

# Using contraceptives to alter bleeding patterns

Most women want shorter, lighter, less-frequent menses. Modern contraceptive methods offer options for manipulating the menstrual cycle.

**G**iven the problems associated with menstruation, it is not surprising that women prefer to menstruate less often—and modern contraceptive methods give them that option. This article describes current options and factors to consider in counseling patients.

Compared with today's women, who have access to effective birth control, past generations had earlier and more frequent childbearing, longer periods of breastfeeding, later menarche, and earlier menopause. During their reproductive years, they were more likely than today's women to be pregnant or breastfeeding than to be menstruating, and they had far fewer total menstrual episodes during their lifetimes.

As a result, today's woman is more likely to have menstruation-related gynecologic complaints, which lead to diagnostic tests and surgical procedures. Indeed, as Ob/Gyns are all too aware, menstrual disorders and premenstrual symptoms account for a significant proportion of office visits. Furthermore, when these problems recur month after month for

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years, ovulation and menstruation may be associated with anemia, endometriosis, ovarian cysts, and increased risk of ovarian cancer.

## Survey: Most women prefer less-frequent periods

**A**lthough some women like having a period each month, most would prefer less-frequent periods to prevent the problems associated with monthly menstruation, according to a recent investigation.<sup>1</sup> These findings were similar to those of other studies.

In a telephone survey of more than 1,300 women in The Netherlands, 80% of currently menstruating women said they would prefer 1

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### KEY POINTS

- Women prefer to menstruate less often, and modern contraceptive methods give them that choice.
- Among the contraceptives that can significantly alter menstruation patterns are depot medroxyprogesterone acetate, levonorgestrel implants, oral contraceptives (OCs), and the levonorgestrel intrauterine device (IUD).
- The levonorgestrel IUD is one of the most effective means available of reducing menstrual blood loss.
- To manipulate bleeding patterns and manage hormone-withdrawal symptoms, the duration of active OC pills can be extended.

or more changes in bleeding patterns, including less-painful menses, shorter menses, lighter menses, and even no menses.<sup>1</sup> The majority (about 70% on average across 3 age groups: 15 to 19 years, 25 to 34 years, and 45 to

**Active pills can be extended  
by a specific number of consecutive  
weeks or by continuous days  
until breakthrough bleeding occurs.**

49 years) selected bleeding intervals ranging from every 3 months to never, and the remaining 30% said they would prefer monthly menses (TABLE 1). Told that menstruation can be manipulated by OCs, women expressed similar bleeding-frequency preferences.

### Effects of contraceptives on menses

Among the contraceptives that can significantly alter menstruation patterns are depot medroxyprogesterone acetate (DMPA), levonorgestrel implants, oral contraceptives (OCs), and the levonorgestrel intrauterine

device (IUD). Which of these methods is best for an individual woman depends on her bleeding preferences, as well as traditional considerations such as efficacy, convenience, cost, health status, and side effects. Counseling women about alterations in menstruation is a critical component of initiating and continuing contraception. Attitudes about menstruation greatly influence contraceptive choices and affect a woman's adherence to a particular method.

**DMPA**, which must be injected every 3 months, causes menstrual changes in almost all users. In most women, bleeding patterns are unpredictable in the first few months of use; the frequency and length of bleeding episodes then decrease, with most patients becoming amenorrheic over time.

**Levonorgestrel implants**, which are inserted subcutaneously in the upper arm, cause irregular bleeding in about two thirds of women during the first year of use. About a quarter continue to have regular menses, and a minority (about 10%) have no menses at all. After 5 years, most women resume a regular bleeding pattern.

**Levonorgestrel IUDs** reduce menstrual bleeding because the levonorgestrel released

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**TABLE 1**

### Preferred frequency of menses<sup>1</sup>

PREFERRED FREQUENCY	AGE OF RESPONDENTS		
	15–19 years (n = 322)	25–34 years (n = 325)	45–49 years (n = 324)
Monthly	29.5%	35.1%	30.2%
Every 3 months	34.5%	23.7%	10.2%
Every 6 months	6.2%	6.2%	4.0%
Yearly	3.1%	4.0%	4.9%
Never	26.4%	31.1%	50.6%

Reprinted from *Contraception*; vol 59; den Tonkelaar I, Oddens BJ; Preferred frequency and characteristics of menstrual bleeding in relation to reproductive status, oral contraceptive use, and hormone replacement therapy use; 357-362; 1999 with permission from Elsevier.

from the device inhibits the endometrial proliferation that normally would occur during the ovulatory cycle. This endometrial suppression is a local effect and is not immediate. The uterine lining thins only after several months. As a result, the user spots frequently during the first 4 months of use. After 12 months, bleeding is greatly diminished in about 80% of women and is completely lacking in the remaining 20%. The levonorgestrel

IUD is one of the most effective means available for reducing menstrual blood loss.

**OCs**, the most popular form of reversible contraception in the United States, help regulate cycle length, making the timing of menses more predictable. Bleeding duration and volume are decreased in most users, as is dysmenorrhea.

Until recently, OCs typically contained 21 days of estrogen plus a progestin and 7 hormone-free days. The rationale for this design was to mimic an average cycle length of 28

**Troublesome symptoms during the hormone-free interval can be alleviated by reducing that interval to 4 days.**

days. Also, by limiting active pills to 21 days, spotting and breakthrough bleeding were minimal after several months of use. The drawback of this design is its association with monthly hormone-withdrawal symptoms. A

**TABLE 2**

**Hormone withdrawal symptoms in oral contraceptive users<sup>2</sup>**

SYMPTOM	TIMING OF SYMPTOM (% OF TOTAL PATIENTS)*	
	During 21 active-pill days	During 7 hormone-free days
Pelvic pain	21%	70%
Headache	53%	70%
Breast tenderness	19%	58%
Bloating/swelling	16%	38%
Use of pain meds	43%	69%

\*P value was <.001 for all symptoms.

study of these symptoms in OC users confirmed that pelvic pain, headaches, breast tenderness, bloating, swelling, and the use of pain medicines were more common during the 7-day hormone-free interval, compared with the 21 active days (TABLE 2).<sup>2</sup>

**Extending active pills delays menses**

**E**xtending the duration of active OC pills delays menses and reduces hormone-withdrawal symptoms.

- In a series of 50 patients with menstrual disorders who were offered extension of their active tablets to delay menses, 75% were stabilized on an extended regimen, with the most common pattern being 12 weeks of active pills.<sup>3</sup> About one quarter of the patients discontinued OCs or returned to the standard regimen—3 weeks of active pills.
- In a follow-up study of 292 patients on OCs who experienced hormone-withdrawal symptoms, 92% of women who were offered extension of their active pills

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## What do women want? A snapshot of patient and physician preferences

**H**ow do women feel about menses? That was 1 of the questions posed during a recent Harris poll of 491 women between the ages of 18 and 49. When asked whether they relied on monthly menstruation to let them know they were "healthy," two thirds said no; further, 44% said they would prefer less-frequent menses. More than 25% of respondents reporting missing a professional, social, athletic, or family-oriented event due to their period, menstrual cramps, or other menstrual-related symptoms.

In a separate survey of 46 female clinicians conducted by the Association of Reproductive

Health Professionals (ARHP), more than 57% reported being asked by patients about manipulating menses, and 70% had prescribed extended oral contraceptive (OC) regimens. Among 63 female nurse practitioners who also were surveyed, 73% had been asked by patients about extended OC regimens, and 85% had prescribed them.

When queried about factors that made clinicians likely to prescribe an extended regimen, more than 80% cited patient requests and therapeutic purposes (e.g., lifestyle concerns).

For more information, visit the ARHP Web site at [www.arhp.org](http://www.arhp.org).

agreed to try the lengthened pattern.<sup>4</sup> Of the women who accepted the extended regimen, 19% discontinued OCs, and 13% extended active pills but then returned to a standard regimen. One hundred seventy-two patients (59%) maintained the extended pattern. The typical pattern was  $12 \pm 12$  weeks of active pills, with a median of 9 weeks and a range of up to 104 consecutive weeks. Patients also were given the option of decreasing the number of hormone-free days. The typical hormone-free interval was  $6 \pm 2$  days, with a median of 5 days and a range of 0 to 7 days.

### Factors to consider for extended OC regimens

**W**hen extending OC regimens, clinicians need to consider several factors.

If patients are taking OCs for the first time, the best course may be to rely on the standard regimen for the first 2 months because of the high incidence of breakthrough

bleeding and spotting when OCs are initiated. After this time, if the patient has hormone-withdrawal symptoms or simply wants to delay menses, she can try extending the active pills.

**The patient must be warned that although she can go off pills for up to 7 days, the hormone-free interval should never be any longer.**

Active pills can be extended in several ways. The patient can take pills for a specific number of consecutive weeks (such as 6, 9, or 12 weeks). Or, she can simply continue taking consecutive active pills until breakthrough bleeding occurs. She then should observe a 7-day (or shorter) hormone-free interval and restart the OCs.

Troublesome symptoms during the hormone-free interval can be alleviated by reducing that interval to 4 days. The patient must be

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warned, however, that although she can go off pills for up to 7 days, the hormone-free interval should never be any longer.

Making sure the patient understands and is comfortable with this extended regimen is extremely important.

### Future options

**A**lthough current contraceptive methods allow clinicians to address patient preferences about menstrual patterns, even more options may well be available in the future. Studies of an 84-day/7-day OC regimen are underway. ■

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