The Doctor Is In 2019

Brent N Davidson, MD
Michigan Department Health and Human Services
Chair Family Planning Medical Advisory Committee
### U.S. MEC: Categories

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No restriction for the use of the contraceptive method for a woman with that condition</td>
</tr>
<tr>
<td>2</td>
<td>Advantages of using the method generally outweigh the theoretical or proven risks</td>
</tr>
<tr>
<td>3</td>
<td>Theoretical or proven risks of the method usually outweigh the advantages – not usually recommended unless more appropriate methods are not available or acceptable</td>
</tr>
<tr>
<td>4</td>
<td>Unacceptable health risk if the contraceptive method is used by a woman with that condition</td>
</tr>
</tbody>
</table>
Using the U.S. MEC App

<table>
<thead>
<tr>
<th>Headaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Normigraine (mild or severe)</td>
</tr>
<tr>
<td>b. Migraine</td>
</tr>
<tr>
<td>i. Without aura (this category of migraine includes menstrual migraine)</td>
</tr>
<tr>
<td>ii. With aura</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method</th>
<th>Category</th>
<th>Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cu-IUD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>LNG-IUD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Implants</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DMPA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>POP</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHCs</td>
<td>2'</td>
<td></td>
</tr>
</tbody>
</table>

Classification depends on accurate diagnosis of those severe headaches that are migraines and those headaches that are not, as well as diagnosis of ever experiencing aura. Aura is a specific focal neurologic symptom. For more information about headache classification, see The International Classification of Headache Disorders, 2nd edition (http://ihc-classification.org/en). Any new headaches or marked changes in headaches should be evaluated.

Classification is for women without any other risk factors for stroke (e.g., age, hypertension, and smoking).
2016 U.S. MEC and SPR App

- MEC by Condition
- MEC by Method
- SPR

- Intrauterine Contraception
- Progestin-only Contraceptives
- Combined Hormonal Contraceptives
- Barrier Methods
- Fertility Awareness-based Methods
- Lactational Amenorrhea Method
- Coitus Interruptus

- How To Be Reasonably Certain That A Woman Is Not Pregnant
  - Cu-IUD
  - LNG-IUD
  - Implants
  - Injectables
  - Combined Hormonal Contraceptives
  - Progestin Only Pills

- About this App
- Full Guidelines
- Provider Tools
EFFECTIVENESS OF FAMILY PLANNING METHODS

*The percentages indicate the number out of every 100 women who experienced an unintended pregnancy within the first year of typical use of each contraceptive method.

**REVERSIBLE**

- **Implant**: 0.05%
- **Intrauterine Device (IUD)**: 0.2% (LNG 0.8% Copper T)

**PERMANENT STERILIZATION**

- **Female (Abdominal, Laparoscopic, and Hysteroscopic)**: 0.5%
- **Male (Vasectomy)**: 0.15%

**REVERSIBLE**

- **Injectable**: 6%
- **Pill**: 9%
- **Patch**: 9%
- **Ring**: 9%
- **Diaphragm**: 12%

**LEAST EFFECTIVE**

- **Male Condom**: 18%
- **Female Condom**: 21%
- **Withdrawal**: 22%
- **Sponge**: 24% (Nulliparous Women), 24% (Parous Women)
- **Fertility Awareness-Based Methods**: 24%
- **Spermicide**: 28%

Other Methods of Contraception: (1) Lactational Amenorrhea Method (LAM); as highly effective, temporary method of contraception and (2) Emergency Contraception: morning after contraceptive pills or a copper IUD often an 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 Contraceptive Programs (CCP), Knowledge for Health project.

Difficult IUD Removal
Blue Nevi Syndrome

• multifocal venous malformations, resulting from abnormal embryonic blood vessel development

• **Genetic and Rare Diseases (GARD) Information Center**
  • PO Box 8126
  • Gaithersburg, MD 20898-8126
  • Phone: (301) 251-4925
  • Toll-free: (888) 205-2311
  • Website: [http://rarediseases.info.nih.gov/GARD/](http://rarediseases.info.nih.gov/GARD/)
Women with Coexisting Medical Conditions

- Hypertension
- Ischemic Heart Disease
- Valvular Cardiac Disease
- Diabetes
- Stroke
Cystic Fibrosis

- New addition 2016 MEC
- Explore knowledge, attitudes, beliefs about pregnancy and contraceptive decision making
- Adult Cystic Fibrosis Program Penn Medicine
- 24 women
- Understanding what motivates women with cystic fibrosis to use or not use contraception can improve family planning
Medication Teratogenicity

• Accutane
• Methotrexate
• Antiseizure Medications
• ACE Inhibitor
• Chemotherapy
• Radiation
Coexisting Medical Issues and CHC

• Rheumatoid arthritis-category 2
• Migraine w/ aura-category 4
• Only 1 category has recommendations for the patient with multiple conditions:
  • MULTIPLE RISK FACTORS FOR ATHEROSCLEROTIC CARDIOVASCULAR DISEASE:
  • Older age, smoking, diabetes, hypertension, low HDL, high LDL, high triglyceride levels
VTE

- Permanent risk (Factor V Leiden) vs reversible (surgery)
- Recurrent vs single episode combined w/ nonrecurring event (immobilization from MVA)
- Overall risk - 50% of that w/ pregnancy
- Women on prolonged anticoagulation: risk of hemorrhagic ovarian cysts, menorrhagia
Service Integration

• Contraceptive Counseling partnerships-anticoagulation clinics
• Disease specific counseling : cardiovascular, diabetic, bariatric, STD clinical settings
• Limited resource (Subsaharan Africa)
• Younger age, having at least 1 child, discussing family planning with their partner increased LARC utilization
• Potential Impact on maternal morbidity and mortality
Counseling on Complex Contraceptive Dilemmas

• High quality, fair counseling, shared decision making
• Opportunity to overcome disparities in contraceptive care due to racial, ethnic, and economic differences
• Example: 34 yo chronic hypertension, Crohn’s history of severe preeclampsia, multiple bowel surgeries including resection, will lose health insurance in 60 days
Impact of Immobilization

- Normalization of clotting factors w/ stopping chc takes 4-6 weeks
- Cat 4
- If patient anticipated to be ambulatory postop-Cat 2
Impact of Dosage

• 50 micrograms > 20 micrograms
• No true data of benefit for <20ucg <10mcg
Balance

• Potential risk of the contraceptive method
• Potential risk of unintended pregnancy
• Nature and severity of medical condition
• Patient’s personal preferences
• Reproductive goals
• Effectiveness, acceptability, and availability of alternatives
Obesity: What Hormonal Contraceptives are Appropriate?

• 2016 Cochrane Review: women with obesity can be offered all hormonal methods with reassurance re efficacy

• Prospective cohort study 1523 women: overall risk chc, ring, patch

• Risk of unintended pregnancy not significantly different across BMI

• Class III, BMI >40 needs further study

• Prospective cohort 52000 slight increase failure BMI >35: disappeared in 24/4 vs 21/7 regimens

• USMEC Cat 2
Bariatric Surgery

• Roux-en Y gastric bypass or biliopancreatic diversion reduce po absorption

• Restrictive surgery: vertical banded gastroplasty, laparoscopic adjustable gastric band, sleeve gastrectomy  USMEC Cat 1
Antimicrobial/Antiretroviral Impact

- Only Rifampin and Rifabutin (anti mycobacteria's) affect metabolism and effect pharmokinetic efficacy
- No impact tetracycline, doxycycline, ampicillin, metronidazole, quinolones—no impact
Fahr Syndrome

• Progressive autosomal dominant neurologic deterioration
• Calcium deposition basal ganglia and cerebral cortex
• No therapy
• Symptomatic treatment only
CVA

- 37 yo G7 P5
- Children 14, 12, 9, 5 and 4
- Abusive spouse
- Cell phone removed
- Has to rely on 14 yo son’s cell phone
- 2nd abusive marriage
- menorrhagia
- “I did not bargain for this”
Neurovascular anatomy of the adult female medial arm in relationship to potential sites for insertion of the etonogestrel contraceptive implant

Joe Iwanaga, Michelle C. Fox, Hans Rekers, Lisa Schwartz, R. Shane Tubbs

Contraception
Volume 100, Issue 1, Pages 26-30 (July 2019)
DOI: 10.1016/j.contraception.2019.02.007
Design

• 40 female cadaveric dissections
• Primary window 8-10cm proximal to medial epicondyle
• 2 rows 1-2 cm dissection windows
• 2-3 cm posterior to sulcus 18%-58% included basilic vein, medial brachial cutaneous, ulnar, and medial antebrachial cutaneous nerves present
• 3-5 cm posterior-no major neurovascular structures found
Fig. 4

- MABCn
- MBCn
- Fascia overlying triceps
- Bv