

Reproductive Life Cycle

Case Conference: Birth Control

Trainee Guide

Contributors:

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Pre-Reading

- Curtis KM, Tepper NK, Jatlaoui TC, et al. U.S. Medical Eligibility Criteria for Contraceptive Use, 2016. MMWR Recomm Rep 2016; 65(No. RR-3):1-104.
- Curtis KM, Jatlaoui TC, Tepper NK, et al. U.S. Selected Practice Recommendations for Contraceptive Use, 2016. MMWR. Recomm Rep 2016; 65(No. RR- 4):1-72
- Summary Chart US Medical Eligibility Criteria (US MEC): https://www.cdc.gov/reproductivehealth/contraception/pdf/summary-chart-us-medical-eligibility-criteria_508tagged.pdf

Session Overview

- **Introduction to Session and Case Discussion (20 Minutes)**
- **Small Group Activity (20 Minutes)- creation of table**
- **Large Group Discussion: Take-Home Points (10 Minutes)**

Learning Objectives

1. The learner will list patient-specific factors that could influence a patient's decision to choose hormonal or non-hormonal contraception. Be prepared to counsel patients on best options.
2. The learner will be able to explain contraceptive efficacy and how this can help a patient select contraception.
3. The learner will be able to discuss psychotropic medications and how they can affect metabolism of certain contraception. What are absolute and relative contraindications?

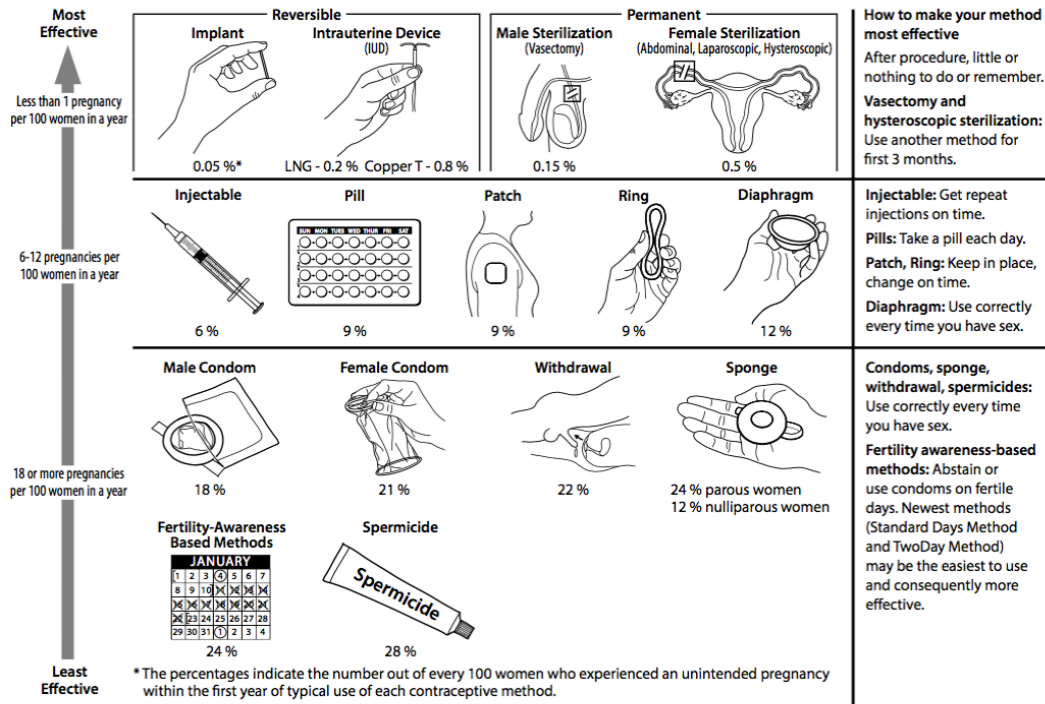
Case Presentation

Mary Smith is a 27-year-old G0P0 with a history of bipolar disorder, currently stable on carbamazepine. She has never been hospitalized, but has had difficulty in the past with job stability, which she credits to side effects from other medications and to difficulty "controlling my bipolar." She does not want children at this time. She is aware of the risk of carbamazepine to a pregnancy and would like to stay on this medication because she is finally happy and feels that her mood is stable. She has never used birth control other than condoms and "pulling out," but now feels like she has finally met "the one" and wants to add another method of contraception to her current condoms-only regimen. She asks you "Are there any birth control methods that are preferred for bipolar disorder?"

Discussion Questions

1. What CHARACTERISTICS of contraceptive methods should be considered when helping a patient choose an appropriate method?
2. What methods are currently available for her to consider?

Effectiveness of Family Planning Methods



CS 242797



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CONDOMS SHOULD ALWAYS BE USED TO REDUCE THE RISK OF SEXUALLY TRANSMITTED INFECTIONS.

Other Methods of Contraception

Lactational Amenorrhea Method: LAM is a highly effective, temporary method of contraception.

Emergency Contraception: Emergency contraceptive pills or a copper IUD after unprotected intercourse substantially reduces risk of pregnancy.

Adapted from World Health Organization (WHO) Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP). Knowledge for health project. Family planning: a global handbook for providers (2011 update). Baltimore, MD: Geneva, Switzerland: CCP and WHO; 2011; and Trussell J. Contraceptive failure in the United States. Contraception 2011;83:397-404.

Hormonal	Non-hormonal

3. What types of progesterone and estrogen do various contraceptives contain?

4. What are the mechanisms by which hormonal contraceptives prevent pregnancy?

5. Now that we have reviewed a bit about contraception and methods, let's review how to counsel Mary about one that is best for her.

6. Let's create a table of contraceptive effectiveness, based on inherent effectiveness, dependence on user characteristics and compliance, and linkage of use to sexual intercourse. Categorize the various birth control methods identified in discussion question #2 into the appropriate tiers.

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use

Condition	Sub-Condition	CHC		POP		Injection		Implant		LNG-IUD		Cu-IUD	
		I	C	I	C	I	C	I	C	I	C	I	C
Age		Menarche to <40=1		Menarche to <18=1		Menarche to <18=2		Menarche to <18=1		Menarche to <20=2		Menarche to <20=2	
		≥40=2		18-45=1		18-45=1		18-45=1		≥20=1		≥20=1	
Anatomic abnormalities	a) Distorted uterine cavity									4	4		
	b) Other abnormalities									2	2		
Anemias	a) Thalassemia	1	1	1	1	1	1	1	1	1	1	1	1
	b) Sickle cell disease ^a	2	1	1	1	1	1	1	1	1	1	1	1
	c) Iron-deficiency anemia	1	1	1	1	1	1	1	1	1	1	1	1
Benign ovarian tumors (including cysts)	a) Undiagnosed mass	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*
	b) Benign breast disease	1	1	1	1	1	1	1	1	1	1	1	1
Breast disease	c) Family history of cancer	1	1	1	1	1	1	1	1	1	1	1	1
	d) Breast cancer ^a												
	i) current	4	4	4	4	4	4	4	4	4	4	4	4
	ii) past and no evidence of current disease for 5 years	3	3	3	3	3	3	3	3	3	3	3	3
Breastfeeding (see also Postpartum)	a) <1 month postpartum	3*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*
	b) 1 month or more postpartum	2*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*
Cervical cancer	Awaiting treatment	2	1	2	2	2	2	4	2	4	2	4	2
Cervical ectropion		1	1	1	1	1	1	1	1	1	1	1	1
Cervical intraepithelial neoplasia		2	1	2	2	2	2	2	2	2	2	2	2
Cirrhosis	a) Mild (compensated)	1	1	1	1	1	1	1	1	1	1	1	1
	b) Severe ^a (decompensated)	4	3	3	3	3	3	3	3	3	3	3	3
Deep venous thrombosis (DVT)/Pulmonary embolism (PE)	a) History of DVT/PE, not on anticoagulant therapy												
	i) higher risk for recurrent DVT/PE	4	2	2	2	2	2	2	2	2	2	2	2
	ii) lower risk for recurrent DVT/PE	3	2	2	2	2	2	2	2	2	2	2	2
	b) Acute DVT/PE	4	2	2	2	2	2	2	2	2	2	2	2
	c) DVT/PE and established on anticoagulant therapy for at least 3 months												
	i) higher risk for recurrent DVT/PE	4*	2	2	2	2	2	2	2	2	2	2	2
	ii) lower risk for recurrent DVT/PE	3*	2	2	2	2	2	2	2	2	2	2	2
	d) Family history (first-degree relatives)	2	1	1	1	1	1	1	1	1	1	1	1
	e) Major surgery												
	i) with prolonged immobilization	4	2	2	2	2	2	2	2	2	2	2	2
ii) without prolonged immobilization	2	1	1	1	1	1	1	1	1	1	1	1	
f) Minor surgery without immobilization	1	1	1	1	1	1	1	1	1	1	1	1	
Depressive disorders	a) History of gestational DM only	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	b) Non-vascular disease	1	1	1	1	1	1	1	1	1	1	1	1
Diabetes mellitus (DM)	i) non-insulin dependent	2	2	2	2	2	2	2	2	2	2	2	2
	ii) insulin dependent ^a	2	2	2	2	2	2	2	2	2	2	2	2
	c) Nephropathy/retinopathy/neuropathy ^a	3/4*	2	3	2	2	2	2	2	2	2	2	2
	d) Other vascular disease or diabetes of >20 years' duration ^a	3/4*	2	3	2	2	2	2	2	2	2	2	2

Condition	Sub-Condition	CHC		POP		Injection		Implant		LNG-IUD		Cu-IUD	
		I	C	I	C	I	C	I	C	I	C	I	C
Endometrial cancer ^a		1	1	1	1	1	1	1	1	4	2	4	2
Endometrial hyperplasia		1	1	1	1	1	1	1	1	1	1	1	1
Endometriosis		1	1	1	1	1	1	1	1	1	1	1	2
Epilepsy ^a	(see also Drug Interactions)	1*	1*	1*	1*	1*	1*	1*	1*	1	1	1	1
Gallbladder disease	a) Symptomatic												
	i) treated by cholecystectomy	2	2	2	2	2	2	2	2	2	2	2	1
	ii) medically treated	3	2	2	2	2	2	2	2	2	2	2	1
	iii) current	3	2	2	2	2	2	2	2	2	2	2	1
	b) Asymptomatic	2	2	2	2	2	2	2	2	2	2	2	1
Gestational trophoblastic disease	a) Decreasing or undetectable β-hCG levels	1	1	1	1	1	1	1	1	3	3		
	b) Persistently elevated β-hCG levels or malignant disease ^a	1	1	1	1	1	1	1	1	4	4		
Headaches	a) Non-migrainous	1*	2*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	b) Migraine												
	i) without aura, age <35	2*	3*	1*	2*	2*	2*	2*	2*	2*	2*	2*	1*
	ii) without aura, age ≥35	3*	4*	1*	2*	2*	2*	2*	2*	2*	2*	2*	1*
	iii) with aura, any age	4*	4*	2*	3*	2*	3*	2*	3*	2*	3*	2*	1*
History of bariatric surgery ^a	a) Restrictive procedures	1	1	1	1	1	1	1	1	1	1	1	1
	b) Malabsorptive procedures	COCs: 3 P/R: 1		3		1		1		1		1	1
History of cholestasis	a) Pregnancy-related	2	1	1	1	1	1	1	1	1	1	1	1
	b) Past COC-related	3	2	2	2	2	2	2	2	2	2	2	1
History of high blood pressure during pregnancy		2	1	1	1	1	1	1	1	1	1	1	1
		1	1	1	1	1	1	1	1	1	1	1	1
History of pelvic surgery	High risk	1	1	1*	1	1	1	2	2	2	2	2	2
	Human immunodeficiency virus (HIV)	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*	1*
	AIDS (see also Drug Interactions) ^a	1*	1*	1*	1*	1*	1*	3	2*	3	2*	3	2*
	Clinically well on therapy	If on treatment, see Drug Interactions									2	2	2
Hyperlipidemias		2/3*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	1*
Hypertension	a) Adequately controlled hypertension	3*	1*	1*	2*	2*	2*	1*	1*	1	1	1	1
	b) Elevated blood pressure levels (properly taken measurements)												
	i) systolic 140-159 or diastolic 90-99	3	1	2	1	1	1	1	1	1	1	1	1
	ii) systolic ≥160 or diastolic ≥100 ^a	4	2	3	2	2	2	2	2	2	2	2	
	c) Vascular disease	4	2	3	2	2	2	2	2	2	2	2	1
Inflammatory bowel disease (Ulcerative colitis, Crohn's disease)		2/3*	2	2	2	1	1	1	1	1	1	1	1

Abbreviations: C=continuation of contraceptive method; CHC=combined hormonal contraceptive (pill, patch, and ring); COC=combined oral contraceptive; Cu-IUD=copper-containing intrauterine device; I=initiation of contraceptive method; LNG-IUD=levonorgestrel-releasing intrauterine device; NA=not applicable; POP=progestin-only pill; P/R=patch/ring.

Legend:

- 1 No restriction (method can be used)
- 2 Advantages generally outweigh theoretical or proven risks
- 3 Theoretical or proven risks usually outweigh the advantages
- 4 Unacceptable health risk (method not to be used)



Approx. annual failure rate	Inherent effectiveness	User-dependence	Coital dependence	Methods
0.1-1%				
5-10%				

10-20%				
20-30%				

For further information to inform table, use the following from the CDC:

7. Given her history, what other contraceptive characteristics (risks, benefits, side effects) would you consider in your counseling?

8. Given her history, what other issues do you need to discuss today?

Back to the case

Mary is very thankful for all of this information. She is also committed to continuing to use condoms because she does not want to get a sexually transmitted infection. Since she is ok using condoms, she wants to try something that is easily reversible and affordable to start.

9. Mary chooses an oral contraceptive pill. What physical exam data or screening tests do you need prior to starting her on this method? Hint: Look at the CDC Medical Eligibility Table (below).