Postpartum Contraception: Resumption of Ovulation and Methods of Birth Control

The selection of contraceptives is a personal choice, but the physician should provide information to the patient regarding the optimal contraception. The postpartum period is an ideal time to initiate contraception as women are continuing to follow up with their healthcare providers, and are likely to be more motivated to avoid the next pregnancy soon.

Overview

Contraception is the process of a woman deciding to have children by choice, and not by chance. It is often guided by a patient’s socioeconomic needs and is achieved using various contraceptive methods.

Factors such as the resumption of ovulation, its effects on lactation, and a woman’s health should be taken into consideration when deciding on the method of postpartum contraception. Ideally, all women requesting postpartum contraceptives should be advised not to wait until the resumption of their menstrual cycle but instead to start contraceptive use before resuming sexual activity. Physicians should also provide emergency contraception, if requested, to all women.

Reversible Postpartum Contraceptive Methods
<table>
<thead>
<tr>
<th>Natural Family Planning</th>
<th>Barrier Method</th>
<th>Progestin-Only Oral Contraceptives</th>
<th>Long-acting Reversible Contraceptives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prolactin increases, causing ovulation to diminish</td>
<td>• Use of condoms and/or spermicides</td>
<td>• Progestin-only or mini-pill</td>
<td>• Provides contraception for an extended period of time</td>
</tr>
<tr>
<td>• Reliability = 98% if used correctly</td>
<td>• Reliability rate = 82%</td>
<td>• Most reliable when taken at the same time every day</td>
<td>• There are several options</td>
</tr>
</tbody>
</table>

**Resumption of Ovulation**

Resumption of sexual activity is variable and depends on a number of factors, including the presence or absence of perineal trauma, the patient’s mental state, and a physiological return to the pre-pregnant state. The exact time at which a woman should begin contraception is therefore variable.

Similarly, ovulation is unpredictable and can occur even before the onset of menstrual cycles in breastfeeding women. This can occur anywhere between 27 days and 6 months after delivery. The return of the menstrual cycle is therefore not a good indicator of the appropriate time to initiate contraception but as a guide to when contraception is needed after 21 days postpartum, as 60% of non-lactating women are fertile in this period.

Ovulation in women who are lactating or breastfeeding depends on the frequency and duration of breastfeeding, maternal nutritional status, and body mass index. Ovulation in breastfeeding women is typically delayed due to the inhibition of hypothalamic gonadotropin-releasing hormone by prolactin.

**The Centers for Disease Control and Prevention (CDC)** updated its guidelines in 2011. They state that hormonal contraceptives should be avoided in the first 3 weeks postpartum due to the high risk of venous thromboembolism during that period. Combined hormonal contraceptives can be prescribed between 3 and 6 weeks postpartum if there are no risk factors for VTE. In the presence of risk factors (eg, a past history of VTE or a recent cesarean section delivery), hormonal contraceptives are contraindicated.

**Postpartum Contraceptive Methods**

Factors that determine the appropriate method of contraception include the following:

1. Timing
2. Patient’s preference
3. Presence or absence of chronic medical conditions such as VTE, hypertension, or malignancy
4. Breastfeeding status of the patient; ie, exclusive, token, or no breastfeeding at all

**The Lactational Amenorrhea Method**

The lactational amenorrhea method is an economical and temporary form of contraception in women who have amenorrhea and are breastfeeding at frequent, regular intervals and not expressing milk or bottle feeding. However, this method requires the achievement of certain criteria for success, including the following:

1. The woman must be exclusively breastfeeding
2. Breastfeeding must take place a minimum of 8 times a day
3. The method can only be used up to 6 months after delivery
4. The woman should not have resumed menses before initiating this method
Hormonal Contraception

Hormonal contraceptive methods are available in different formats, including pills, injections, implants, and intrauterine devices. Their use and preference are based on factors such as:

- The imminent risk of VTE in the immediate postpartum period (up to 21 days) and the presence of VTE risk factors after 21 days (contraindicates estrogen use)
- Breastfeeding status of the woman, as estrogen can reduce the quality and amount of breast milk

They can ideally be started safely 42 weeks postpartum.

Nonlactating women can be offered hormonal contraception with estrogen 4 weeks postpartum, while breastfeeding women can be offered the progesterone-only pill, a medroxyprogesterone depot injection (DMPA; Depo-Provera), or a levonorgestrel intrauterine system. DMPA is not recommended for long-term use (more than 2 years) in older women unless no other contraceptive alternatives are acceptable, as it is associated with a higher incidence of decreases in bone density.

Barrier Devices

Barrier devices such as diaphragms and cervical caps should ideally be fitted 6 weeks postpartum, as pregnancy and delivery tend to alter the cervical and vaginal size and tone. Condoms and spermicides, on the other hand, can be offered in the immediate postpartum period. The use of contraceptive sponges should be postponed until at least 42 days postpartum to avoid toxic shock syndrome.

Intrauterine Devices/Systems

Both breastfeeding and non-lactating women can be offered intrauterine devices such as the Copper T or intrauterine systems such as levonorgestrel (LNG-IUS). The Copper T is an ideal long-term contraceptive option and can be kept in place for up to 10 years.

If inserted in the immediate postpartum period, these devices are likely to be extruded, and therefore should ideally be inserted 30–42 days postpartum when the uterus has involuted completely. Three types of levonorgestrel systems are currently available. Each of these is effective for different durations, ranging from 3–5 years.

Sterilization

Tubal sterilization is an effective and permanent contraceptive solution for women who have completed their childbearing. It should be offered with caution to women in unstable relationships, to young women, or to those who may want to have children at some point in time.

This surgical procedure should ideally be performed in the immediate postpartum period, as it is associated with lower failure rates compared with when it is performed later. If it is performed later, it can be done either laparoscopically or transcervically.

The patient should be informed that the fallopian tubes can take 3–6 months to close completely after the procedure and that therefore she should use another form of contraception until then. Confirmation of successful occlusion of the tubes requires a
hysterosalpingogram.

References

- Postpartum care: What to expect after a vaginal delivery via mayoclinic.org
- Postpartum: First 6 Weeks After Childbirth – Recovery At Home via webmd.com
- CDC Updates Recommendations for Contraceptive Use in the Postpartum Period via aafp.org
- Sexuality and Contraception via arhp.org
- Postpartum contraception via uptodate.com

Legal Note: Unless otherwise stated, all rights reserved by Lecturio GmbH. For further legal regulations see our legal information page.