



437 Team: Obstetrics and Gynecology

We recommend reviewing physiological changes in pregnancy lecture before starting because postpartum changes are the reverse.

Postpartum Care

Objectives:

- Discuss the normal physiologic changes of the postpartum period
- Describe the components of normal postpartum care
- Outline topics to cover in postpartum patient counseling
- Describe appropriate postpartum contraception

References:

- Kaplan USMLE step 2 CK - Obstetrics and Gynecology
- Online Meded videos
- Team 435

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POSTPARTUM PHYSIOLOGIC ISSUES

1- Reproductive tract changes

- **Uterus:**

return to non-pregnancy place in pelvis by 2 week PP, and back to normal size by 6 week PP

- **Lochia:**

These are superficial layers of the endometrial decidua that are shed through the vagina during the first three postpartum weeks as normal vaginal discharge after delivery

A. Lochia rubra (red): first few days PP

B. Lochia serosa (pinkish, watery) : few week PP

C. Lochia alba (yellowish): 6-8 week PP

These are normal and should be differentiated from malodor discharge which might indicate infection.

- **Vagina and vulva:**

A. painful and sore especially if the patients had laceration in her vaginal delivery over the counter analgesic usually sufficient.

B. change in vaginal tone /pelvic floor muscles changes and might never return to their prior pregnancy state. Also this may cause urinary incontinence , **Kegel's exercise** (pelvic muscle exercises) help to recovery phase. **It prevents future prolapse whether is urethra, vaginal, rectal. You can do it every time except at the time of voiding**

- **Cramping:**

The myometrial contractions after delivery constrict the uterine venous sinuses, thus preventing hemorrhage. These lower midline cramps may be painful and are managed with mild analgesics.

- **Perineal Pain:**

Discomfort from an episiotomy or perineal lacerations can be minimized in the first 24 hours with ice packs to decrease the inflammatory response edema. A heat lamp or sitz bath is more helpful after the first day to help mobilize tissue fluids.

2- Urinary tract changes

- **Kidney function:**

GFR still increase to 2-3 week PP, the GFR ↑ leads to a creatinine ↓ so even if there is a slight increase it is sensitive to renal problems.

- **Hypotonic bladder :**

-Intrapartum bladder trauma can result in increased postvoid residual volumes.

-If the residuals exceed 250 mL, the detrusor muscle can be stimulated to contract with bethanechol (Urecholine).

-Occasionally an indwelling Foley catheter may need to be placed for a few days.

- **Stress urinary incontinence**

- **Dysuria :**

Pain with urination may be seen from urethral irritation from frequent intrapartum catheterizations. Conservative management may be all that is necessary. A urinary analgesic may be required occasionally.

3- CVS changes

Fluid shift from extravascular space to intravascular space leading to significant diuresis
Normal CVS functions retune by 2-3 week PP.

4- Coagulation

Pregnancy is a hypercoagulation state with increases in procoagulants to prevent bleeding during delivery → increase VTE in pregnancy especially PP. **in PP period, women have to walk regularly.**

System back to normal balance state by 6-8 week PP.

5- GIT changes

- **Constipation:**

- Decreased GI tract motility because of perineal pain and fluid mobilization, can lead to constipation.
- Management is oral hydration and stool softeners.

- **Hemorrhoids:**

- Prolonged second-stage pushing efforts can exaggerate pre-existing hemorrhoids.
- Management is oral hydration and stool softeners.

6-Breast

- Changes in the color, areola, nipples
- Breast will become enlarged and engorged
- Breastfeeding will be painful, first time. Then the patient will tolerate it then the mother will enjoy it.
- If the patient has inverted nipples you should Educate them to massage the Breast. areola and memes and they should Breast feed
- The first few days of breastfeeding is very important as it contains a lot of immunoglobulins
- Enhancement of breastfeeding: by breast feeding it self (it increases oxytocin receptors), hydration, some herbal medication and good sleep.

POSTPARTUM PSYCHOSOCIAL PROBLEMS

- **Bonding:**

- Impaired maternal–infant bonding is seen in the first few days post-delivery.
- Lack of interest or emotions for the newborn is noted.
- Risk is increased if contact with the baby is limited because of neonatal intensive care, as well as poor social support.
- Management is psychosocial evaluation and support.

- **Blues:**

- Postpartum blues are very common within the first few weeks of delivery.
- Mood swings and tearfulness occur.
- Normal physical activity continues and care of self and baby is seen.
- Management is conservative with social support.

- **Depression:**

- Postpartum depression is common but is frequently delayed up to a month after delivery.
- Feelings of despair and hopelessness occur.
- The patient often does not get out of bed with care of self and baby neglected.
- Management includes psychotherapy and antidepressants.

- **Psychosis:**

- Postpartum psychosis is rare, developing within the first few weeks after delivery.
- Loss of reality and hallucinations occur.
- Behavior may be bizarre.
- Management requires hospitalization, antipsychotic medication, and psychotherapy.

POSTPARTUM HEMORRHAGE

- Postpartum hemorrhage is :

Vaginal delivery blood loss
≥500 mL

OR

Cesarean section blood
loss ≥1,000 mL

POSTPARTUM CONTRACEPTION

1. Breast feeding:

Lactation is associated with temporary anovulation, so contraceptive use may be deferred for three months. A definitive method should be used after that time.

2. Diaphragm:

Fitting for a vaginal diaphragm should be performed after involution of pregnancy changes, usually at the six-week postpartum visit.

3. Intrauterine Device (IUD):

Higher IUD retention rates and decreased expulsions are seen if IUD placement takes place at six weeks postpartum.

4. Combination Modalities:

Combined estrogen-progestin formulations (e.g., pills, patch, vaginal ring) **should not** be used in breast-feeding women because of the estrogen effect of **diminishing milk production**. In nonlactating women, they should be started after three weeks postpartum to allow reversal of the hypercoagulable state of pregnancy and thus decrease the risk of deep venous thrombosis.

5. Progestin-only Contraception:

Progestin steroids (e.g., mini-pill, Depo-Provera, Nexplanon) do not diminish milk production so can safely be used during lactation. They can begin immediately after delivery.

POSTPARTUM IMMUNIZATIONS

1. **RhoGAM:** If the mother is Rh(D)-negative and her baby is Rh(D)-positive, she should be administered 300 µg of RhoGAM IM within 72 hours of delivery.
2. **Rubella:** If the mother is rubella IgG antibody-negative, she should be administered active immunization with the live-attenuated rubella virus. She should avoid pregnancy for one month to avoid potential fetal infection.

The 7Bs of PostPartum Care

1. **Breast vs. bottle:**

recommended exclusive breastfeeding at least 6 months

2. **Bladder:**

- urinary retention by nerve compression during delivery or Anesthesia, All women should urinate 6 hours after delivery or catheter removal.
- urinary incontinence: 25% of women will have stress urinary incontinence after vaginal delivery

3. **Bowel movement:**

women taking opioid medications or those with 3rd or 4th degree laceration should be offered stool softener

4. **Bleeding**

5. **Bottom:**

perineum pain or irritation.

6. **Blues:**

risk factors: history of depression , poor social support

7. **Birth control:**

Ovulation back depends on breastfeeding

•Breast feeding:

Non lactating women are fertile at 6 weeks PP, and many women resume intercourse prior the 6 week follow up appointment. They can resume as soon as lochia finishes

Woman who breastfeeding is partially protective against pregnancy but the breast feeding should be exclusive and every 3 hours and she has to be amenorrheic. Any kind of contraception Pills will be good Except Combined OCP as they interfere with The amount of the milk she will produce.

Before choosing Prober Contraception, you have to know about patient's age, weight, medical condition, her future washings and patent wellness to use this methods.

medical disorders:

Obese patient: taking Estrogen contains pills increases cholesterol, lipids and Blood Pressure and the risk of DVT.

Psychological diseases: Estrogen containing pills will cause swinging of her mood.

Not good candidate of combined pills: obese Patient, patient who smokes or drinks, patient with Psychological disorders, recent previous trauma, patients with diseases, family tix of psychological or cardiac issues. So, offer Them non Hormonal Medications, such as Intrauterine device, spermicide, Sterilization (Not for young patients, irreversible option), Implants or Injection.

patient who has repetitive vaginal Infx, multiple sexual partners, known case of STDs, IUD IS NOT a good choice, It increases The Risk of Ascending Infections, it is better to use barrier methods (Condoms / Diaphragm)

Abstinence is good But some men has premature Ejaculation, spermicide gel is recommended with this method

Teaching case (video case)

A 22 year-old multigravida delivered her third healthy child vaginally without complication. During sign-out and hand-off, the patient is described as ready for discharge from the hospital. She is breastfeeding, as she has with all of her children, but reports difficulty latching on. Although she is not married, she is in a stable relationship. She is considering permanent sterilization and wants to discuss it at her postpartum check-up. She states that she does not want any contraception at discharge, since she is breastfeeding and thinks she does not need any.

On further questioning, she alludes to a vague history of a possible deep venous thrombosis (DVT) and history suggestive of postpartum depression after a prior pregnancy. Even though she is not a new mother, she asks about when she should expect her period.

A young parent who is wither she didn't get family support, she is not educated enough, or she got pregnant when she wasn't ready.

multigravida in this age, not normal probably she lacks education about contraception, or she might didn't use the proper contraception method. Difficulty in latching, is not usual in women with multiple kids, she maybe didn't know how, or when she started it was painful so she decided not to continue with Breastfeeding.

Questions

1. What are you going to tell the patient about her difficulty with latching on?

First teach her or even let her show a video that visualize the technique for her, if still she is having difficulties so discuss the indications for referral to and role of a lactation consultant prior to discharge.

2. How are you going to answer the patient's question about resumption of menses?

- The average time to ovulation is 45 days in non-lactating women and 189 days in lactating women.
- The likelihood of ovulation increases as the frequency and duration of breastfeeding decreases.
- Review the physiological basis [reactivation of the HPOA axis] for clinically relevant postpartum changes such as resumption of ovulation and menstruation.

3. What type of contraceptive counseling are you going to provide?

- Provide contraceptive counseling while the patient is still in the hospital. Include the CDC recommendations for timing of initiation of postpartum contraception to minimize the risk of DVT and methods appropriate for a history of DVT according to the CDC US Medical Eligibility Criteria for Contraceptive Use. Emphasize that unless women are breastfeeding every 3-4 hours around the clock, they may be fertile before the 6 week postpartum checkup.
- Combined estrogen-progestin oral contraceptives should not be used during the first 21 days after delivery as there is an increased risk of VTE (venous thromboembolism during this period. The current CDC guidelines further state that during days 21-42 postpartum, women who don't have risk factors (age > 35 years, recent cesarean section, or smoking) for VTE generally can initiate combined hormonal contraception. After 42 days postpartum, in the absence of medical conditions that may increase the risk for VTE, no restrictions on the use of combined hormonal contraceptives based on postpartum status apply (refer to updated CDC guidelines in our reference below)
- Progestin-only oral contraceptives, depot medroxyprogesterone acetate injections and implants may be initiated immediately postpartum whether exclusively breastfeeding or not. They are not associated with an increase in complications. Although IUD expulsion rates are higher during the first 6 weeks postpartum, IUDs can be inserted immediately postpartum. Once lactation is established, neither the volume nor the composition of breast milk is adversely affected by progestin contraceptives

