

# Contraception in Patients with Common Medical Conditions

Nikki Zite, MD, MPH

Professor, Vice Chair of Education and Advocacy

Department of OBGYN

University of Tennessee Graduate School of Medicine

# Learning Objectives

- At the end of this presentation, you will be able to:
- (Knowledge)
  - Name common contraindications to Estrogen containing contraception
- (Competence)
  - Assist your patients with contraceptive decision making
- (Performance)
  - Provide patient centered contraceptive counseling
- (Patient Outcomes)
  - Feel confident your patients will be able to determine what contraceptive method is best for them.

# Disclosures

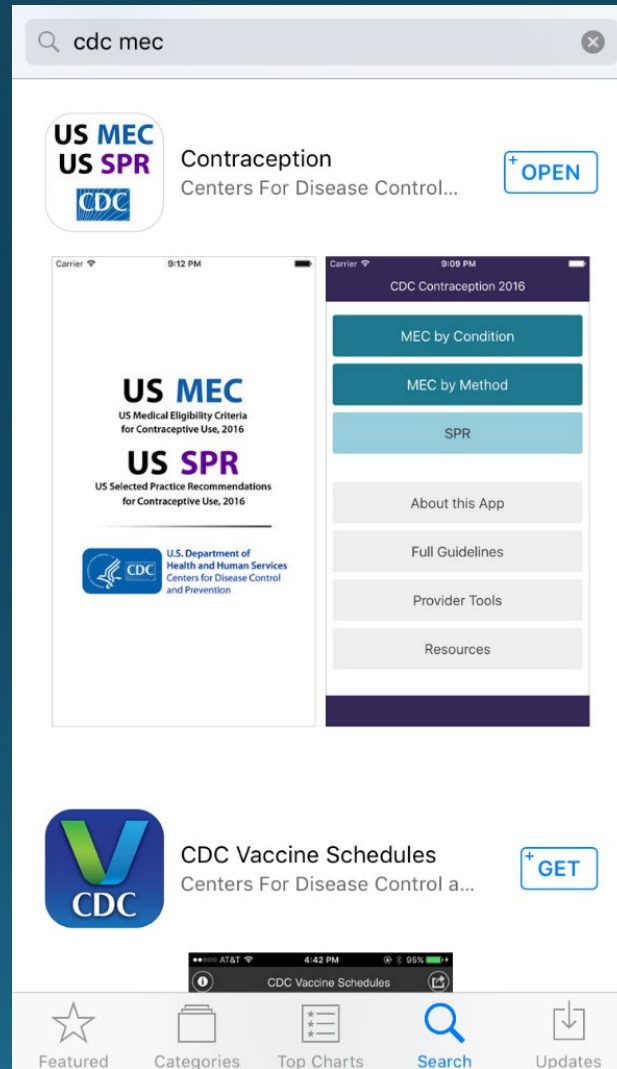
- No financial disclosure related to this presentation
- Unpaid Nexplanon Trainer
- IIS supported by Organon (ended 2025)

# Contraception



In one study, only 40% of women aged 15-34 and 32% of women aged 35-44 with chronic medical conditions were using contraception.

# There's an App for That!



# Medical Eligibility Criteria

Risk Level	
1	Method can be used without restriction
2	Advantages generally outweigh theoretical or proven risk
3	Method usually not recommended unless other, more appropriate methods are not available or not acceptable
4	Method not to be used



Condition	Sub-condition	Combined pill, patch, ring		Progestin-only pill		Injection		Implant		LNG-IUD		Copper-IUD	
		I	C	I	C	I	C	I	C	I	C	I	C
	(ii) systolic $\geq 160$ or diastolic $\geq 100$ †	4		2		3		2		2		1	
	c) Vascular disease	4		2		3		2		2		1	
Inflammatory bowel disease	(Ulcerative colitis, Crohn's disease)	2/3*		2		2		1		1		1	
Ischemic heart disease‡	Current and history of	4		2	3	3		2	3	2	3	1	
Liver tumors	a) Benign												
	i) Focal nodular hyperplasia	2		2		2		2		2		1	
	ii) Hepatocellular adenoma‡	4		3		3		3		3		1	
	b) Malignant‡	4		3		3		3		3		1	
Malaria		1		1		1		1		1		1	
Multiple risk factors for arterial cardiovascular disease	(such as older age, smoking, diabetes and hypertension)	3/4*		2*		3*		2*		2		1	
Obesity	a) $\geq 30$ kg/m <sup>2</sup> body mass index (BMI)	2		1		1		1		1		1	
	b) Menarche $\leq 18$ years and $\geq 30$ kg/m <sup>2</sup> BMI	2		1		2		1		1		1	
Ovarian cancer‡		1		1		1		1		1		1	
Parity	a) Nulliparous	1		1		1		1		2		2	
	b) Parous	1		1		1		1		1		1	
Past ectopic pregnancy		1		2		1		1		1		1	
Pelvic inflammatory disease	a) Past, (assuming no current risk factors of STIs)												
	(i) with subsequent pregnancy	1		1		1		1		1		1	
	(ii) without subsequent pregnancy	1		1		1		1		2		2	
	b) Current	1		1		1		1		4	2*	4	2*
Peripartum cardiomyopathy ‡	a) Normal or mildly impaired cardiac function												
	(i) $\leq 6$ months	4		1		1		1		2		2	
	(ii) $\geq 6$ months	3		1		1		1		2		2	
	b) Moderately or severely impaired cardiac function	4		2		2		2		2		2	
Post-abortion	a) First trimester	1*		1*		1*		1*		1*		1*	
	b) Second trimester	1*		1*		1*		1*		2		2	
	c) Immediately post-septic abortion	1*		1*		1*		1*		4		4	
Postpartum (in non-breastfeeding women)	a) $< 21$ days	3		1		1		1					
	b) $\geq 21$ days	1		1		1		1					
Postpartum (in breastfeeding or non-breastfeeding women, including post-caesarean section)	a) $< 10$ minutes after delivery of the placenta									2		1	
	b) 10 minutes after delivery of the placenta to $< 4$ weeks									2		2	
	c) $\geq 4$ weeks									1		1	
	d) Puerperal sepsis									4		4	
Pregnancy		NA*		NA*		NA*		NA*		4*		4*	
Rheumatoid arthritis	a) On immunosuppressive therapy	2		1		2/3*		1		2		2	1
	b) Not on immunosuppressive therapy	2		1		2		1		1		1	
Schistosomiasis	a) Uncomplicated	1		1		1		1		1		1	
	b) Fibrosis of the liver‡	1		1		1		1		1		1	
Severe dysmenorrhea		1		1		1		1		1		2	

Condition	Sub-condition	Combined pill, patch, ring		Progestin-only pill		Injection		Implant		LNG-IUD		Copper-IUD	
		I	C	I	C	I	C	I	C	I	C	I	C
Sexually transmitted infections	a) Current purulent cervicitis or chlamydial infection or gonorrhea	1		1		1		1		4	2*	4	2*
	b) Other STIs (excluding HIV and hepatitis)	1		1		1		1		2		2	2
	c) Vaginitis (including trichomonas vaginalis and bacterial vaginosis)	1		1		1		1		2		2	2
	d) Increased risk of STIs	1		1		1		1		2/3*		2/3*	2
Smoking	a) Age $< 35$	2		1		1		1		1		1	
	b) Age $\geq 35$ , $< 15$ cigarettes/day	3		1		1		1		1		1	
	c) Age $\geq 35$ , $\geq 15$ cigarettes/day	4		1		1		1		1		1	
Solid organ transplantation‡	a) Complicated	4		2		2		2		3		3	2
	b) Uncomplicated	2*		2		2		2		2		2	
Stroke‡	History of cerebrovascular accident	4		2	3	3		2	3	2		1	
Superficial venous thrombosis	a) Varicose veins	1		1		1		1		1		1	
	b) Superficial thrombophlebitis	2		1		1		1		1		1	
Systemic lupus erythematosus‡	a) Positive (or unknown) antiphospholipid antibodies	4		3		3		3		3		1	1
	b) Severe thrombocytopenia	2		2		3	2	2		2*		3*	2*
	c) Immunosuppressive treatment	2		2		2	2	2		2		2	1
	d) None of the above	2		2		2	2	2		2		1	1
Thrombogenic mutations‡		4*		2*		2*		2*		2*		1*	
Thyroid disorders	a) Simple goiter/hypothyroid/hypothyroid	1		1		1		1		1		1	
Tuberculosis‡	a) Non-Pelvic	1*		1*		1*		1*		1		1	
	b) Pelvic	1*		1*		1*		1*		4	3	4	3
Unexplained vaginal bleeding	(suspicious for serious condition) before evaluation	2*		2*		3*		3*		4*	2*	4*	2*
Uterine fibroids		1		1		1		1		2		2	
Valvular heart disease	a) Uncomplicated	2		1		1		1		1		1	
	b) Complicated‡	4		1		1		1		1		1	
Vaginal bleeding patterns	a) Irregular pattern without heavy bleeding	1		2		2		2		1		1	
	b) Heavy or prolonged bleeding	1*		2*		2*		2*		1*		2*	2*
Viral hepatitis	a) Acute or flare	3/4*	2	1		1		1		1		1	
	b) Carrier/Chronic	1	1	1		1		1		1		1	
<b>Drug Interactions</b>													
Antiretroviral therapy (ART)	a) Nucleoside reverse transcriptase inhibitors	1*		1		1		1		2/3*	2*	2/3*	2*
	b) Non-nucleoside reverse transcriptase inhibitors	2*		2*		1		2*		2/3*	2*	2/3*	2*
	c) Ritonavir-boosted protease inhibitors	3*		3*		1		2*		2/3*	2*	2/3*	2*
Anticonvulsant therapy	a) Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine)	3*		3*		1		2*		1		1	
	b) Lamotrigine	3*		1		1		1		1		1	
Antimicrobial therapy	a) Broad spectrum antibiotics	1		1		1		1		1		1	
	b) Antifungals	1		1		1		1		1		1	
	c) Antiparasitics	1		1		1		1		1		1	
	d) Rifampicin or rifabutin therapy	3*		3*		1		2*		1		1	

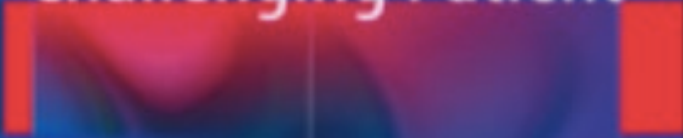
1 = initiation of contraceptive method; C = continuation of contraceptive method

\* Please see the complete guidance for a clarification to this classification. [www.cdc.gov/reproductivehealth/usmec](http://www.cdc.gov/reproductivehealth/usmec)


‡ Condition that exposes woman to increased risk as a result of unintended pregnancy.

§ Please refer to the US MEC guidance related to drug interactions at the end of this chart

# Contraception for the Medically Challenging Patient



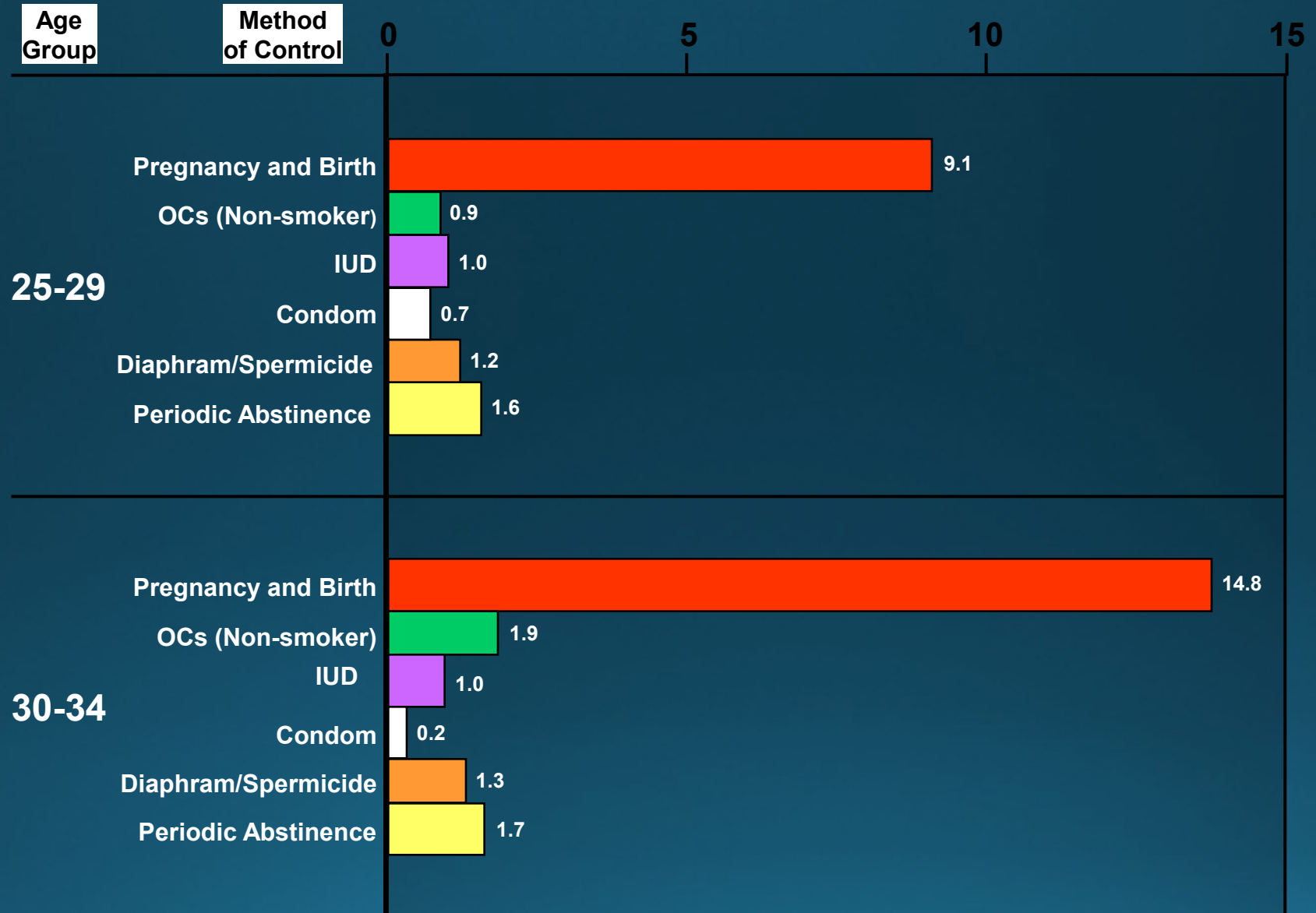
Rebecca H. Allen  
Carrie A. Cwiak  
Editors

 Springer



# Annual Birth & Method-Related Deaths

Incidence Per 100,000 Women



# Understanding risk

- Relative risk
  - the ratio of the disease rate in exposed persons to that in people who are unexposed
  - measure of association most often used by epidemiologists
  - less relevant to making decisions in risk management than attributable risk
- Attributable risk
  - disease rate in exposed persons minus that in unexposed persons
  - measure of association that is most relevant when making decisions for individuals

# Barriers to contraception in chronically ill women

## ➤ Specialists

- “I’m not an OB/GYN”
- “This isn’t my job” (rx of teratogens: now it is!)
- Sexual history, current and future risk of pregnancy
- Now what?

## ➤ Fear

## ➤ Lack of information

# Conditions for which pregnancy poses additional health risks\*

- Heme
  - Sickle Cell Disease
  - Thrombogenic mutations
- Onc
  - Gyn cancers
  - Solid organ transplantation
  - Liver tumors
- Cardiac conditions
  - Valvular heart disease
  - Peripartum cardiomyopathy
  - Ischemic heart disease
- GI/Endocrine
  - Diabetes
  - ICP
- Neuro
  - Seizure disorders
  - Stroke
- Rheum
  - Systemic lupus erythematosus
  - APLS

\*Not a comprehensive list

# Case 1

35 yo G3P2 @ 34 weeks, recently diagnosed with ICP. Her medical history is also significant for obesity (BMI 32). She is otherwise uncomplicated. She is being managed with MFM for antenatal surveillance, and plan for IOL at 37 weeks.

At her 35 week visit, she inquires about postpartum contraception, and states she would like to resume her OCPs. Does her ICP dx change her safe contraceptive options?

How do you counsel her?



# Look at the CDC MEC:

The first screenshot shows the main menu of the CDC Contraception 2016 app. The 'MEC by Condition' button is circled in red. The second screenshot shows the 'Obesity' section, with the option 'a. BMI ≥ 30 kg/m²' circled in red. The third screenshot shows a table of contraceptive methods and their MEC categories for Obesity (BMI ≥ 30 kg/m²). The 'CHCs' row is circled in red. The fourth screenshot shows the evidence text for the selected condition.

Method	Category	Clarification	
		Evidence Comment	SPR Info
Cu-IUD	1		
LNG-IUD	1		
Implants	1		
DMPA	1		
POP	1		
CHCs	2		

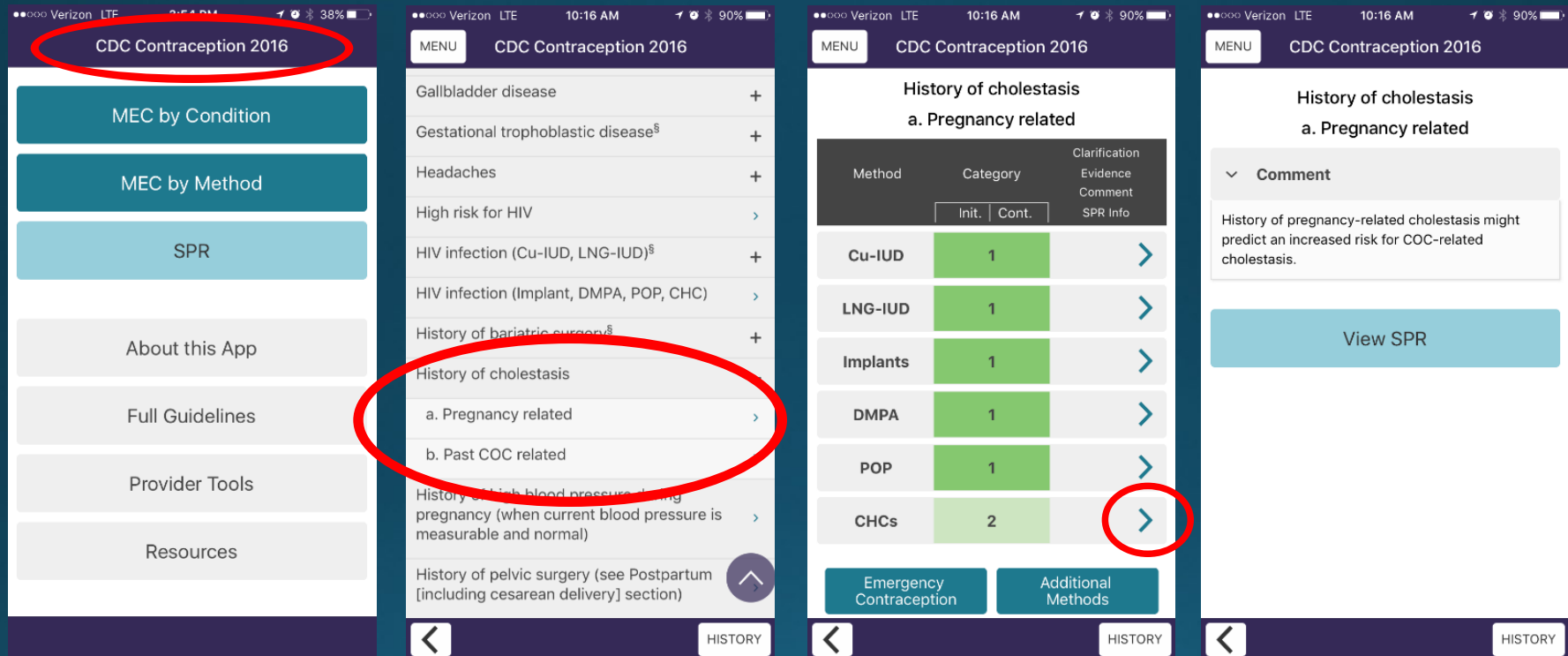
**Obesity**  
a. BMI ≥ 30 kg/m²

**Evidence**

Obese women who use COCs are more likely than obese women who do not use COCs to experience VTE. Research examining the interaction between COCs and BMI on VTE risk is limited, particularly for women in the highest BMI categories (BMI ≥ 35 kg/m²). Although the absolute risk for VTE in otherwise healthy women of reproductive age is small, obese women are at 2–3 times higher risk for VTE than normal weight women regardless of COC use. Limited evidence suggests that obese women who use COCs do not have a higher risk for acute myocardial infarction or stroke than do obese nonusers. Limited evidence suggests that effectiveness of some COC formulations might decrease with increasing BMI, however the observed reductions in effectiveness are minimal and evidence is conflicting. Effectiveness of the patch might be reduced in women >90 kg. Limited evidence suggests obese women are no more likely to gain weight during COC or vaginal ring use than normal weight or overweight women.

BMI > 30 = 2

# Look at the CDC MEC:



- History of cholestasis of pregnancy

Should she start COCs?

Does MEC  $2+2 = 2$  or 3 or 4?

# Case 2: Mary

34 yo G1P1 with medical history complicated by T1DM.

She was diagnosed when she was 8 years old and has struggled with glucose control her whole life.

She is now managed on an insulin pump and her A1C has markedly improved from 11.2% to 7.1% as of last week.

Complications from her diabetes include retinopathy and peripheral neuropathy.

She is inquiring about contraception.

What methods are safe for her?

AT&T 1:29 PM

MENU CDC Contraception 2016

KEY

Diabetes<sup>s</sup>

c. Nephropathy/retinopathy/neuropathy

Method	Category		Clarification Evidence Comment SPR Info
	Init.	Cont.	
Cu-IUD	1		>
LNG-IUD	2		>
Implants	2		>
DMPA	3		>
POP	2		>
CHCs	3/4 <sup>†</sup>		>

< HISTORY

AT&T 1:31 PM

MENU CDC Contraception 2016

KEY

Diabetes<sup>s</sup>

d. Other vascular disease or diabetes of >20 years' duration

Method	Category		Clarification Evidence Comment SPR Info
	Init.	Cont.	
Cu-IUD	1		>
LNG-IUD	2		>
Implants	2		>
DMPA	3		>
POP	2		>
CHCs	3/4 <sup>†</sup>		>

< HISTORY





# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

### ➤ **Will CHCs affect development of T2DM among pts w/ hx of gestational diabetes?**

- No; **MEC 1** for CHCs

### ➤ **Will CHCs affect control of T2DM?**

- 1 study of COC's and DMPA showed small effect on fCBG, but no effect on A1C's and development of retinopathy/nephropathy. **MEC 2.**

# Case 3

25 yo G2P2 with medical history complicated by seizure disorder.

She was diagnosed at age 11 and has tried multiple medications in the past.

The only AED that has controlled her seizures is Carbamazepine. She is currently well controlled on this medication

How would you counsel her on contraceptive options?

# Women with epilepsy

## ➤ Guidelines:

“Published guidelines recommend that providers caring for reproductive-age women with epilepsy consider the known effects of enzyme inducing AEDs on hormonal contraception, increased risk of teratogenesis of AEDs, and potential impact of seizures during pregnancy”



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

### ➤ **ANTICONVULSANTS: What are some safe ones that won't affect metabolism of a COC?**

- Gabapentin, Lamotrigine, Levetiracetam (Keppra), Valproic Acid

### ➤ **ANTICONVULSANTS: Which ones decrease steroid levels?**

- Barbiturates, Carbamazepine, Phenytoin, Topiramate
- **MEC 3**

# Epilepsy: Drug Interactions

## Potential Interaction

Carbamazepine  
Felbamate  
Oxcarbazepine\*  
Phenobarbital  
Topiramate\*  
Phenytoin  
Lamotrigine

## No Reported Interaction

Gabapentin  
Levetiracetam  
Tiagabine  
Zonisamide  
Valproate

\*At higher dosage.



# Case 4

37 yo G5P5 is admitted to the ID service for disseminated histoplasmosis and recurrent pneumonia. The patient was diagnosed with HIV and has now been diagnosed with AIDS.

She is currently on a regimen of Ritonavir, Lamivudine and AZT.



# HIV/AIDS and Contraception

## Antiretroviral (ARV)

## OC levels

## ARV levels

### Protease inhibitors

Nelfinavir	↓	No data
Ritonavir	↓	No data
Lopinavir/ritonavir	↓	No data
Atazanavir	↑	No data
Amprenavir	↑	↓
Indinavir	↑	No data
Saquinavir	No data	No change

### Non-nucleoside reverse transcriptase inhibitors (NNRTI)

Nevirapine	↓	No change
Efavirenz	↑	No change
Delavirdine	?↑	No data

# HIV/AIDS and Contraception (cntd)

## **NRTIs (All Cat I)**

- Abacavir
- Emtricitabine
- Lamivudine
- Tenofovir
- Tenofovir DF

# Case 5

32 yo G2P2 PPD#1 s/p uncomplicated SVD.

Patient has a known history of Factor V Leiden, diagnosed after her mother had recurrent VTE.

She herself has never had experienced VTE.

She has been on prophylactic anticoagulation throughout the pregnancy and plans to continue for 6 weeks postpartum.

On morning rounds you discuss contraceptive options with her.



MENU

## CDC Contraception 2016

## KEY

Known thrombogenic mutations<sup>s</sup> (e.g. factor V Leiden; prothrombin mutation; protein S, protein C, and antithrombin deficiencies)

Method	Category		Clarification Evidence Comment SPR Info
	Init.	Cont.	
Cu-IUD	1 <sup>+</sup>		>
LNG-IUD	2 <sup>+</sup>		>
Implants	2 <sup>+</sup>		>
DMPA	2 <sup>+</sup>		>
POP	2 <sup>+</sup>		>
CHCs	4 <sup>+</sup>		>



HISTORY

Condition	Sub-Condition	Cu-IUD		LNG-IUD		Implant		DMPA		POP		CHC	
		I	C	I	C	I	C	I	C	I	C	I	C
Deep venous thrombosis (DVT)/Pulmonary embolism (PE)	a) History of DVT/PE, not receiving anticoagulant therapy												
	i) Higher risk for recurrent DVT/PE	1		2		2		2		2		4	
	ii) Lower risk for recurrent DVT/PE	1		2		2		2		2		3	
	b) Acute DVT/PE	2		2		2		2		2		4	
	c) DVT/PE and established anticoagulant therapy for at least 3 months												
	i) Higher risk for recurrent DVT/PE	2		2		2		2		2		4*	
	ii) Lower risk for recurrent DVT/PE	2		2		2		2		2		3*	
	d) Family history ( <i>first-degree relatives</i> )	1		1		1		1		1		2	
	e) Major surgery												
	i) With prolonged immobilization	1		2		2		2		2		4	
	ii) Without prolonged immobilization	1		1		1		1		1		2	
	f) Minor surgery without immobilization	1		1		1		1		1		1	

Higher Risk (one or more of following)

- Known thrombophilia
- Active cancer (metastatic, on therapy or within 6m of remission)
- History of recurrent DVT/PE



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

➤ **VTE Risk: Pt reports a history of superficial varicose veins; OK for CHC's?**

- Yes (**MEC 1**)

➤ **VTE Risk: Family hx (1°) of VTE's/PE's; OK for CHC's?**

- Yes (**MEC 2**)

➤ **VTE Risk: DVT from immobilized foot?**

- Maybe...

## Combination hormonal contraceptives: **Absolute contraindications (?)**

- Thromboembolic disorders
  - Previous deep venous thrombosis/PE
  - Cerebral vascular disease
  - Personal history of clotting disorder
- Smokers over age 35
- Markedly impaired liver function
- Current breast cancer
- Undiagnosed abnormal vaginal bleeding (? EM Cancer)
- Severe high cholesterol or triglycerides
- High blood pressure/DM with vascular disease
- Migraines with aura
- Lupus with antiphospholipid antibodies

More special populations

**U.S. Medical Eligibility Criteria  
Categories for Classifying Hormonal  
Contraceptives and Intrauterine Devices**

➤ **Patients with bariatric surgery?**

- Restrictive procedures **MEC 1**
- Malabsorptive procedures (Roux-en-Y) **MEC 3** because of a potential to decrease effectiveness

**U.S. Medical Eligibility Criteria  
Categories for Classifying Hormonal  
Contraceptives and Intrauterine Devices**

➤ **T/F? Almost one quarter of women with lupus who conceive choose to terminate their pregnancies.**

- True
- Pts with +APA have high risk for arterial and VTEs – **MEC 4**
- Thrombocytopenia, immunosuppressives – **MEC 2**

➤ **What about other conditions requiring long-term steroid use ie. RA?**

- DMPA is **MEC 3** in patients on steroids with risks or history of non-traumatic stress fractures.





# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

### ➤ **Is the use of hormonal contraception safe for women who are 35 years old?**

- Safe, if Healthy & Non-Smoker
- No increased risk of myocardial infarction/stroke
- Only applies to oral contraceptives w/ <50mcg of estrogen.
- **MEC Category 1 for all methods**



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

➤ If a woman is hypertensive and BP is controlled with meds, is she a better candidate for CHCs?

- No.
- **MEC 3** for CHCs regardless of control
- **MEC 4**: for systolic  $\geq 160$ mmHg and diastolic  $\geq 100$ mmHg



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

➤ (T/F): Even modern formulations of CHCs will increase a woman's blood pressure.

- True!
- Women using CHC w/ progestin & 30mcg of ethinyl estradiol
- Ambulatory SBP up by 8mm Hg, diastolic by 6mm Hg
- Effect not seen w/ POPs' & DMPA



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

### ➤ **What is the effect of hormonal contraception on lipids profiles?**

- Estrogen decreases LDL, increases HDL levels.
- Progestin increases LDL, decreases HDL levels.

### ➤ **Safety in women w/ dyslipidemia?**

- Yes; **MEC 2**. Lipids are only surrogate markers for CV dz.

### ➤ **Lipid screening?**

- Not needed.



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

### ➤ **Re: MIGRAINES: What symptoms are NOT aura?**

- Nausea, vomiting, photophobia, phonophobia, blurring, spots, flashing lights before a migraine

### ➤ **What symptoms are CHARACTERISTIC of aura?**

- Flickering/colored lines progressing to the periphery, spreading scotomata, loss of visual field, typically before the headache



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

➤ (T/F) CHC use is contraindicated in patients w/  
BRCA mutations.

- **MEC<sub>1</sub>**

- False - There is no increased risk of breast cancer among these patients compared to those never using CHCS.
- Favorable rating given reduction in ovarian cancer risk in these patients.



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

➤ (T/F) CHC use is contraindicated in patients w/  
breast mass or family history of breast cancer.

- Benign breast disease – **MEC 1**
- Undiagnosed mass – **MEC 2**
- Family history - **MEC 1**
- Current breast cancer – **MEC 4**
- Past breast cancer NED 5 years – **MEC 3**
- Copper IUD!





# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

### ➤ **Breastfeeding: CHCs should not be started until...**

- <42 days (**MEC 3**); >42 days (**MEC 2**)
- <21 days is **MEC 4** given risk of DVT in PP (not due to BF'ing)

### ➤ **NOT Breastfeeding: CHCs can start at 3wks despite DVT risk because...**

- <21 days is **MEC 4** given risk of DVT in PP; encourage PO or abstinence
- Risk of ovulation after 21 days! (**MEC 2**)



# ***PRACTICE BULLETIN***

## **Use of Hormonal Contraception in Women With Coexisting Medical Conditions**

CLINICAL MANAGEMENT GUIDELINES FOR  
OBSTETRICIAN–GYNECOLOGISTS

NUMBER 73, JUNE 2006

*(Replaces Practice Bulletin Number 18, July 2000)*

➤ **Anti-Infective Agents: The only antibiotic known to induce hepatic enzymes and affect steroid levels.**

- Rifampin (Tuberculosis) **MEC 3**

➤ **Other medications that might affect effectiveness? What symptoms might they get?**

- St. John's Wort (inducer); breakthrough bleeding



The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

# COMMITTEE OPINION

Number 602 • June 2014

*(Replaces Committee Opinion Number 415, September 2008)*

## Depot Medroxyprogesterone Acetate and Bone Effects

➤ **DMPA – The FDA added a black box warning, indicating that it be continued for more than 2 years only if other methods inadequate. Why?**

- Bone mineral density loss
- But reversible with discontinuation
- No association with actual fractures

➤ **Is there a role for DXA in young patients on DMPA?**

- Only in research at this time



The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

# COMMITTEE OPINION

Number 602 • June 2014

*(Replaces Committee Opinion Number 415, September 2008)*

## Depot Medroxyprogesterone Acetate and Bone Effects

### ➤ IMPLANON/NEXPLANON: Similar concerns as with DMPA?

- Prospective study of implant users showed no difference in change in BMD compared to CuIUD users after 2 years.
- Does not suppress E the same way DMPA does



THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS  
WOMEN'S HEALTH CARE PHYSICIANS

# PRACTICE BULLETIN

*CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN—GYNECOLOGISTS*

NUMBER 121, JULY 2011

*Replaces Practice Bulletin Number 59, January 2005. Reaffirmed 2013*

## Long-Acting Reversible Contraception: Implants and Intrauterine Devices

### ➤ **PREGNANT w/ AN IUD: Leave in or take out?**

- FDA and WHO recommend that IUDs be removed from pregnant women when possible w/out an invasive procedure

### ➤ **Complications of continuing pregnancy?**

- Risk of spontaneous abortion, infection, rupture of membranes, preterm delivery

# POST PARTUM



# Importance of Postpartum LARC



ELSEVIER

Contraception 80 (2009) 519–526

Contraception

## Safety of the etonogestrel-releasing implant during the immediate postpartum period: a pilot study

Milena Bastos Brito<sup>a</sup>, Rui Alberto Ferriani<sup>a,b</sup>, Silvana Maria Quintana<sup>a</sup>,  
Marta Edna Holanda Diogenes Yazlle<sup>a</sup>, Marcos Felipe Silva de Sá<sup>a,b</sup>, Carolina Sales Vieira<sup>a,b,\*</sup>

<sup>a</sup>Department of Obstetrics and Gynecology, University of São Paulo, Ribeirão Preto, School of Medicine, Ribeirão Preto, SP, 14049-900, Brazil

<sup>b</sup>National Institute of Hormones and Women's Health, Ribeirão Preto, SP, 14049-900, Brazil

All women received a calendar to record their bleeding patterns and any possible side effects of the contraception, and they were instructed to abstain from sexual intercourse until the return visit (6 weeks after delivery). Information regarding the duration of exclusive lactation for 6 months or until menses occurred was provided to the study participants at the return visits, as defined by the Bellagio Conference

Nearly 50% of the participants in our study engaged in sexual intercourse before the 6 weeks postpartum, despite the explicit instructions provided to them to abstain from sexual activity during this period. Thus, the availability of an effective, long-acting contraceptive after delivery will offer a useful opportunity to prevent unwanted pregnancy.



THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS  
WOMEN'S HEALTH CARE PHYSICIANS

# PRACTICE BULLETIN

*CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN—GYNECOLOGISTS*

NUMBER 121, JULY 2011

*Replaces Practice Bulletin Number 59, January 2005. Reaffirmed 2013*

## Long-Acting Reversible Contraception: Implants and Intrauterine Devices

➤ **POSTPARTUM:** The only MEC 1 method that can be given immediately PP in breastfeeding women...

- Copper IUD

➤ **To be called immediate postpartum placement, an IUD needs to be placed within how many mins?**

- 10 minutes

➤ **Expulsion rates?** • ~24%





THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS  
WOMEN'S HEALTH CARE PHYSICIANS

# PRACTICE BULLETIN

*CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN—GYNECOLOGISTS*

NUMBER 121, JULY 2011

*Replaces Practice Bulletin Number 59, January 2005. Reaffirmed 2013*

## Long-Acting Reversible Contraception: Implants and Intrauterine Devices

### ➤ **POSTPARTUM: Contraindications to immediate placement?**

- Chorioamnionitis, endometritis, or puerperal sepsis

### ➤ **How long to wait before interval placement if w/ sepsis?**

- 3 months



THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS  
WOMEN'S HEALTH CARE PHYSICIANS

# PRACTICE BULLETIN

*CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN—GYNECOLOGISTS*

NUMBER 121, JULY 2011

*Replaces Practice Bulletin Number 59, January 2005. Reaffirmed 2013*

## Long-Acting Reversible Contraception: Implants and Intrauterine Devices

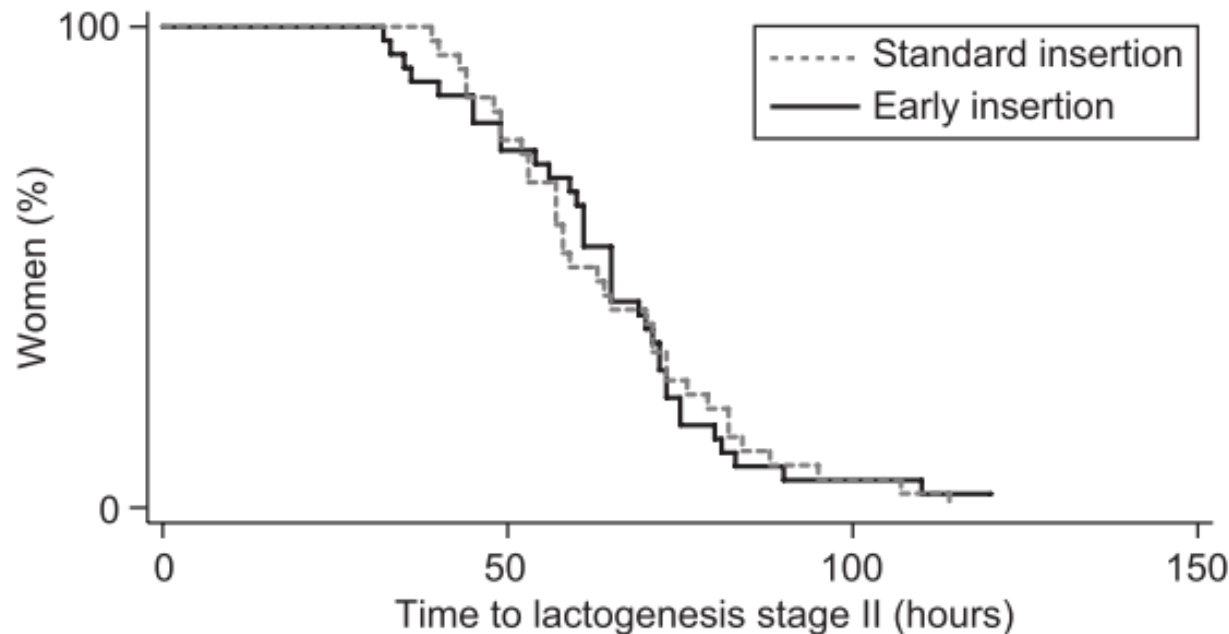
➤ **LACTATION: Does timing of LARC affect lactogenesis and duration of breastfeeding?**

- Unlikely

# Lactogenesis After Early Postpartum Use of the Contraceptive Implant

## *A Randomized Controlled Trial*

*Shawn E. Gurtcheff, MD, MS, David K. Turok, MD, MPH, Greg Stoddard, MPH, Patricia A. Murphy, CNM, DrPH, Mark Gibson, MD, and Kirtly P. Jones, MD*



**Fig. 3.** Time to lactogenesis stage II graphically represented as a Kaplan-Meier survival curve.

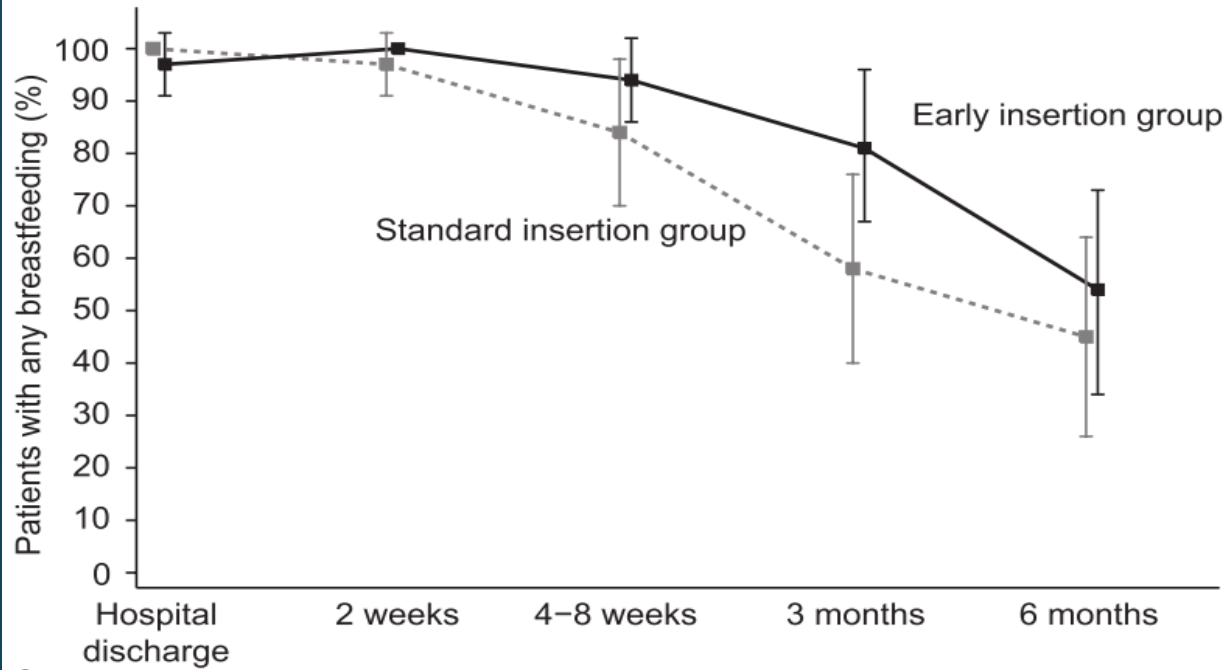
# Lactogenesis After Early Postpartum Use of the Contraceptive Implant

## A Randomized Controlled Trial

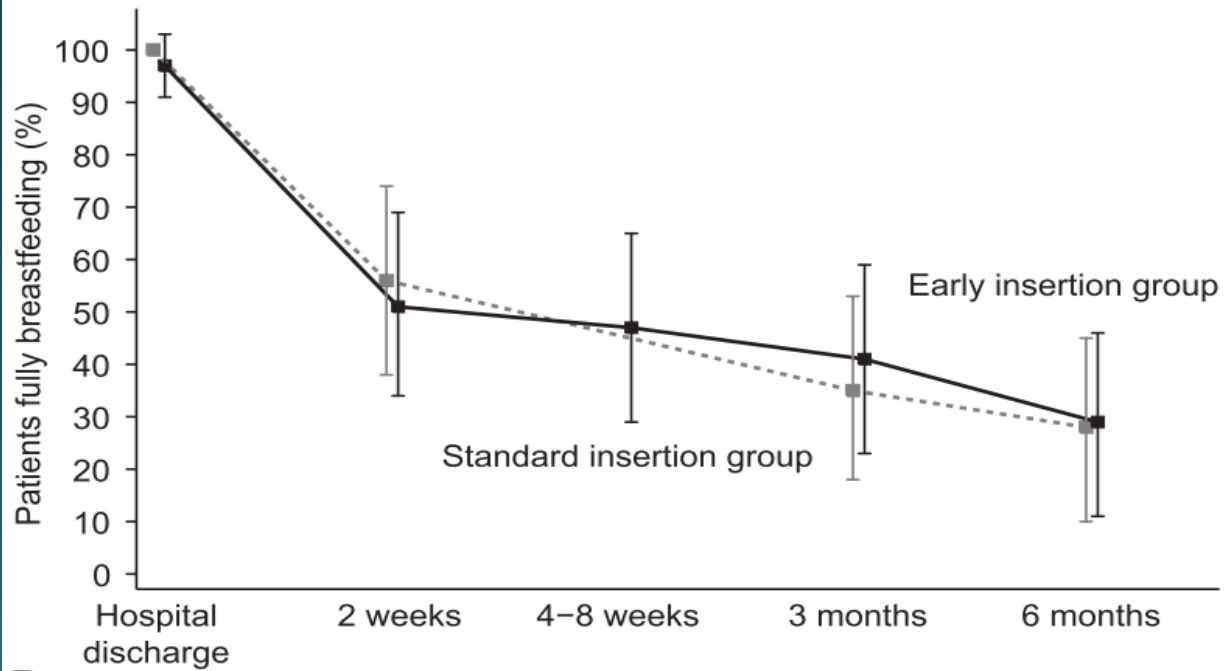


Shawen E. Gurtcheff, MD, MS, David K. Turok, MD, MPH, Greg Stoddard, MPH,  
Patricia A. Murphy, CNM, DrPH, Mark Gibson, MD, and Kirtly P. Jones, MD

A



B





THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS  
WOMEN'S HEALTH CARE PHYSICIANS

# PRACTICE BULLETIN

*CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN—GYNECOLOGISTS*

NUMBER 121, JULY 2011

*Replaces Practice Bulletin Number 59, January 2005. Reaffirmed 2013*

## Long-Acting Reversible Contraception: Implants and Intrauterine Devices

### ➤ LACTATION: Do progestins affect lactation and breastfeeding?

- Not expected





ELSEVIER

Contraception 72 (2005) 346–351

Contraception

# A comparative study of the levonorgestrel-releasing intrauterine system Mirena® versus the Copper T380A intrauterine device during lactation: breast-feeding performance, infant growth and infant development

Ayman H. Shaamash\*, Gamal H. Sayed, Mostafa M. Hussien, Mamdouh M. Shaaban

*Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt*

*A.H. Shaamash et al. / Contraception 72 (2005) 346–351*

Table 4  
Breast-feeding performance at different stages of the study

Age of infants (months)	LNG-IUS (Mirena®)					Cu T380A				
	Breast-feeding episodes/24 h (mean±SD)	Net cumulative rates (per 100 women; mean±SE)				Breast-feeding episodes/24 h (mean±SD)	Net cumulative rates (per 100 women; mean±SE)			
		Breast-feeding <sup>a</sup>	Full breast-feeding <sup>a</sup>	Partial breast-feeding <sup>a</sup>	Weaning <sup>a</sup>		Breast-feeding <sup>a</sup>	Full breast-feeding <sup>a</sup>	Partial breast-feeding <sup>a</sup>	Weaning <sup>a</sup>
3	12.9±0.7	98.7±0.7	80.7±3.3	19.3±3.3	1.3±0.7	12.7±2.9	99.3±0.0	85.4±2.9	14.6±2.9	0.7±0.3
6	10.5±3.6	91.9±2.4	16.5±3.4	84.5±3.4	8.1±2.4	10.6±3.2	94.5±1.9	19.9±3.6	80.1±3.6	5.5±1.9
9	9.9±3.9	90.5±2.4	3.3±1.6	96.7±1.6	9.5±2.4	8.7±3.1	91.6±2.3	2.5±1.4	97.5±1.4	9.4±2.3
12	8.9±4.0	87.0±2.8	0.3±0.4	99.3±0.7	13±2.8	8.2±3.5	87.9±2.8	0.0±0.0	100±0.0	12.1±2.8

<sup>a</sup> Kaplan–Meier survival test was used, all p values were insignificant.

Table 5  
Infant physical growth parameters in both groups

Infant age (months)	LNG-IUS (Mirena®) group (mean±SD)					Cu T380A group (mean±SD)				
	Infants' weight (g)	Length (cm)	Head circumference (cm)	Mid-arm circumference (cm)	Skin-fold thickness (mm)	Infants' weight (g)	Length (cm)	Head circumference (cm)	Mid-arm circumference (cm)	Skin-fold thickness (mm)
3	5570±765	57.8±3.3	38.6±2.4	12.3±1.3	7.6±1.5	5558±656	58.2±2.9	38.9±1.3	12.2±0.8	7.7±1.2
6	7225±810	65.1±3.2	41.6±3.9	13.6±1.5	8.7±1.5	7157±759	64.4±3.0	41.9±1.3	13.6±1.1	8.8±1.2
9	8280±923	68.9±3.4	43.6±1.5	14.1±1.4	9.5±1.8	8267±992	68.8±3.0	43.9±1.3	14.3±1.1	9.6±1.6
12	9284±423	72.6±3.2	45.0±2.8	14.7±1.6	9.9±2.1	9183±421	72.3±3.9	45.3±3.0	15.0±1.5	10.2±2.1

Two-tailed Student's *t* test for unpaired data was used; all p values were insignificant.



The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

## **COMMITTEE OPINION**

Number 539 • October 2012

*(Replaces Committee Opinion No. 392, December 2007  
Reaffirmed 2014)*

### **Adolescents and Long-Acting Reversible Contraception: Implants and Intrauterine Devices**

- (T/F): All adolescents have the right to receive confidential contraceptive services without parental consent.

- False; state dependent



The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

## COMMITTEE OPINION

Number 539 • October 2012

*(Replaces Committee Opinion No. 392, December 2007  
Reaffirmed 2014)*

### **Adolescents and Long-Acting Reversible Contraception: Implants and Intrauterine Devices**

➤ **NULLIPAROUS CERVIX:**  
(T/F) The use of misoprostol 2-3 hours before IUD insertion for softening can help to reduce pain.

- False; may worsen cramping, side effects





The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

# PRACTICE BULLETIN

*CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN—GYNECOLOGISTS*

Number 152, September 2015

*(Replaces Practice Bulletin Number 112, May 2010)*

**Committee on Practice Bulletins—Gynecology.** This Practice Bulletin was developed by the Committee on Practice Bulletins—Gynecology with the assistance of Elizabeth Raymond, MD; Archana Pradhan, MD; and Lisa Keder, MD, MPH. The information is designed to aid practitioners in making decisions about appropriate obstetric and gynecologic care. These guidelines should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.

[PDF Format](#)

## Emergency Contraception

➤ *Is emergency contraception safe if used repeatedly?*

- Oral emergency contraception may be used more than once, even within the same menstrual cycle

**ACOG Practice Bulletin No. 73: Use of Hormonal Contraception in Women With Coexisting Medical Conditions. (n.d.). *Obstetrics & Gynecology*, 1453-1453.**

**ACOG Committee Opinion 539: Adolescents and LARC:Implants and IUD. (n.d.). *Obstetrics & Gynecology*.**

**ACOG Practice Bulletin No. 121: Long-acting reversible contraception: implants and IUDs *Obstetrics & Gynecology*.**

**ACOG Committee Opinion 602: Depo-medroxyprogesterone acetate and bone effects. *Obstetrics & Gynecology*.**

**ACOG Practice Bulletin No. 152: Emergency Contraception. *Obstetrics & Gynecology*.**