SMFM Preterm Birth Toolkit

Increasing the Interpregnancy Interval to Prevent Preterm Birth and the Role of Immediate Postpartum LARC provision

Over half of the more than 6 million pregnancies each year in the United States are unintended, one third of which are mistimed and ultimately result in over 2 million unintended births. Additionally 33% of births occur within 18 months of a prior delivery. Both unintended birth and a short interpregnancy interval (IPI) are associated with delayed prenatal care and preterm birth and increase the risk of adverse maternal and child outcomes.

Despite provider recommendations to avoid sexual intercourse until 6 weeks postpartum, nearly two thirds of couples have resumed sexual activity within the first month with nearly 90% having had sexual intercourse by the end of the second month. Ovulation can occur as early as 25 days in women using supplement feeding and without effective contraception at time of hospital discharge, these women are at risk for a short IPI pregnancy before they even present to their 6 week postpartum visit.

Post-Partum is the ideal time to address contraception:

- >60% women in postpartum period
- Advantages of postpartum period
  - Motivated to prevent pregnancy
  - Know they’re not pregnant

- Challenges include
  - Perception about conflicts with breastfeeding
  - Schedule of post-partum visits
  - No show for post-partum visits
  - Cost

Definitions:
- Interpregnancy interval: the time period between the start of the index pregnancy and the preceding live birth.
- Short IPI – usually: <12-18 months.
- Long IPI -> 59 months
Main points to consider in favor of postpartum contraception:

- LARC users almost 4X more likely to have optimal IPI versus barrier users
- LARC users almost 2X more likely to have optimal IPI versus user dependent hormonal methods

1. The American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) in 2014 released recommendations supporting LARC as the first line method of contraception and encouraged LARC as options for most women and girls.
2. The Center for Disease Control (CDC) and the World Health Organization (WHO) recommend providing information to patients about effectiveness when discussing contraceptive options using the tier approach.
3. Contraception should be discussed prior to delivery, but in the setting of a preterm delivery, this conversation may not have yet taken place in the prenatal care setting.
4. Many women will not follow up postpartum to obtain contraception.
5. One option is to initiate contraception in the immediate postpartum period, prior to hospital discharge.

Addressing potential barriers to postpartum contraception:

1. Concerns over risks of hormonal contraception and VTE
2. Theoretical concern of initiation of a progestin in the first 72 hours (prior to lactogenesis II or milk coming in)
3. Expulsion rates for IUD’s

Is there increased risk of thromboembolism with early initiation?

- Due to the increased risk of venous thromboembolism (VTE) in the immediate postpartum period, combined hormonal contraceptive (estrogen containing such as pill, ring and patch) are contraindicated in the first 21 days postpartum and as long as 6 weeks postpartum in women with additional risk factors for VTE.
- Progestin-only contraception does not increase the risk of VTE postpartum and thus considered acceptable and safe by the CDC in the postpartum period.

What about breastfeeding?

- Progestin only contraceptive does not adversely affect breastfeeding success.
- The contraceptive implant (Implanon®) does not affect milk composition
- Only about 30% of women are still breastfeeding at 3 months postpartum and so are at risk for pregnancy.
- Prospective nonrandomized study contraceptive implant vs. nonhormonal IUD
Breast milk composition the same
The benefit of early initiation of contraception – to prevent unintended and short interval pregnancy – likely outweighs the theoretical effect on breastfeeding.
RCT of postpartum insertion of implant at 1-3 days vs. 4-8 weeks postpartum show:
- **No difference in breastfeeding outcomes**, including lactogenesis and lactation failure
- 3-year follow-up no difference in infant growth

*Increased risk of IUD expulsion with immediate postpartum insertion:*
- CDC supports insertion in all postpartum patients with the exception of those with puerperal sepsis.
- Given the increased risk of expulsion, patients should be counseled about the risk of expulsion and the importance of follow up.
- When considering the higher expulsion rates, one must consider the equally, if not greater, risk of loss to follow up with no contraception initiated.
- Expulsion rate lowest if IUD inserted < 10 minutes after placental delivery (10-20%)

**Bottom line:**
- Overall the potential benefit of immediate postpartum initiation of LARC, within 1-3 days, as a means to decrease the risk of an unintended pregnancy and a short interval pregnancy should be discussed with all patients.
- Given that prior preterm birth is a strong risk factor, women who have had a preterm birth should receive comprehensive contraceptive counseling prior to hospital discharge with initiation of LARC prior to discharge or within 4 weeks postpartum.

This algorithm and key driver material was written by a group of experts in the field of Preterm Birth. It was then reviewed by the Society for Maternal-Fetal Medicine’s (SMFM’s) Publications Committee, Executive Committee and Risk Management.

Standardization of healthcare processes and reduced variation has been shown to improve outcomes and quality of care. SMFM developed these documents to help facilitate the standardization process. These algorithms and key driver documents are “tools” to assist clinicians and practices. The practice of medicine continues to evolve, and individual circumstances may vary. They reflect clinical and scientific advances as of the date issued and are subject to change. They are not intended to dictate a certain management or course of action. We encourage users to adapt them to their particular situation, environment and patient population.

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