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Offer this contraceptive to breastfeeding new moms

Early insertion of the etonogestrel implant does not affect lactogenesis, and fosters contraceptive compliance.

PRACTICE CHANGER

Recommend the etonogestrel implant to new mothers who plan to breastfeed; the insertion of this contraceptive within the first few days postpartum does not alter breastfeeding outcomes.¹

STRENGTH OF RECOMMENDATION

B: Based on a single high-quality randomized controlled trial (RCT).

Gurtcheff SE, Turok DK, Stoddard G, et al. Lactogenesis after early postpartum use of the contraceptive implant. *Obstet Gynecol.* 2011;117:1114-1121.

ILLUSTRATIVE CASE

In the last trimester of pregnancy, a patient asks about her options for postpartum contraception. She plans to breastfeed and does not want to have another child for several years, she says. Her family is scheduled to move 2 weeks after her due date, and she wants to begin using contraception before then. She's interested in the etonogestrel implant (Implanon) and wonders whether she can have it inserted before she leaves the hospital. What can you tell her?

Approximately 4 million women give birth each year in the United States,² 77% of whom choose to breastfeed their babies.³ Postpartum contraception is recommended, to ensure adequate spacing between (or prevention of) pregnancies.

Hormonal options are limited for nursing moms

Due to the negative effect of estrogens on lac-

tation,⁴ women who wish to use birth control while breastfeeding have limited choices. Their options include progestin-only oral contraceptives; intrauterine devices, including the levonorgestrel intrauterine contraceptive; barrier methods; and the etonogestrel implant. Yet concerns remain that using a progestin contraceptive in the early postpartum period could negatively affect lactogenesis, as well as the quantity and quality of the breast milk.⁵

Starting contraception after 6 weeks? The opportunity is often missed

A 2010 systematic review found that progestin-only contraception can be safely used in breastfeeding women. However, the studies included in the review did not consider timing. Thus, the researchers concluded only that initiation of a progestin contraception >6 weeks postpartum is safe.⁶ The World Health Organization recommends waiting >6 weeks, as well.⁷ But studies have found that between 10% and 40% of women miss their 6-week postpartum visit,⁸ thereby missing the opportunity to start contraception.

A 2009 pilot study found that the implant can be safely used <4 weeks postpartum, and did not affect breastfeeding.⁹ The study we review here is the first RCT to evaluate the impact of early insertion (1-3 days postpartum) of the etonogestrel implant on lactogenesis.

STUDY SUMMARY

Timing of implant did not affect outcomes

The study by Gurtcheff et al was a ran-

domized controlled noninferiority trial of 69 women who wanted to use Implanon for postpartum birth control. Inclusion criteria included good health (of the babies as well as the mothers), the intention to breastfeed, and the willingness to be randomly assigned to either early (1-3 days) or standard (4-8 weeks) insertion. The study was not blinded. No other source of bias was identified.

The primary outcomes studied were time to stage II of lactogenesis (based on maternal perception of when her milk “had come in”) and rates of lactation failure.

Early insertion, the researchers found, was noninferior to standard insertion, both in the time to stage II of lactogenesis and the risk of lactation failure. The time to lactogenesis was 64.3 hours (mean standard deviation [SD], 19.6 hours) for early insertion vs 65.2 hours (mean SD, 18.5 hours) for standard insertion. The mean difference was -1.4 hours (95% confidence interval [CI], -10.6 to 7.7 hours). For lactation failure, the absolute risk difference was 0.03 (95% CI, -0.02 to 0.08).

Secondary outcomes included breastfeeding status, side effects, and bleeding patterns, as well as the contraceptive method actually being used at the time. This information was gathered at 2 weeks, 6 weeks, 3 months, and 6 months postpartum.

There were no statistically significant differences in breastfeeding, formula supplementation, or patient-reported bleeding patterns. However, a third of the women (11 of 34) in the standard group did not have the implant inserted, and opted for an alternate form of birth control.

At 6 weeks, women in both groups had a milk sample analyzed for fat and energy content. There was no significant difference in mean creatatocrit values between the groups.

WHAT'S NEW

Early insertion is safe and fosters compliance

Lactogenesis and lactation failure rates were comparable, whether the etonogestrel implant was inserted between 1 and 3 days postpartum or 4 to 8 weeks postpartum. An advantage of early insertion was increased contraceptive compliance. At 3 months postpartum, 13% of the women in the standard group were not using any birth control. Among those in the early insertion group, compliance was 100%.

CAVEATS

Study sample may not be representative

This was a small study, but it was powered to detect ≥ 8 hour difference in onset of stage II lactogenesis. Participants were not representative of all populations (91% were white, 73% of whom were Hispanic). Both the mothers and babies were healthy, so we can't extrapolate to situations where either mom or baby is sick.

CHALLENGES TO IMPLEMENTATION

Finding clinicians trained in insertion technique

Health care providers trained in insertion of the etonogestrel implant would need to be



INSTANT POLL QUESTION

Do you recommend the etonogestrel implant to new mothers while they're still in the hospital?

- Yes, as one of several contraceptive options
- No, I usually discuss contraception at the 6-week postpartum visit
- Only if they ask about it
- Other _____

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available to promote insertion in the early postpartum period. Ensuring availability of the device in hospitals may require extra logistical planning; incorporating etonogestrel implant insertion into already-hectic morning rounds may be challenging, as well. **JFP**

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