Extended- and Continuous-Cycle Oral Contraception: Finding the Right Choice for the Right Patient

Association of Reproductive Health Professionals
www.arhp.org
Acknowledgment

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<thead>
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<th>Affiliations</th>
<th>Disclosures</th>
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<tbody>
<tr>
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<td>Dr. Shulman is a consultant for Teva, Merck, Bayer, Watson, and Agile.</td>
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Regular menstrual cycles are a health benefit of extended- and continuous-cycle OC regimens.

A. True
B. False
Which of the following FDA-approved extended/continuous OCs contains an ascending dose of estrogen to minimize breakthrough bleeding?

A. Quartette™
B. Lybrel®
C. Seasonale®
Maya, a sexually active 19-year-old, currently takes a 21/7 COC and wants to take “the pill that lets you skip a period every few months.” You:

A. Determine if she takes the current OCPs consistently, explain the benefits/limitations of extended OCs, and recommend a dedicated extended OC with instructions for use.

B. Determine if she takes the current OCPs consistently, explain the benefits/limitations of extended OCs, and suggest that she extend her current active OCPs for 84 days followed by a 7 day HFI.

C. Either A or B.
Learning Objectives

• Compare combination oral contraceptive options, including cyclic and extended/continuous regimens
• Discuss the benefits and limitations of extended- and continuous-cycle oral contraceptive options
• Identify patient factors and individualize regimen selection
Lack of Understanding About Menstruation

Isn’t it natural for me to get a period, even when I’m on the pill?

During my cycle, when am I safe from pregnancy?

Is it safe to take hormones to stop my period?

What is the purpose of monthly bleeding?

ARHP. 2005.
The 21/7 Cycle

• Rock and Pincus designed the pill so that the Catholic Church would approve its use
• 3 weeks on / 1 week off to mimic menstruation
• No medical rationale

Providers Offering Extended/Continuous OC Regimens

How often are extended/continuous OC regimens recommended to patients?

- Frequently (54%)
- Occasionally (31%)
- Rarely (7%)

Seval DL. Contraception. 2011.
Extended OC Regimens Prescribed

- FDA-approved extended OC regimens: 49%
- 21/7 OC w/instructions on extending: 44%
- FDA-approved continuous OC regimen: 5%
- Various combinations: 2%

Seval, DL. Contraception. 2011.
Health Benefits of Extended/Continuous COCs

Sulak PJ. J Women’s Health. 2008.
## More Health Benefits of Extended/Continuous COCs

<table>
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<tr>
<th>Iron-deficiency anemia</th>
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<td>Catamenial conditions</td>
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<td>(migraine headaches, seizures)</td>
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Prevention of OC Failures?

Birtch, RL. *Contraception*. 2006.
Lower Daily Dose and Improved Contraceptive Effectiveness

• Extended regimens are characterized by more effective ovulation suppression than conventional 21/7 regimens
• Are able to accomplish improved ovarian suppression with a lower daily dose of estrogen and progestin
• Improved ovarian suppression has been associated with improved contraceptive effectiveness (INAS)

Hormone-Free Interval & “Escape” Ovulation

Slide courtesy of P. Sulak
Benefits of Reducing or Eliminating Hormone-Free Interval

- Reduces withdrawal bleeding
- Minimizes hormone withdrawal symptoms
- Maximizes ovarian follicular suppression

Continuous Use and OC Success

<table>
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<th>Period of Cycle</th>
<th>Missed Pills Interrupted Cycle (%)</th>
<th>Missed Pills Continuous Cycle (%)</th>
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<tr>
<td>1st day of resumption of pill</td>
<td>26.3</td>
<td>11.5</td>
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<tr>
<td>During 1st week</td>
<td>21.0</td>
<td>19.5</td>
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Limitations and Risks

• Most common side effect = breakthrough bleeding
  ▪ Temporary and decreases over time

• Risks are same as combined hormonal contraception

Wright and Johnson. 2008; Archer et al. 2006; Anderson et al. 2003; Farmer and Preston. 1995
Fig. 2. Percentage of all women reporting bleeding by study day.

6-month Continuous vs. Conventional

Spotting + Bleeding (NS)
- Continuous Regimen: 26
- 21/7 Regimen: 35

Bleeding that Required Protection (P<0.01)
- Continuous Regimen: 18
- 21/7 Regimen: 34

Bloating (P=0.04)
- Continuous Regimen: 1
- 21/7 Regimen: 11

Cramping (P<0.01)
- Continuous Regimen: 2
- 21/7 Regimen: 13

Extended/Continuous COC Options: Dedicated Products

**Seasonale®**
- 84 days active pills (30mcg EE + 150mcg LNG)
- 7 days inactive placebo pills

**Seasonique®**
- 84 days active pills (30mcg EE + 150mcg LNG)
- 7 days low-dose estrogen pills

**Lybrel®**
- Full year of continuous active pills (20mcg EE + 90mcg LNG)

**Quartette™**
- 42 days: 20mcg EE + 150mcg LNG
- 21 days: 25mcg EE + 150 mcg LNG
- 21 days: 30mcg EE + 150 mcg LNG
- 7 days: 10mcg EE

Anderson et al. 2003; Stewart et al. 2005; Portman. 2012.
Extended/Continuous Contraception with Traditional 21/7 COCs

• Continue active pills indefinitely and take no placebo pills

• Extend active pills for 84 days followed by 7 day HFI

Seval DL. *Contraception*. 2011.
Case Study

• Age: 24
• Currently takes a 21/7 COC
• Dysmenorrhea & headaches
• Avid swimmer

What would you recommend?
Candidates for Extended/Continuous OC Regimens

- Women with menstrual-related gyn/med disorders
- Adolescents
- Perimenopausal women
- Athletes
- Women in the military
- Developmentally delayed women
- Any woman who chooses to bleed less frequently
Patient Counseling: Advantages & Disadvantages

- Alleviate menstruation-related conditions
- May reduce some side effects
- Convenience
- Less need for hygiene products

- Unscheduled breakthrough bleeding may occur, but should lessen over time.

Patient Counseling: When to Contact Provider

- Heavy bleeding
- Nausea with vomiting
- Bloating
- Severe headaches
- Mood changes
- Suspect pregnancy
Clinical Pearls for Extended/Continuous COC

1. Many medical and lifestyle benefits associated with extended/continuous COC regimens

2. Dedicated extended/continuous use or conventional COCs can be prescribed

3. Providers can help patients understand how to use extended/continuous OCs as well as benefits and limitations
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