four icons: a clipboard with a checkmark, a clipboard with a plus sign, a hierarchical tree structure, and an open book.

02

CASE NO. 2

Annual Well Check

Case No. 2 - Annual Well Check

A 60 y/o caucasian female comes to your primary care office for her annual well check. She denies any current complaints stating that she is feeling well and is just here for a checkup. She has been without insurance for a number of years so she has not gotten any preventative care for the past 8 years.

PMHx:

- Anxiety and depression; previously on lexapro, currently not on medication and denies symptoms

PSHx:

- Cholecystectomy (1989)
- Cesarean section x 3 (1991, 1993, 1997),
- Bilateral tubal ligation (1999)

Case No. 2 - Annual Well Check

Social History:

- Tobacco: 40 pack year history of smoking - currently smoking 1 ppd
- Alcohol: 2-3 glasses of wine per day
- Marijuana: denies use
- Illicit Drugs: denies use

OB-GYN:

- Menarche at 12 years old
- Menopause at 54 years old
- G5P3023 with three cesarean sections and two early 1st trimester SAB
- History of abnormal pap smear previously s/p LEEP in 2002, denies recurrence of abnormal pap
- Currently sexually active with her husband - reports monogamous relationship since mid-1990s

Case No. 2 - Annual Well Check

Vitals

- T: 37.0°C
- HR: 90 bpm
- RR: 15
- BP: 118/78 mmHg
- SpO2: 98% on RA
- BMI: 32

**General inspection, skin, head, eyes
ENT, neck, cardiac, and respiratory,
and abdominal exam WNL**

Genital:

- External genitalia is normal in appearance without lesions, swelling, masses or tenderness. Mild atrophic changes are noted consistent with age
- Vagina is pink and moist without lesions or discharge. Cervix is nontender without lesions or erosions.
- Uterus is anteflexed, nontender and normal in size. Ovaries are nontender without palpable masses or enlargement.

Case No. 2 - Annual Well Check

What sort of
preventative health
measures should
be offered to this
patient?

Case No. 2 - Annual Well Check

What sort of
preventative
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offered to this
patient?

- Type 2 DM screening
- Alcohol Misuse
- Blood pressure
- Breast Ca - Mammograms and BRCA Testing
- Cervical Cancer
- Colorectal Cancer
- Depression/Anxiety
- Healthy diet, weight reduction
- Tobacco cessation
- Lung Cancer
- Unhealthy
- HIV, Syphilis, GC/CT screening
- Bone Density screening

Case No. 2 - Annual Well Check

What sort of preventative health measures should be offered to this patient?

- Type 2 DM screening
- Alcohol Misuse
- Blood pressure
- **Breast Ca - Mammograms and BRCA Testing**
- Cervical Cancer
- Colorectal Cancer
- Depression/Anxiety
- Healthy diet, weight reduction
- Tobacco cessation
- Lung Cancer
- Unhealthy
- HIV, Syphilis, GC/CT screening
- **Bone Density screening**



Breast Cancer Screening Guidelines

Assessment of Risk

- Majority of women are at average risk – less than 15 percent lifetime risk
- Even with some risk factors patients are still likely at average risk
- Risk stratification can be done by utilizing models such as the Gail Model (2018)

Society recommendations for routine mammographic screening

Group	Screening by age
US Preventive Services Task Force (2016)	<ul style="list-style-type: none">● 40-49 y/o: individualized● 50-74 y/o: screening every 2 years
American College of Obstetrics and Gynecologists (2017)	<ul style="list-style-type: none">● 40-49 y/o: individualized every 1-2 years● 50-75 y/o: every 1-2 years
American Cancer Society (2015)	<ul style="list-style-type: none">● 40-44 y/o: individualized every year● 45-55 y/o: every year● 55 to when life expectancy is < 10 years: every 1-2 years

Overall Recommendations - Average Risk

- Frequency varies from annually to every 3 years
- Most societies recommends screening between 45 and 50 years old.
- Generally cessation of screening is recommended around 75 years old

ACOG Guidelines

Recommends mammography every 1 to 2 years

Initiation of screening:

- Shared decision making for patients 40 to 49 years old
- Universal screening from 50 to 75

Is there value in clinical or self breast exams?

Overall, clinical breast exams (CBE) and breast self-examination (BSE) are not recommended for average-risk women for the purposes of screening.

- Lack of data supporting that CBE improve patient outcomes when used as a screening modality
- Evidence suggests an increase in false-positive rates

Clinical breast exams are still an integral part of evaluating breast complaints

Is there value in clinical or self breast exams?

Average-risk women should not perform BSE.

- Several studies have shown a lack of benefit and a higher rate of breast biopsies that showed benign disease
- If patients decide to continue BSE they should receive careful instruction to differentiate normal tissue from suspicious lumps and understand it does not replace mammography

Overall Recommendations - Moderate Risk

Approximately 15 to 20% lifetime risk of breast cancer

- Includes most women with 1st degree relative without genetic syndrome
- Overall, the same recommendations apply for screening
- There is no high-quality data supporting screening at an earlier age.
- Some experts suggest that supplemental screening with either a MRI or ultrasound is offered in addition to mammography

Overall Recommendations - High Risk

≥ 20 percent of developing breast cancer

- Includes:
 - Those who have BRCA or other susceptibility genes
 - History of chest radiation
 - Calculated lifetime risk of developing breast cancer greater than 20 percent.
- It is vital to emphasize the utilization of enhanced modalities and increased frequency of screening
- Refer to high-risk screening clinic to screen and consider risk reduction treatment

ACS Recommendations for Breast MRI

Recommended based on high risk of breast cancer and high sensitivity of MRI

- BRCA mutation
- First-degree relative of BRCA carrier but untested
- Lifetime risk of >20 to 25% or greater as defined by BRCAPRO or other models that are largely dependent on family history
- Radiation to chest between age 10 and 30 years
- Li-Fraumeni syndrome and first-degree relatives
- Cowden and Bannayan-Riley-Ruvalcaba syndromes and 1st degree relatives

Insufficient Evidence to recommend for or against MRI screening

- Lifetime risk of 15 to 20%
- Lobular carcinoma in situ or atypical lobular hyperplasia
- Atypical ductal hyperplasia
- Heterogeneously or extremely dense breast on mammography
- Women with a personal history of breast cancer, including ductal carcinoma in situ

Recommend against MRI screening

- Women at < 15% lifetime risk

Screening - Biological Males

Routine mammography is not performed

Male carriers of BRCA1/2 who have evidence of gynecomastia or parenchymal/glandular breast density – annual screening mammography should be considered

Screening - Dense Breast Tissue

- Does not alter general approach to age- and risk-based screening
- Prefer digital mammography over film mammography due to greater sensitivity
- Currently, digital 2D or 3D is the modality of choice in most locations in the United States
- Supplemental imaging not generally recommended
 - No benefit seen in low-risk patients
 - No recommendation for or against MRI in moderate risk patients
 - Routine supplemental MRI is recommended as adjunct to mammography for high risk patients

Risk Calculator - Gail Model (2018)

- Age
- Race/Ethnicity/Nativity
- Biopsies with atypical hyperplasia
- Age of menarche
- Age at 1st live birth
- 1st degree relatives with breast cancer

Risk Calculator - Case No. 2

- Age - **60 y/o**
- Race - **caucasian, non hispanic**
- Biopsies with atypical hyperplasia - **unknown**
- Age of menarche - **12**
- Age at 1st live birth - **25 to 29 y/o**
- 1st degree relatives with breast cancer - **1 relative**

Risk Calculator - Case No. 2

Results

Relative risk when less than 50 years old

Relative risk when 50 or more years old

Average 5-year risk of breast cancer for a female of the same age and race/ethnicity in the general US population %

Average lifetime risk of breast cancer for a female of the same age and race/ethnicity in the general US population %

Patient 5-year risk of breast cancer %

Patient lifetime risk of breast cancer %

Decimal precision



Bone Density Screening

Goals of Screening

Goals of osteoporosis screening is to identify persons at increased risk of sustaining a low-trauma fracture who would benefit from intervention to minimize risk.

Should involve history and physical exam and assessment of risk factors.

FRAX - Risk Factor Tool

FRAX - Fracture Risk Assessment Tool: provides guidance for:

- BMD testing (assessment threshold)
- Treatment (intervention threshold)

Clinical Risk Factors for Fracture Independent of bone mineral density

Advancing age

Previous fracture

Glucocorticoid therapy

Parental history of hip fracture

Low body weight

Current cigarette smoking

Rheumatoid arthritis

Secondary Osteoporosis (e.g., hypogonadism or premature menopause, malabsorption, chronic liver disease, inflammatory bowel disease)

BMD Assessment Guidelines

Bone mineral density is generally evaluated by the utilization of DXA scans in the United States

Guidelines for DXA scans:

- Women \geq 65 y/o - BMD assessment recommended
- Women $<$ 65 y/o - BMD assessment in postmenopausal women with 1 or more risk factors
- BMD: Men - targeted screening based on risk factors


Will generally measure bone mineral density of the hip and spine using DXA

Frequency of Testing

Repeat Bone Mineral Density Measurements

T-score -2.00 to -2.49 at any site or risk factors	Follow-up measurements every 2 years as long as risk factor persists
T-score -1.50 to -1.99 at any site, no risk factors	Follow-up DXA in 3 to 5 years
T-score -1.01 to -1.49 at any site, no risk factors	Follow-up DXA in 10 to 15 years

FRAX 10-year probability of fracture should be re-evaluated every five years



Would you order a
DXA Scan for our
patient?

Case No. 2 - Screening Considerations

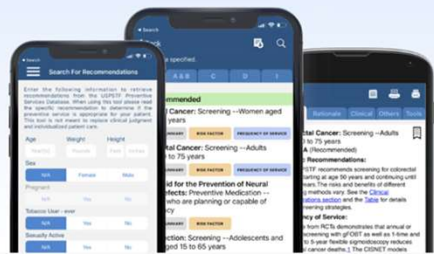
60-year old female, denies history of personal or family history of fracture. **40 pack year history of tobacco use**. Current daily alcohol consumption.

Postmenopausal with 1+ risk factors → Order a DXA


Clinical Pearls


United States Preventive Services Task Force App


- Available for apple and android
- Allows you to put age, race, and risk factor, height, weight



USPSTF Recommendations App for Web and Mobile Devices

USPSTF  **Prevention TaskForce WEB**
USPSTF Recommendations application for desktop browsers

USPSTF  **Prevention TaskForce Mobile**
USPSTF Recommendations application for mobile devices

USPSTF  **Prevention TaskForce API**
USPSTF Recommendations application into your application

03

CASE NO. 3

Adolescent Gynecologic Visit

Case No. 3 – Adolescent Gynecology

A 17 y/o female presents to your office for her annual well check with no complaints. She states that she is feeling well and is staying very active playing basketball for the varsity team at school.

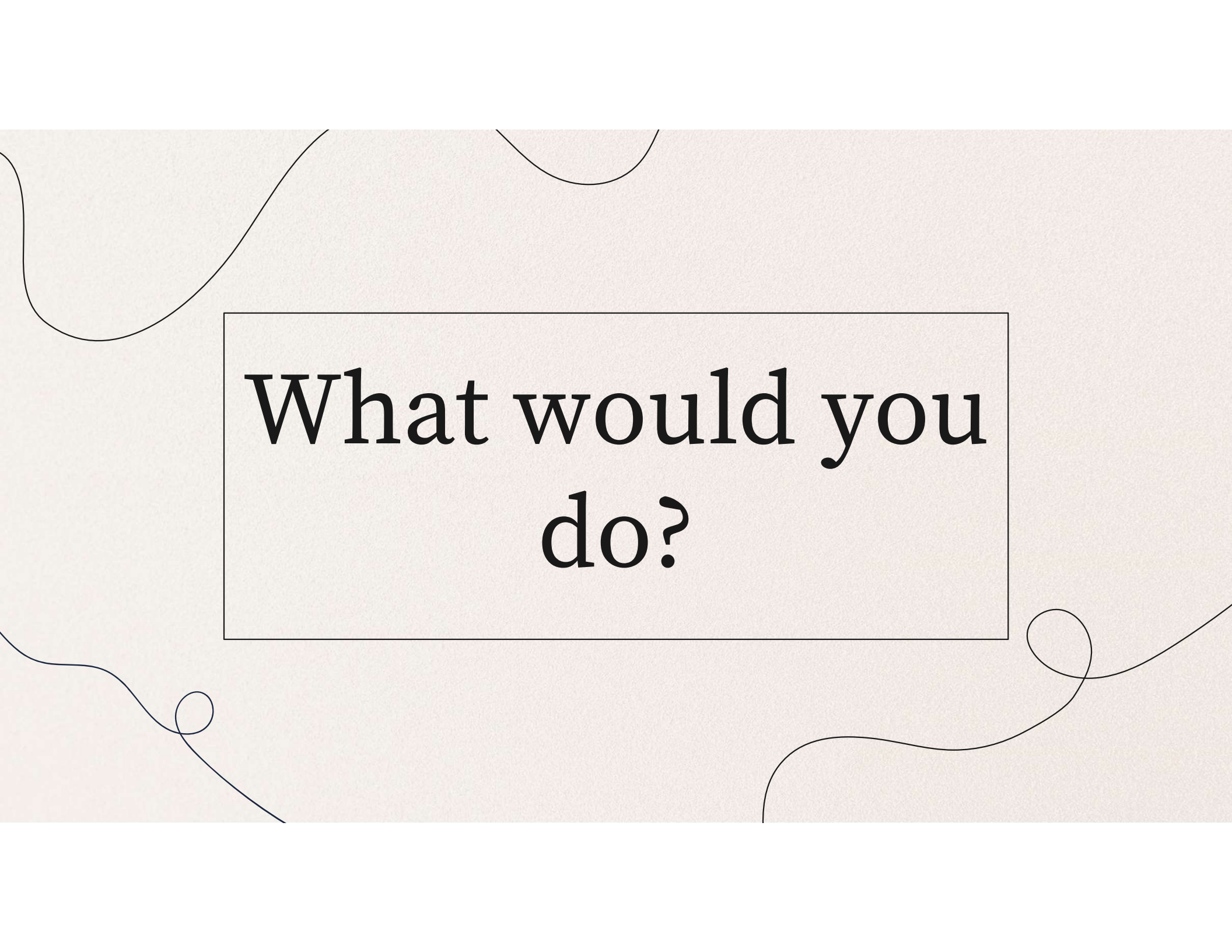
PMHx:

- Received all childhood immunizations; TDap given in 2022
- Menarche at 12 y/o
- Denies chronic health conditions
- Denies medications
- Denies Surgery

Case No. 3 – Adolescent Gynecology

Per office protocol you have the patient's mother leave the room so that you can interview the patient alone. Once the mother has left the patient notes that she has a boyfriend who she is considering becoming sexually active with.

Notes that she desires to use contraceptives but has not discussed this with her mother due to fear of judgement.

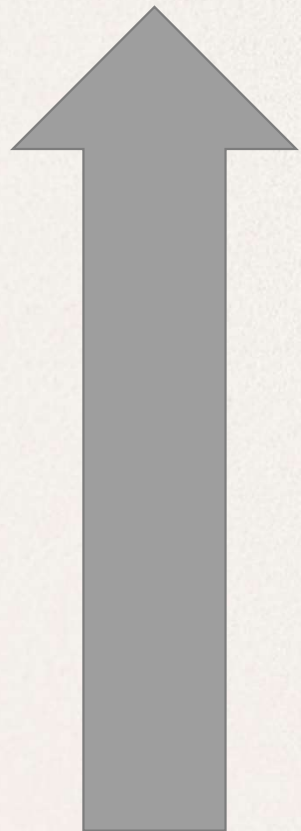


What would you
do?

Confidentiality and Parental Consent

- It is important to assure confidentiality and establish trust with adolescent patients
- Make sure to explain that you will keep everything confidential unless you believe they are a danger to themselves or others
- Ensure that they know that if you run prescriptions through insurance then their parents will likely be able to see what you prescribe
- Be aware of your specific state laws regarding parental consent
- Most states allow minors to access non prescriptive and prescriptive contraceptives and consent to services involving them

Contraceptive Methods and Typical Effectiveness



Effectiveness	Types
Tier 1 → Most effective Less than 1 pregnancy per 100 women in one year	<ul style="list-style-type: none">● Implant● Vasectomy● Tubal occlusion● IUD
Tier 2 → Moderately Effective 4 to 7 pregnancies per 100 women in one year	<ul style="list-style-type: none">● Injectables● Pills● Patch● Ring
Tier 3 → Less effective More than 13 pregnancies per 100 women in one year	<ul style="list-style-type: none">● External condom, diaphragm, sponge, internal condom, spermicides● Fertility awareness-based methods● Withdrawal

Steps to Contraceptive Counseling

1. Establish Rapport
2. Identify those appropriate to receive contraceptive counseling
3. Assess medical history and contraindications to methods
4. Initiate contraceptive counseling process
5. Elicit informed preferences for method characteristics
6. Facilitate preference-concordant decision making
7. Counsel about method initiation and use

Identify Patient-Centered Reproductive Goals

- Ask open ended questions:
 - Do you want to have (more) children?
 - Would you like to become pregnant in the next year?

Pericoital Contraceptives

- Non-hormonal reversible contraceptive methods used at the time of intercourse (i.e., on demand) to prevent pregnancy
- Prevent functioning sperm from entering the female reproductive tract
- Female Controlled options (<1% of contraceptive use):
 - Diaphragms
 - Cervical cap
 - Spermicides
 - Sponge
 - Female Condoms
 - Fertility awareness
- Male Controlled: Condoms

Pericoital Contraception

Advantages

- Safe, minimal complications
- No hormonal exposure or side effects
- Many forms give agency to female participants
- May be reusable
- Relatively inexpensive
- Immediately effective and reversible

Disadvantages

- Failure rates higher than many other forms of contraception
- Many forms do not protect against STIs
- Require motivation and skill
- No noncontraceptive benefits

Hormonal Contraception

- Hormonal methods contain either estrogen and progestin or progestin only
- Types:
 - Implant
 - Intrauterine Device (IUD)
 - Injections
 - Pills
 - Vaginal Rings
 - Skin Patches

Hormonal Contraception

Advantages

- Provides longer protection
- Provide noncontraceptive benefits
- Increased reliability

Disadvantages

- Side Effects
- Spotting between periods
- Mood swings
- Decreased libido
- Increased risk of thrombosis

Hormonal Contraception - Types

Vaginal Ring

- Efficacy: > 99% perfect use; 97% with average use
- Combined hormonal contraceptives
- NuvaRing (21 day use) and Annovera ring (worn 3 weeks, removed 1 week, use total of 13 cycles)
- SE: vaginitis, vaginal wetness, leukorrhea

Transdermal Patch

- Efficacy > 99%
- Apply patches weekly
- Combined hormonal contraceptive
- SE: topical irritation (rare)
- Cannot be used in overweight or obese patients

Hormonal Contraception - Types

Depo-Provera

- Efficacy: 96%
- Depot Medroxyprogesterone (DMPA)
- Contraindications:
 - Patients with breast Ca
 - Severe liver disease
 - Planned pregnancy in next year
 - Long-term use of corticosteroids

Hormonal Contraception - Types

Combined Oral Contraceptive Pills

- Efficacy: 99% perfect use; 91% with typical use
- Combination of estrogen and progestin
- Many different varieties
- Contraindications:
 - >35 y/o who smoke
 - Hx of blood clot or stroke
 - Hx estrogen-dependent tumor
 - Abnormal menstrual bleeding
 - Active liver disease
 - Migraines with aura
 - Severe Hypertension

Progestin-Only Pills (POP)

- Efficacy: 95% when taken perfectly
- Option for women who cannot or prefer not to use estrogen-containing contraceptives
- Made up of norethindrone and drospirenone
- 28 active pills, does not involve a withdrawal week

Hormonal Contraception - Types

Etonogestrel Implant

- Efficacy 99.7%
- More effective than permanent sterilization
- Single-rod progestin contraceptive placed subdermal
- Name brand: Nexplanon
- Approved for 3 years but studies show effective for 5 years

Intrauterine Devices

- 99.5-99.9% effective
- Most common used LARC
- Utilized by 23% of female contraceptive users
- Types:
 - Copper IUD (Paragard)
 - Levonorgestrel Releasing:
 - Mirena/Liletta
 - Kyleena
 - Skyla

Contraindications to IUDs

- Severe distortion of the uterine cavity
- Active pelvic infection
- Known or suspected pregnancy
- Wilson's disease or copper allergy → can still use LNG IUDs
- Unexplained abnormal vaginal bleeding
- Breast cancer (can use copper IUD)

Permanent Sterilization

Female:

- Tubal ligation
- Salpingectomy
- Essure
- Adiana

Male: Vasectomy

Identify Patient-Centered Reproductive Goals

- PATH Questions:
 - **Pregnancy Attitudes:** Do you think you might like to have (more) children at some point?
 - **Timing:** If the patient is considering future parenthood – when do you think that might be?
 - **How important is prevention?** – How important is it for you to prevent pregnancy?

04

CASE NO. 4

Hot flashes, mood swings, and painful intercourse

Case No. 4 - Hot Flashes, Mood Swings & Painful Intercourse

A 49 y/o female comes to your office noting that she has been having debilitating hot flashes, mood swings, and pain with intercourse for the last 5 months. She notes that it has been approximately 13 months since she had her last period and wants to know what she can do for her symptoms.

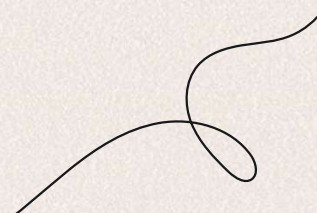
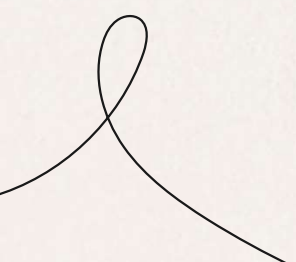
She denies any other concerns and notes that she has no pertinent past medical or surgical history and only takes a women's multivitamin.

Case No. 4 - Hot Flashes, Mood Swings & Painful Intercourse

Exam is normal at time of presentation with the exception of some vaginal atrophy likely related to perimenopausal state.

Case No. 4 - Hot Flashes, Mood Swings & Painful
Intercourse

What
should your
next step
be?



Case No. 4 - Hot Flashes, Mood Swings & Painful Intercourse

What
should your
next step
be?

- Send cultures for vaginitis
- Counsel patient regarding perimenopausal symptoms
- Discuss possible hormone replacement therapy

Case No. 4 - Hot Flashes, Mood Swings & Painful Intercourse

Menopausal hormone therapy (MHT): broad term used to describe both unopposed estrogen use for women who have undergone hysterectomy and combined estrogen-progestin therapy for women with intact uterus

Goal: relieve vasomotor symptoms. Can also help:

- Sleep disturbances
- Depression/Anxiety
- Joint aches and pains
- GU syndrome of menopause

Role of Hormone Replacement Therapy

- If vasomotor symptoms are absent – begin with vaginal estrogen for symptoms of atrophy
- Estrogen is available in oral, cream/ointment, and transdermal preparations
- If there is an intact uterus you must also give micronized progesterone
- Transdermal estrogen preferred in patients with:
 - Hypertriglyceridemia
 - Active gallbladder disease
 - Known thrombophilias (i.e., factor V Leiden)

Role of Hormone Replacement Therapy

- Duration of use: three to five years
- If recurrent, bothersome hot flashes occur after stopping estrogen you should have patients try nonhormonal management first and then use the lowest dose of MHT as possible

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TAKE HOME POINTS

High-Yield Summary Slides

Take Home Points

- Pap testing should begin at 21 y/o and Pap testing with HPV co-testing is recommended Q5 years beginning at 30
- Routine Mammography should begin at 50 y/o with shared decision making for screening between 40 and 50 y/o
- Routine bone mineral density screening should begin at 60 y/o with risk factors and otherwise at 65 y/o
- Use the PATH Questions to help tailor contraceptive counseling
- Hormone Replacement therapy should only be utilized to treat vasomotor symptoms of menopause



Questions?
Contact me

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Resources

Allen, R. H. (2023, July 24). *Combined estrogen-progestin oral contraceptives: Patient selection, counseling, and use*. UpToDate. https://www.uptodate.com/contents/combined-estrogen-progestin-oral-contraceptives-patient-selection-counseling-and-use?search=combined+oral+contraceptives&source=search_result&selectedTitle=2~146&usage_type=default

American College of Obstetrics and Gynecology. (n.d.-a). *Updated cervical cancer screening guidelines*. ACOG. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2021/04/updated-cervical-cancer-screening-guidelines>

American College of Obstetrics and Gynecology. (n.d.-b). *Updated cervical cancer screening guidelines*. ACOG. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2021/04/updated-cervical-cancer-screening-guidelines>

American College of Obstetrics and Gynecology. (n.d.-c). *Updated guidelines for management of cervical cancer screening abnormalities*. ACOG. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/10/updated-guidelines-for-management-of-cervical-cancer-screening-abnormalities>

Resources

- Bartz, D. A. (2023, October 17). *Pericoital (on demand) contraception: Diaphragm, cervical cap, spermicides, and sponge*. UpToDate. https://www.uptodate.com/contents/pericoital-on-demand-contraception-diaphragm-cervical-cap-spermicides-and-sponge?search=pericoital+contraception&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1
- Chacko, M. R. (2023, August 4). *Contraception: Issues specific to adolescents*. UpToDate. https://www.uptodate.com/contents/contraception-issues-specific-to-adolescents?search=birth+control+adolescent&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H35
- Darney, P. D. (2023, May 24). *Contraception: Etonogestrel Implant*. UpToDate. https://www.uptodate.com/contents/contraception-etonogestrel-implant?search=contraceptive+methods&topicRef=5459&source=see_link#topicContent
- Dehlendorf, C. (2022, December 2). *Contraception: Counseling and Selection*. UpToDate. https://www.uptodate.com/contents/contraception-counseling-and-selection?search=contraceptive+methods&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1

Resources

- Elmore, J. G., & Lee, C. I. (2023a, September 1). *Screening for breast cancer: Strategies and recommendations*. UpToDate. https://www.uptodate.com/contents/screening-for-breast-cancer-strategies-and-recommendations?search=breast+cancer+screening&source=search_result&selectedTitle=1~139&usage_type=default&display_rank=1#H2205904719
- Elmore, J. G., & Lee, C. I. (2023b, October 12). *Screening for breast cancer: Evidence for effectiveness and harms*. UpToDate. https://www.uptodate.com/contents/screening-for-breast-cancer-evidence-for-effectiveness-and-harms?sectionName=Clinical+breast+examination&search=breast+cancer+screening&topicRef=7564&anchor=H3757872&source=see_link#H3757872
- Goodman, A., Huh, W. K., & Einstein, M. H. (2023, August 28). *Cervical cancer screening: Risk assessment, evaluation, and management after screening*. UpToDate. https://www.uptodate.com/contents/cervical-cancer-screening-risk-assessment-evaluation-and-management-after-screening?search=abnormal+pap+test&topicRef=3205&source=see_link#H724648913

Resources

Madden, T. (2023, October 19). *Intrauterine contraception: Background and device types* . UpToDate. https://www.uptodate.com/contents/intrauterine-contraception-background-and-device-types?search=contraceptive+methods&topicRef=5459&source=see_link

Martin, K. A., & Barbieri, R. L. (2023, November 20). *Treatment of menopausal symptoms with hormone therapy*. UpToDate. https://www.uptodate.com/contents/treatment-of-menopausal-symptoms-with-hormone-therapy?search=hormone+replacement+therapy&source=search_result&selectedTitle=2~150&usage_type=default#H21

Mello, V., & Sundstrom, R. K. (n.d.). *Cervical intraepithelial neoplasia - StatPearls - NCBI Bookshelf*. National Library of Medicine . <https://www.ncbi.nlm.nih.gov/books/NBK544371/>

UpToDate. (n.d.). *Contraceptive methods and comparison of typical effectiveness*. UpToDate. https://www.uptodate.com/contents/image?imageKey=OBGYN%2F119765&topicKey=PEDS%2F107&search=birth+control+adolescent&rank=1~150&source=see_link

