Managing Contraceptive Side Effects: Clinical Insights

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Take Home Message

- The most important interventions in managing contraceptive side effects are...
  - The counseling provided at the time that the method is prescribed
  - Access to clinicians to address subsequent questions
- The best source for side effect management is CDC “US Selected Practice Recommendation (SPR) for Contraceptive Use, 2013”

Marisella

- A 28 year old G2P0TAB2 woman is seen for a well woman visit and would like to discuss contraception
- She states that she wants a non hormonal method because she believes that hormonal methods aren’t natural and are too risky

Would You Tell Her That...

1. Her choices are barrier methods, NFP, and Cu-IUD
2. You advise her to use a LARC method since she already has had 2 abortions
3. She has a large menu of choices and that she should hear a little about each one before making a decision
4. You would like to know more about why she is not interested in hormonal methods
**Approaches to Contraceptive Counseling**

**Client Centered**
- What You Want Is What You Get (WYW)
- IWYG

**Clinician Centered**
- Directive
- Informed Choice

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**What You Want Is What You Get**

- Example: “If you want the Pill, let’s make sure it’s safe for you.”
- Little or no information sharing beyond medical history
- Client is active; clinician is passive, unless there is a method contraindication
- Risks to the client
  - Client may not know (much) about other options
  - Client choice may be biased by misinformation
  - Clinician has no input, unless contraindications

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**Directive Counseling**

- Example: “Here’s my opinion of the best method for you.”
- Fits the illness model of a clinician-client relationship
- Clinician is active; client is passive
- Advice may be biased by the client’s age, sexual or pregnancy history, socio-economic status, or race/ethnicity
- Risk to the client
  - The client may feel pressured by the clinician
  - The method may not be best for her lifestyle, relationship, or acceptance of side effects
  - Relatively higher risk of discontinuation

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**Informed Choice**

- Example: “Here are all of the methods available to you, including the pros and cons.”
  - Foreclosed: info about a limited number of methods
- Clinician is active but makes no recommendation; the client is passive until the time to make a decision
- Maximizes client autonomy
- Risk to the client
  - Clinician has no input, unless contraindications
  - Client may not integrate the information given with her values and personal preferences

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**Tiered Effectiveness**

**Informed Choice + Directive Counseling**

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**Shared Decision Making**

- Example: “What are you looking for in a method?”
- Relational communication: explore the client’s “back-story”
- Task oriented communication
  - Provide information about potential methods
  - Account for the client’s medical history
  - Identify client method preferences
  - Ensure that preferences are not biased by misinformation
  - Reach a mutually acceptable decision
- Risks
  - Takes clinician time and skill
The First 2 Minutes – “Small Talk”

- Ask what kind of work she does or if she is in school before getting into the content of the visit.
- Use the information she gives you to refer back to later in the visit

“Working and taking care of a little one must make it challenging to schedule a visit for your depo shot”

“It sounds like you are incredibly busy with all that you have on your plate with work and school”

The Process of Shared Decision Making

Explore the client’s “back-story”

- Attitude about future fertility
  - “Would you like to have kids someday?”
  - If yes, “When do you think that might be?”
- Attitude about prevention vs. delay of pregnancy
  - “How important is it to prevent pregnancy until then?”

The Process of Shared Decision Making

- “What is important to you about your method?”
  - Prior experience with contraceptive method(s)
  - Women controlled method vs. shared with partner
- Probes
  - Frequency of using method
  - Different ways of taking methods
  - Return to fertility
  - (Specific) side effects
  - Non-contraceptive “life-style” attributes of method

Information About Side Effects

- Studies have found that many women report that they...
  - Do not receive adequate information
  - Feel providers dismiss concerns and overlook possible side effects
- Counseling about side effects is associated with positive outcomes

Canto De Centina, Contraception, 2001
Becker, Perspect Sex Repro Health, 2007
Dehlendorf, Contraception, 2013
Yee, JHCPU, 2011

What Are Your Concerns About Hormones?

- Not attributable to PPR
- May occur with DMFA in adolescents
- No increased depression rate or worsening of existing depression
- Can try different formulation or discontinue
- Most protect fertility; IUDs don’t increase risk
- OCs protect against ovarian + endometrial ca
- No long term change in breast cancer risk

Address Patient’s Concerns

- Proactively address patient concerns in a respectful manner

“That’s too bad your friend had a bad experience with the IUD and weight gain. I haven’t heard of that before, and I can tell you it definitely doesn’t happen frequently. My guess is that if you were to use this method it would not happen to you.”
Contraceptive Counseling in a Nutshell

• Not...
  – What method do you want?
• Instead...
  – What do you want in a method?

Marisella (continued)

• After discussion, she chooses to have a LNG IUS placed today
• What should you tell her about which side effects to anticipate and how to manage them?

Once a LARC Method is Chosen....

• Provide opportunity to ask questions
  – Only done in 47% of all counseling visits
• Discuss what to do if not satisfied with method (contingency counseling)
  – Only done in 65% of visits
• Facilitate actually receiving chosen method
• Ensure that removal is an option whenever she wants to do so

Tactile and Visual Aids

• IUD and implant “demo units”
  – Have the patient hold the device while discussing it
  – She will see it is non-threatening:
    • Soft
    • Flexible
    • Small
  – Easier to accept something into the body when we have a tactile relationship to it

Potential IUD Side Effects

<table>
<thead>
<tr>
<th>During insertion</th>
<th>First few days</th>
<th>First few months</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Variable pain and/or cramping</td>
<td>• Light bleeding</td>
<td>• Inter-menstrual bleeding</td>
<td>• Copper T: Heavier or prolonged menses</td>
</tr>
<tr>
<td>• Vaso-vagal reactions</td>
<td>• Mild cramping</td>
<td>• Cramping</td>
<td>• LNG: Gradual decrease in menstrual flow</td>
</tr>
</tbody>
</table>

Tactile and Visual Aids

• Keep one in your lab coat
• One in each room
• Show her how the threads feel
• Show her how the plastic would feel if expelled

Dehlendorf, unpublished data
Namerow, Fam Plann Perspect, 1989
** LNG-IUS Net Termination & Continuation Rates per 100 at 1 and 5 Years**

<table>
<thead>
<tr>
<th>Event</th>
<th>1 year</th>
<th>5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Expulsion</td>
<td>3.4</td>
<td>4.9</td>
</tr>
<tr>
<td>Bleeding</td>
<td>5.8</td>
<td>10.9</td>
</tr>
<tr>
<td>Pain</td>
<td>1.6</td>
<td>4.2</td>
</tr>
<tr>
<td>Hormonal</td>
<td>2.3</td>
<td>8.4</td>
</tr>
<tr>
<td>PID</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>6.7</td>
<td>23.8</td>
</tr>
<tr>
<td>Continuation</td>
<td>79.9</td>
<td>46.9</td>
</tr>
</tbody>
</table>


** Cu-IUC Net Termination & Continuation Rates per 100 at 1 and 5 Years**

<table>
<thead>
<tr>
<th>Event</th>
<th>1 year</th>
<th>5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy</td>
<td>0.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Expulsion</td>
<td>3.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Bleeding</td>
<td>5.7</td>
<td>16.2</td>
</tr>
<tr>
<td>Pain</td>
<td>1.6</td>
<td>4.2</td>
</tr>
<tr>
<td>Hormonal</td>
<td>0.1</td>
<td>1.1</td>
</tr>
<tr>
<td>PID</td>
<td>0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>Other</td>
<td>4.9</td>
<td>22.7</td>
</tr>
<tr>
<td>Continuation</td>
<td>83.0</td>
<td>44.5</td>
</tr>
</tbody>
</table>


** Logistics of LARC Methods**

- Process of insertion
  - Pain with IUD insertion significant concern
  - Mentioned in 61% of visits in which IUD chosen
- Process of removal
  - Provider control is disincentive to use
  - 70% of women believe that IUDs/implants cannot be removed early if a woman changes her mind
  - Process of removal only mentioned in 21% of visits to those choosing an IUD

Craig, WHI. 2014  
Dehlendorf, PSRH. 2014  
Foster, Contraception, 2014

** Side Effects of LARC Methods**

- Irregular bleeding and amenorrhea
  - Mentioned in 63% and 80% of visits when women chose a hormonal IUD
- Heavier bleeding/cramping
  - Mentioned in 70% and 59% of visits when women chose a copper IUD
- Also discuss benefits
  - Only 13% of patients choosing hormonal IUD told about potential for decreased cramping

** IUDs: Management of Cramping**

- Mild: recommend NSAIDs
- Severe or prolonged
  - Examine for partial expulsion, perforation, or PID
  - Remove IUD if severe cramping is unrelated to menses or unacceptable to patient
IUDs: Bleeding Days Per Month

- Luukkainen T, Semin Reprod Med. 2001

LNG-IUD: “Resting State” Endometrium

- Lower volume of menstrual bleeding
  - Shorter, lighter menses
  - Less iron deficiency anemia
  - Therapeutic for menorrhagia
- Less dysmenorrhea
  - Suppression of endometriosis, adenomyosis

BUT...

- 3-6 months for full effect on the endometrium
- Spotting is common during this time

LNG-IUD: Menstrual Effects

*Intermenstrual bleeding*

- Management
  - Exclude PID, pregnancy, coagulopathy
  - NSAID: in advance or as needed
  - Supplemental estradiol for 2-3 wks
  - OCs for 1-3 months
  - If persistent bleeding, check for anemia
- Remove IUC if abnormal bleeding is unacceptable

Copper IUC: Menstrual Effects

- Exclude PID, pregnancy, coagulopathy
- If heavy or persistent bleeding, check for anemia
- NSAIDs prophylactically
  - Pre-emptive use for first 3 cycles
  - Start before onset or with onset of menses for anti-prostaglandin effect
    - Naproxen Na 220mg x2 BID (max 1100mg/day)
    - Ibuprofen 600-800mg TID (max 2400mg/day)
- Remove IUC if bleeding is unacceptable to patient

IUDs: Bleeding Irregularities

- Consider Cu-IUD displacement, an STD, pregnancy, or new pathologic uterine conditions
- Cu-IUD Use
  - If an underlying GYN problem is not found and the woman requests treatment use NSAIDs for short-term treatment (5-7 days)
- LNG-IUD use
  - If unacceptable bleeding persists, counsel her on alternative methods, and offer if it is desired

LNG IUD: Management of Late Abnormal Bleeding

- Matched-pair, case-control study
  - 15 users with unacceptable bleeding > 6 months of use vs. 15 control users with no abnormal bleeding
  - Displacement or leiomyomas more common in cases
- Conclusion
  - Consider ultrasonography to evaluate bleeding complaints in long-term users of LNG device
  - Replace device if it is displaced

Marisella (continued)
• Two years later, Marisella decided that she wanted to become pregnant
• Her LNG IUD was removed and she quickly became pregnant
• She had an uneventful pregnancy, vaginal delivery, and postpartum course
• At her 6 week postpartum visit, she expressed interest in using the contraceptive implant, and after counseling, one was inserted

Bleeding Patterns with ENG Implant

<table>
<thead>
<tr>
<th>Bleeding pattern</th>
<th>Adults (Mansour)</th>
<th>Adults (Darney)</th>
<th>Post partum teens (Guazzelli)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amenorrhea</td>
<td>22%</td>
<td>30%</td>
<td>39%</td>
</tr>
<tr>
<td>Infrequent</td>
<td>34%</td>
<td>35%</td>
<td>16%</td>
</tr>
<tr>
<td>Acceptable</td>
<td>19%</td>
<td>20%</td>
<td>32%</td>
</tr>
<tr>
<td>Frequent</td>
<td>7%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Prolonged</td>
<td>18%</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>Irregular</td>
<td>--</td>
<td>--</td>
<td>2%</td>
</tr>
</tbody>
</table>

ENG Implant: Vaginal Bleeding
• Smaller amount of bleeding than cycling women
• Number of bleeding days in implant users is similar to natural cycles, but the pattern is unpredictable
  – Patients with a favorable bleeding pattern in the first 90 days tend to have a favorable pattern
  – More than 1/2 with an unfavorable pattern initially will have an improved pattern over time
• Continuous progestin prevents EM hyperplasia; endometrial biopsy unnecessary for this purpose

ENG Implant: Vaginal Bleeding
• Counseling points
  – You will have fewer bleeding episodes
  – You will have the same or fewer bleeding days
• But,
  – Your bleeding days, episodes will be unpredictable
  – You may have more spotting days than before

ENG Implant: Vaginal Bleeding
• “Historical” Management
  – Counseling and reassurance
  – Ibuprofen 400-600 mg TID for 7-days, or
  – Estradiol 1-2 mg PO QD for 10-14 days, or
  – OCs, given for 2-3 cycles
A Pragmatic Approach To Stopping Unscheduled Bleeding In Users Of ENG Contraceptive Implant

<table>
<thead>
<tr>
<th>#</th>
<th>Therapy regimen</th>
<th>Supportive evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COC taken daily for 21 days followed by a 7-day break.</td>
<td>Little published evidence.</td>
</tr>
<tr>
<td></td>
<td>* Use for up to three months</td>
<td>Anecdotally, helps in practice</td>
</tr>
<tr>
<td>2</td>
<td>High-dose cyclical progestogen for up to 3 months (MPA 10 mg twice daily or</td>
<td>No published evidence</td>
</tr>
<tr>
<td></td>
<td>norethindrone 5 mg twice daily for 21 days with a 7-day break)</td>
<td>Anecdotally, appears to help in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>practice</td>
</tr>
<tr>
<td>3</td>
<td>POP, particularly a desogestrel POP, taken daily for up to three months</td>
<td>No published evidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anecdotally, works in some cases</td>
</tr>
<tr>
<td>4</td>
<td>NSAIDS, especially COX-2 inhibitors, taken daily for 5-10 days</td>
<td>Some published evidence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anecdotally, may work in practice</td>
</tr>
<tr>
<td>5</td>
<td>Tranexamic acid 500 mg twice daily for 5 days</td>
<td>Limited published evidence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anecdotally, may work in practice</td>
</tr>
</tbody>
</table>

Mansour D, et. al., Contraception. 2011

Marisella (continued)

- 12 months later, Marisella disclosed that she was dissatisfied with the unpredictability of her menstrual cycles and wanted her implant removed
- She stated that she might want to become pregnant again when her first child was 18 months old (in 6 months)
- She expressed interest in using oral contraceptives, but was open to using the contraceptive patch or contraceptive vaginal ring

CHOICE: 12 Month CHC Discontinuation

<table>
<thead>
<tr>
<th>Condition</th>
<th>Unadjusted</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast tenderness</td>
<td>1.36 (1.06–1.75)</td>
<td>1.39 (1.06–1.82)</td>
</tr>
<tr>
<td>Difficulty obtaining method</td>
<td>2.36 (1.69–3.01)</td>
<td>2.43 (1.81–3.27)</td>
</tr>
<tr>
<td>Certainty of method continuation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If side effects</td>
<td>0.47 (0.36–0.61)</td>
<td>0.57 (0.43–0.77)</td>
</tr>
<tr>
<td>If break up with partner</td>
<td>0.53 (0.40–0.72)</td>
<td></td>
</tr>
<tr>
<td>If extra spotting or bleeding</td>
<td>0.65 (0.51–0.84)</td>
<td></td>
</tr>
<tr>
<td>If periods stop</td>
<td>0.76 (0.60–0.98)</td>
<td></td>
</tr>
<tr>
<td>If partner does not like method</td>
<td>0.59 (0.43–0.81)</td>
<td></td>
</tr>
<tr>
<td>If you have to go for a prescription refill</td>
<td>0.50 (0.36–0.70)</td>
<td></td>
</tr>
</tbody>
</table>


CHC Side Effect Management

- Before initiation, provide counseling about potential changes in bleeding patterns during extended or continuous CHC use
  - Extended CHC use is defined as a planned hormone-free interval after at least two contiguous cycles
  - Continuous CHC use is defined as uninterrupted use of hormonal contraception without a hormone-free interval

CHC Side Effect Management

- Unscheduled spotting or bleeding is common during the first 3–6 months of extended or continuous CHC use
  - It is not harmful and decreases with continued use
- Consider an underlying gynecological problem, such as
  - Pregnancy
  - Inconsistent use
  - Interactions with other medications
  - Cigarette smoking
  - STD (e.g., cervicitis, PID)
  - Pathologic conditions (e.g., polyps or fibroids)
**CHC Side Effect Management**

**Treatment options**
- Discontinue CHC use for 3–4 consecutive days
  - Not recommended during the first 21 days of using the continuous or extended CHC use
  - Not recommended more than once per month because effectiveness might be reduced
- If spotting or bleeding persists and is unacceptable, counsel her on alternative methods, and offer another if desired

**Combined Hormonal Methods**

- Most side effects improve with time
  - Avoid switching before 3 months if possible
- When adjusting OCs, determine if side effect is more related to estrogen or progestin
  - If estrogen, try a different dose
  - If progestin, switch between estrane and gonane
- Treat side effects in the hormone-free interval with continuous contraception

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**SPR Appendix E: Management of Women with Bleeding Irregularities**

- If bleeding disorder persists or woman finds it unacceptable

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**Patient Education Resource**

- “User friendly”, accurate information on all contraceptive methods
- Will set up reminders for contraception adherence
- Many fun and helpful tools
- [http://bedsider.org/](http://bedsider.org/)

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**References**

- Rönnérdag M, Odlind V. Late bleeding problems with the levonorgestrel-releasing intrauterine system: evaluation of the endometrial cavity. Contraception. 2007 Apr;75(4):268-70
References


