



HORMONAL CONTRACEPTION DURING LACTATION

The preferred method of contraception both pre-pregnancy and postpartum is hormonal, with the most popular being oral contraceptives (OCs) or repository injection. This preference has raised concerns over the impact of their use immediately postpartum.¹ Queries received at SDIS indicate a need for information regarding which form of hormonal contraception (HC) should be used and when it should be started/resumed. The objective of this newsletter is to provide pharmacists with the information necessary to make such recommendations.

BACKGROUND

Frequency of breastfeeding, duration of lactation and start of menses are key factors affecting the return of fertility post-partum. Women who feed their babies only breast milk do not need contraception for six to eight weeks postpartum [referred to as lactational amenorrhea (LA)]. However, if the baby is receiving supplemental feedings or is not breastfed at all, contraception should be initiated during the third postpartum week.^{2,3}

It is a common myth that a woman who is breastfeeding cannot become pregnant as long as menses hasn't resumed. It is true that women who are exclusively breastfeeding generally do not begin menstruation for months after delivery and ovulation usually occurs several weeks after the first menses. However, in some cases, ovulation will occur prior to the first menses in which case pregnancy can occur.²

Under normal conditions (without supplementation), because of the intricacy involved in coordinating behaviors and biological processes between mother and baby, initiating breastfeeding and establishing milk flow generally take about 6 weeks.⁴ Therefore, it is not advisable to initiate drug therapy that may negatively affect milk production during this time.

EVIDENCE

Combination Oral contraceptives (COCs): estrogen and progesterin

Evidence suggests the adverse effects on breast milk production with COC use is related to the estrogen component. Decreases in milk volume appear to be related to the dose and how soon treatment starts after delivery.^{2,5} Studies involving 30 mcg ethinyl estradiol (the strength found in most COCs) have demonstrated this effect.² Whether the composition of breast milk is significantly altered by COC's is controversial.⁶

Recommendation:

In general, whether breastfeeding or not, COC use should be avoided immediately postpartum because these women remain in a hypercoaguable state for weeks. Product manufacturers advise their use be avoided for four weeks but because ovulation can occur in as little as 25 days postpartum, initiation is sometimes seen in as little as two weeks.⁷

In breastfeeding women COCs should be avoided especially during the first 6-8 weeks postpartum due to possible negative effects on volume and caloric and mineral content of the milk.⁸ If the decision is made to use a COC, it should be done cautiously in women who do not wish to use or do not have access to supplemental feeding. Weight gain in the infant is the most reliable indicator of the effect of the drug on child development.⁹

In cases where healthy women have initiated supplementary feeding while using COCs, this did not appear to adversely affect infant growth.¹⁰ The progestins and estrogens present in milk are quite low and many studies have confirmed there are no problems with sexual development in these children.⁶

Progestin-only contraceptives(POCs): the progestin-only pill (POP) (Micronor®) and the injectable progestogen (Depot-Provera®)

These contraceptives do not appear to have adverse effects on milk production. There have been many studies evaluating the effect of depot medroxyprogesterone (DMPA) with most reporting no effect and a few a positive effect on milk volume and duration of lactation.⁹ Only one study reported a negative effect on lactation but this conclusion was based on the mother's impression and not on measurable data.¹¹

Prolactin influences secretion and production of milk by the mammary glands and repeated elevation is necessary for milk production. A recent study concluded that DMPA increased basal prolactin levels in lactating women.¹²

Recommendation:

Although many studies suggest progestin-only contraception can be initiated immediately postpartum without negative effects on milk supply, drug therapy is not necessary due to lactational amenorrhea. The amount of steroid passing into the milk is considerable in the case of the DMPA. Therefore, delaying POC for six weeks would reduce infant exposure to exogenous hormones and decrease the incidence of irregular menstrual bleeding in their mothers.²

It would be reasonable to suggest resuming contraception at six weeks postpartum with a POP such as Micronor® which will allow the mother to assess any affect on milk supply. If this proves satisfactory, DMPA can be used.⁸ Keep in mind that the POP may not be suitable in cases where compliance may be an issue.

CONCLUSION

The American Academy of Pediatrics considers both POCs and COCs to be compatible with breastfeeding.¹³ POC is the preferred form of HC postpartum. POPs and DMPA do not appear to have any adverse effects on breast milk components and infant growth.¹⁴

The information above is limited to hormonal contraception. There are also non-hormonal forms of contraception available that are effective and safe to use during lactation, e.g., intrauterine devices (IUDs).⁸ IUDs can usually be inserted 4 – 6 weeks postpartum.¹⁵

References available upon request.

Prepared by Maya Wagner, BSP, Drug Information Consultant

Staff Changes at the Saskatchewan Drug Information office

Maya Wagner has resigned from the Drug Information Service and started a graduate degree program at the College of Pharmacy and Nutrition. We will miss Maya and wish her the best of luck in her new endeavour. Zahra Hirji is the new consultant on the healthcare professional information line. Zahra is a recent Saskatchewan graduate and has spent the past three years working in a community pharmacy in Victoria, BC. She is very enthusiastic about the field of drug information and is looking forward to the opportunity of providing this service to Saskatchewan pharmacists and physicians.

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