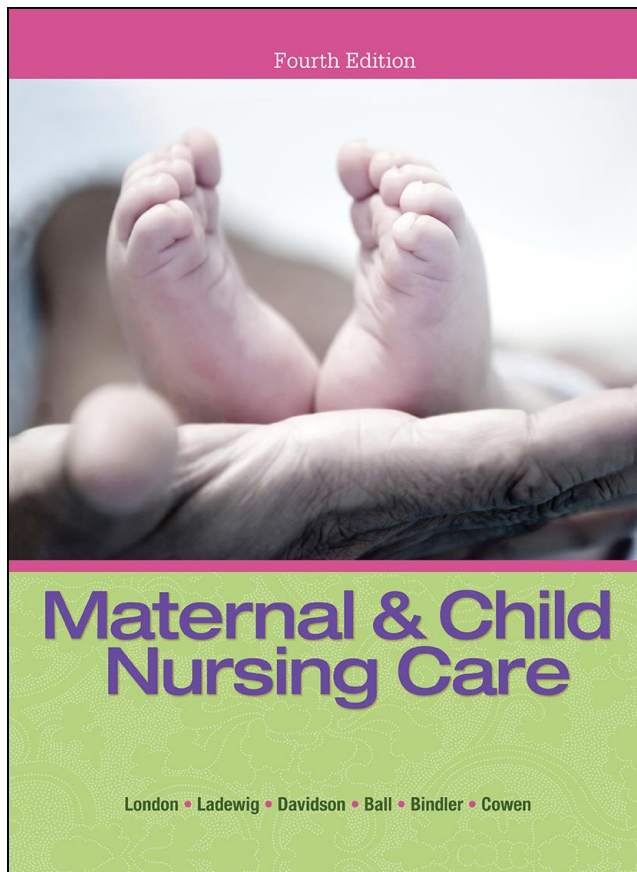


MATERNAL & CHILD NURSING CARE

FOURTH EDITION



CHAPTER 29+30

Postpartum Adaptation,
Nursing Assessment,
Nursing diagnosis & care

Physiologic changes that occur in the postpartal period

Learning Outcome 29-1

Describe the basic physiologic changes that occur in the postpartal period as a woman's body returns to its prepregnant state.

Postpartum Uterine Changes

- Uterus decreases in size in a process called involution
- Process of rapid reduction takes about 3 weeks.
- Spongy layer of the decidua is sloughed off
- Basal layer differentiates into two layers
 - Outer layer sloughs off
 - Inner layer begins the foundation for the new endometrium

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Postpartum Uterine Changes

- Placental site heals by exfoliation within 6 weeks
- Uterine cells will atrophy

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TABLE 33–1**Factors That Slow Uterine Involution**

Factor	Rationale
Prolonged labor	Muscles relax because of prolonged time of contraction during labor.
Anesthesia	Muscle relaxation results in a boggy uterus.
Difficult birth	The uterus is manipulated excessively, causing fatigue.
Grandmultiparity	Repeated distention of uterus during pregnancy and labor leads to muscle stretching, diminished tone, and muscle relaxation.
Full bladder	As the uterus is pushed up and usually to the right, pressure on it interferes with effective uterine contraction.
Incomplete expulsion of placenta or membranes	The presence of even small amounts of tissue interferes with ability of uterus to remain firmly contracted.
Infection	Inflammation interferes with uterine muscle's ability to contract effectively.
Overdistention of uterus	Overstretching of uterine muscles with conditions such as multiple gestation, polyhydramnios, or a very large baby may set the stage for slower uterine involution.

Postpartum Uterine Changes

- The fundus is the top portion of the uterus
 - Fundus will be at the level of the umbilicus 6–12 hours postpartum
 - Fundus will be 1 cm below the umbilicus on the first postpartum day
 - Fundus will descend 1 cm per day until it is in the pelvis on the 10th day

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Postpartum Uterine Changes

- Boggy uterus (uterine atony) associated with uterine bleeding
- Suspect distention of bladder when fundus higher than expected
- Subinvolution
 - Slowing of descent

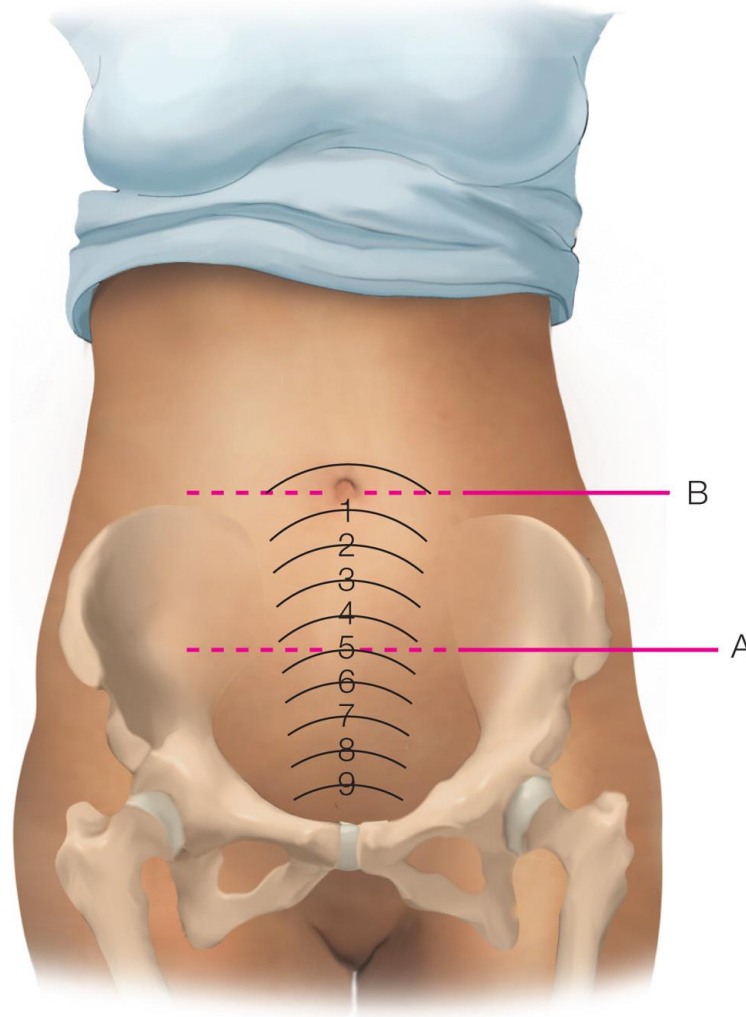
Postpartum Uterine Changes

- Uterine debris in the uterus is discharged through lochia
 - Lochia rubra is dark red (first 2–3 days): small clots, epithelial cells, erythrocytes, leukocytes, shreds of decidua, lanugo hair & vernix.
 - Lochia serosa is pink (day 3 to day 10): serous exudate, shreds of decidua, erythrocytes, leukocytes, cervical mucus
 - Lochia alba is white (continues until the cervix is closed) 1-2 weeks

Postpartum Uterine Changes

- The uterus will reach its prepregnant size by 5–6 weeks postpartum

Figure 29-1 Involution of the uterus. *A*, Immediately after delivery of the placenta, the top of the fundus is in the midline and approximately halfway between the symphysis pubis and the umbilicus. About 6 to 12 hours after birth, the fundus is at the level of the umbilicus. *B*, The height of the fundus then decreases about one finger breadth (approximately 1 cm) each day.



Postpartum Cervical Changes

- Cervix is spongy, flabby, and may appear bruised
- External os may have lacerations and is irregular and closes slowly
- Admits 2 fingers
- Shape of the external os changes to a lateral slit

Postpartum Vaginal Changes

- Vagina may be edematous, bruised with small superficial lacerations
- Size decreases and rugae reappear within 3 to 4 weeks
- Returns to prepregnant state by 6 weeks

Perineal Changes and Return of Menstruation

- Perineum may be edematous, with bruising
- Lacerations or an episiotomy may be present
- Complete healing 4–6 months
- Menstruation generally returns between 7 and 12 weeks (nonbreastfeeding woman)

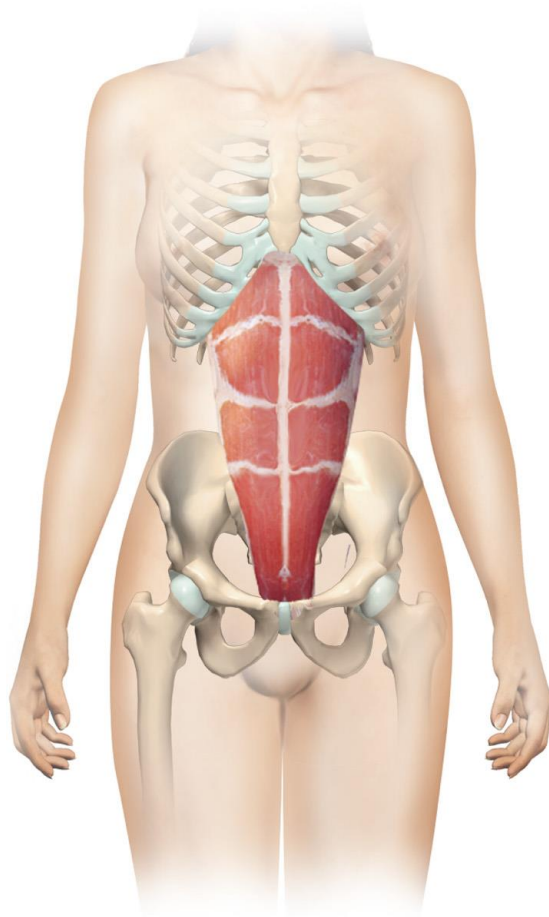
Perineal Changes and Return of Menstruation

- Ovulation usually occurs as early as 27 days or within 70 to 75 days (nonbreastfeeding women)
- Signs of infection: pain, redness, warmth, swelling, discharge

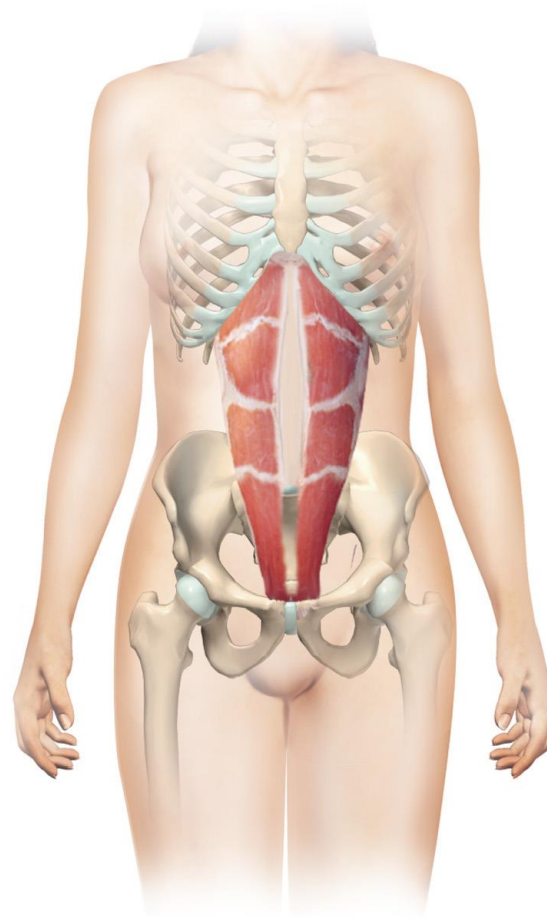
Postpartum Abdominal and Breast Changes

- Abdomen is loose and flabby but will respond to exercise
- Uterine ligaments will gradually return to their prepregnant state
- Diastasis recti abdominis
- Striae: Stretching due to rupture of elastic fibers in skin will take on different colors based on the mother's skin color
- Breasts are ready for lactation

Figure 29-3 Diastasis recti abdominis, which involves a separation of the abdominal musculature, commonly occurs after pregnancy.



Normal location of rectus muscles of the abdomen



Diastasis recti: separation of the rectus muscles

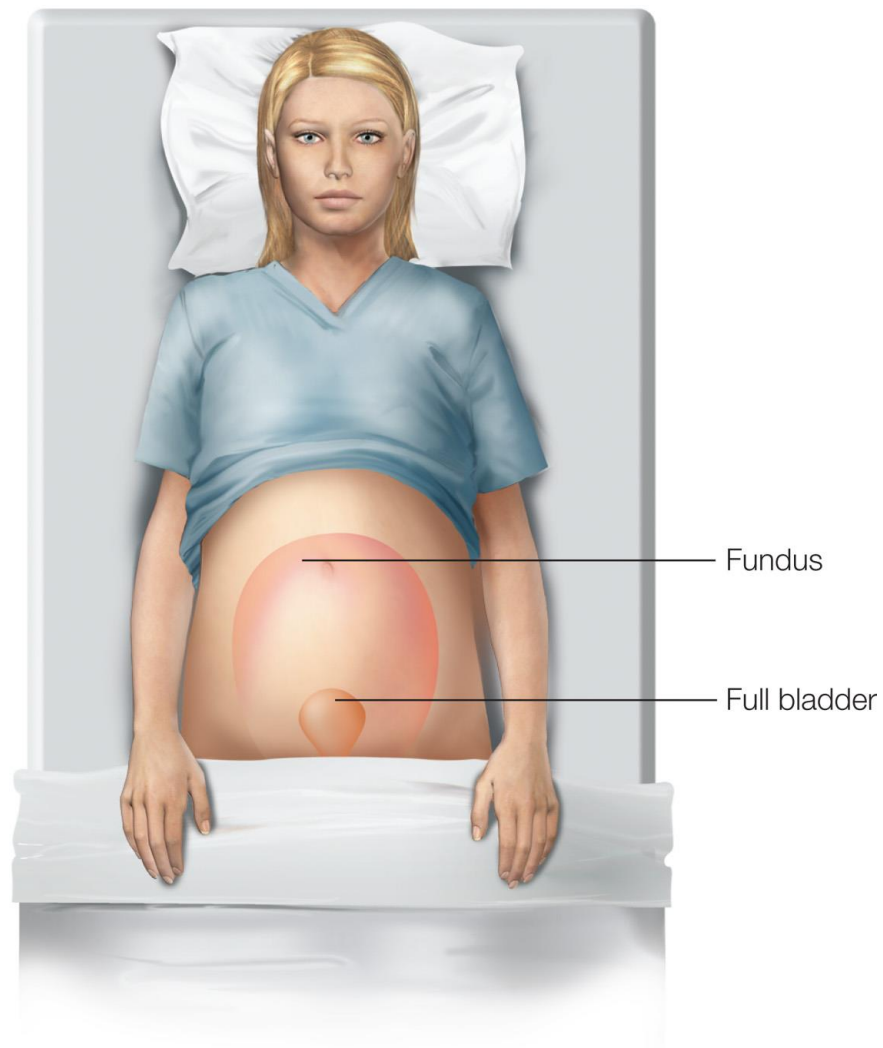
Postpartum Bowel Changes

- Woman will experience hunger and thirst
- Bowels will be sluggish
- Episiotomy, lacerations, or hemorrhoids may delay elimination
- Cesarean birth
 - Clear liquids after surgery
 - Solid food after bowel sounds present

Postpartum Bladder Changes

- Increased bladder capacity
- Swelling and bruising of tissues around the urethra
- Decrease in sensitivity to fluid pressure
- Decrease in sensation of bladder filling
- Urinary output is greater due to puerperal diuresis
- Increased chance of infection due to dilated ureters and renal pelvis

Figure 29-2 Displacement and deviation of the uterus. The uterus becomes displaced and deviated to the right when the bladder is full.



Postpartum Changes in Vital Signs

- Temperature may be elevated to 38° C for up to 24 hours after birth
- Temperature may be increased for 24 hours after the milk comes in

Postpartum Changes in Lab Values

- Hemoglobin, hematocrit difficult to interpret in first 2 days due to changes in blood volume
- Nonpathologic leukocytosis occurs in the early postpartum period [WBC up to 30,000/mm³]
- Blood loss averages 200 to 500 mL (vaginal), 700 to 1000 mL (cesarean)
- Plasma levels reach the prepregnant state by 4 to 6 weeks postpartum

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Postpartum Changes in Lab Values

- Platelet levels fall down due to placental separation & will return to normal by the sixth week
- Diuresis helps decrease extracellular fluid
- Cardiac output returns to normal by 6 to 12 weeks
- Most common neurologic symptom is headache

Postpartum Weight Changes

- Initial weight loss of 10 to 12 lb
- Postpartum diuresis causes a loss of 5 lb.
- Return to prepregnant weight by the sixth to eighth week

Common Discomforts

- Tremors or chills
- If not followed by fever, of no clinical concern

Common Discomforts

- Postpartum diaphoresis due to elimination of extra fluids & waste products
- Sweating episodes at night
- Perspiration not clinically significant
- Afterpains
- More common in multipara
 - Last 2–3 days
 - Stimulated by breastfeeding or oxytocic agents

Psychologic adjustments that normally occur during the postpartum period

Postpartum Blues

- Transient period of depression; sometimes occurs during the first few days postpartum
 - Mood swings
 - Anger
 - Weepiness
 - Anorexia
 - Difficulty sleeping
 - Feeling of being let down

Causes of Postpartum Blues

- Changing hormones
- Fatigue
- Lack of a supportive environment
- Resolves within 10-14 days

Support

- Family relationships become very important after birth
- Contact with parents of small children is also important
- Women with no family or friends may need a support group or postpartum doula to help her adjust to her new role as mother

Postpartum Nursing Assessment

Risk Factors

- Risk factors for development of complications include:
 - Preeclampsia
 - Diabetes
 - Cardiac disease
 - Cesarean birth
 - Overdistention of uterus
 - Abruptio placentae, placenta previa
 - Difficult birth

TABLE 33–2 Postpartum High-Risk Factors

Factor	Maternal Implication
Preeclampsia	↑ Blood pressure ↑ CNS irritability → ↑ risk for seizure ↑ Need for bed rest → ↑ Risk of thrombophlebitis
Diabetes	Need for insulin regulation Episodes of hypoglycemia or hyperglycemia ↓ Healing
Cardiac disease	↑ Maternal exhaustion
Cesarean birth	↑ Healing needs ↑ Pain from incision ↑ Risk of infection ↑ Length of hospitalization Exacerbation of carpal tunnel syndrome
Overdistention of uterus (multiple gestation, polyhydramnios)	↑ Risk of thrombophlebitis (cesarean section [C/S] risk) ↑ Risk of problems breastfeeding (C/S risk) ↑ Risk of hemorrhage ↑ Risk of anemia ↑ Stretching of abdominal muscles ↑ Incidence and severity of afterpains

TABLE 33–2 Postpartum High-Risk Factors

Factor	Maternal Implication
Abruptio placentae, placenta previa	Hemorrhage → anemia ↓ Uterine contractility after birth → ↑ Infection risk
Precipitous labor (less than 3 hours)	↑ Risk of lacerations to birth canal → hemorrhage
Prolonged labor (greater than 24 hours)	Exhaustion ↑ Risk of hemorrhage Nutritional and fluid depletion ↑ Bladder atony and/or trauma ↑ Pain and bruising from prolonged time in stirrups
Difficult birth	Exhaustion ↑ Risk of perineal lacerations ↑ Risk of hematomas ↑ Risk of hemorrhage → anemia
Extended period of time in stirrups at birth	↑ Risk of thrombophlebitis
Retained placenta	↑ Risk of hemorrhage ↑ Risk of infection

Principles of Conducting a Postpartum Assessment

- Select appropriate time
- Explanation the purpose
- Ensuring that the woman is relaxed
- Recording and reporting the results clearly

Vital Signs

- Elevated temperature should last only 24 hours
- Increase in BP should be transient
- Pulse rate may be slow
- Breath sounds should be clear

Postpartum Assessment [BUBBLE HE]

- B – Breasts
- U – Uterus
- B – Bowel
- B – Bladder
- L – Lochia
- E – Episiotomy/Lacerations
- H – Homan's/Hemorrhoids
- E – Emotions

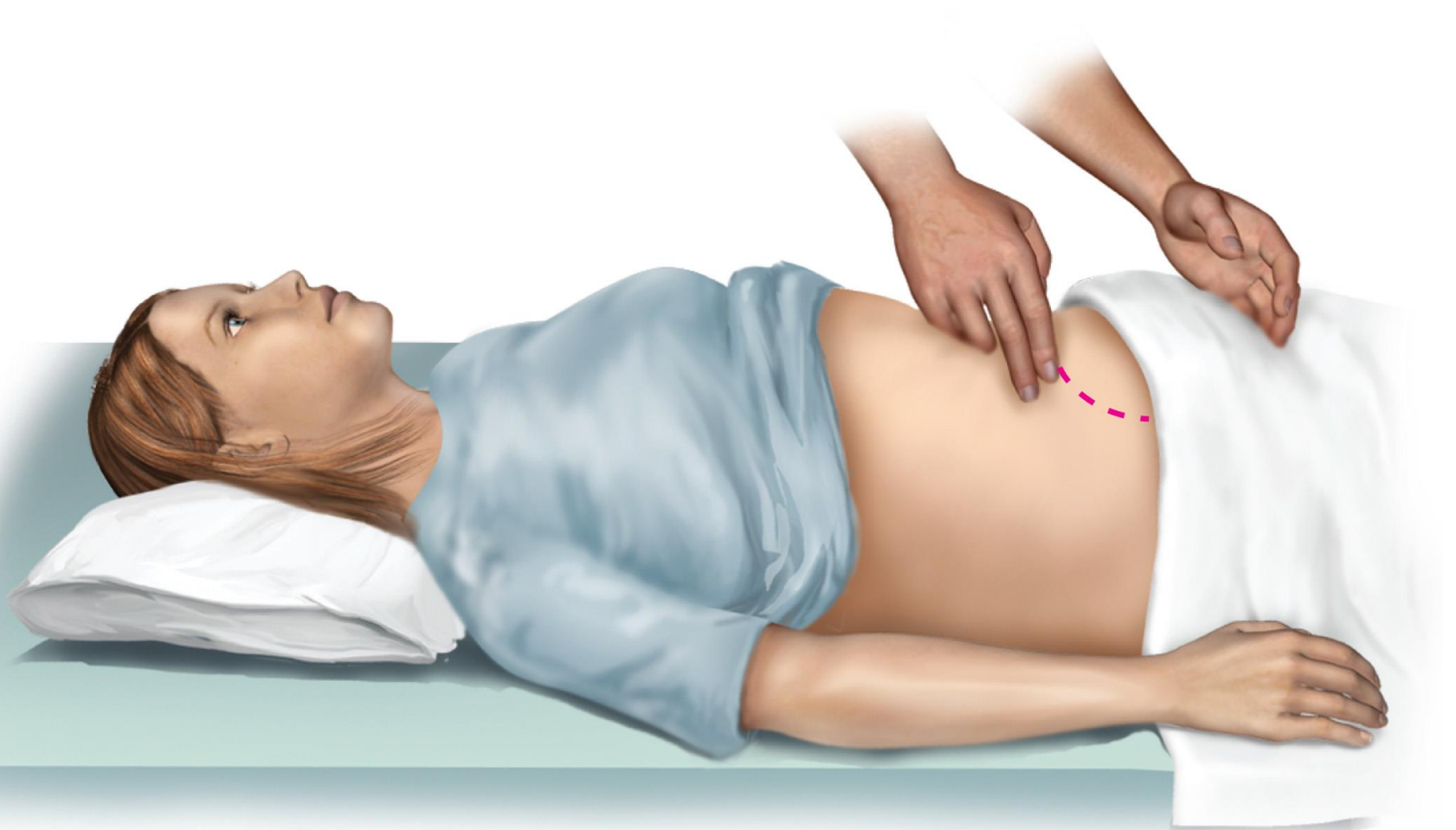
Breast Assessment

- Size and shape
- Abnormalities, reddened areas, or engorgement
- Presence of breast fullness due to milk presence
- Assess nipples for cracks, fissures, soreness, or inversion
- Properly fitting bra

Abdominal Assessment

- Position of fundus related to umbilicus
- Position of fundus to midline
- Firmness
 - Well-contracted uterus is firm.
 - Boggy uterus does not contract
- Assess incision for bleeding, approximation, and signs of infection

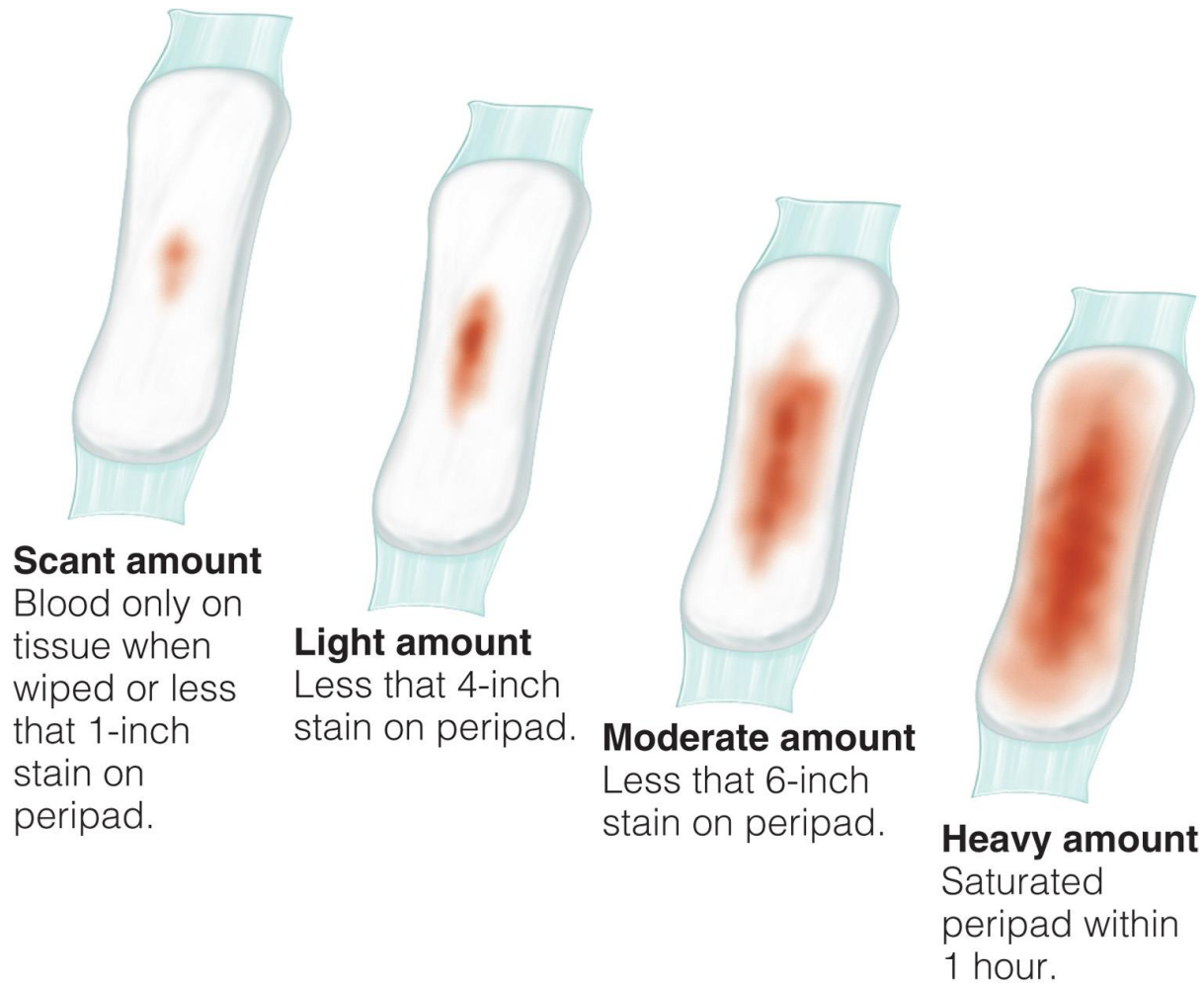
Figure 33–6 Measuring the descent of the fundus for the woman having a vaginal birth. The fundus is located two fingerbreadths below the umbilicus. Always support the bottom of the uterus during any assessment of fundus.



Assessment of Lochia

- Assess lochia for amount, color, and odor
- Presence of any clots
 - Should never exceed moderate amount
 - Assess blood pressure, pulse, and uterus frequently if large amount
- Teach the patient
 - Normal changes of lochia
 - Effect of position on lochia
 - Hygienic measures

Figure 33-7 Suggested guidelines for assessing lochia volume.



Assessment of Perineum

- Wound is assessed for approximation, redness, edema, ecchymosis, and discharge
- Presence of hemorrhoids
- Efficacy of any comfort measures

Assessment of Extremities

- Homans' sign
- Assess legs for edema, redness, tenderness, and warmth
- Ambulate to prevent thrombophlebitis
- Teach signs of thrombophlebitis



Assessment of Bowel and Bladder

- Bladder distention
- Complete emptying of the bladder
- Urinary tract infection
- Intestinal elimination
- Maternal concerns regarding bowel movements

Assessment of Psychological Adaptation and Nutrition

- Fatigue
- Adequacy of sleep
- Nutritional status
 - Breastfeeding mothers increase intake by 300 kcal
 - Nonbreastfeeding mothers decrease intake by 200 kcal

Learning Outcome 29-4

Describe the common concerns of the mother that are considered in a postpartum assessment.

Maternal Teaching During Assessment

- Breast care: breast milk production, Let-down reflex, breast self-examination
- Perineal care: hygiene, kegel
- Incision care
- Abdominal tightening exercises
- Physical & anatomic changes
- Nutrition

Postpartum Concerns of the Mother

- Vaginal bleeding (gushing of blood after lying for long periods of time)
- Passing clots
- Night sweats
- Afterpains
- Weight loss

Figure 30-2 Postpartum teaching. The nurse provides educational information to both parents.



Nursing care

Promotion and Restoration of Maternal Physical Well-Being

- Monitor uterine status, vital signs, cardiovascular status, elimination patterns, nutritional needs, sleep and rest, and learning needs
- Medication to relieve pain
- Treat anemia

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Promotion and Restoration of Maternal Physical Well-Being

- Prevent development of antibodies in the nonsensitized Rh-negative woman
- Promote comfort and relieve stress

Relief of Perineal Discomfort and Hemorrhoids

- Perineal discomfort
 - Promote effective perineal care
 - Ice packs, sitz baths, and topical agents

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Relief of Perineal Discomfort and Hemorrhoids

- Hemorrhoidal discomfort
 - Sitz baths, topical anesthetic ointments, rectal suppositories, or witch hazel pads
 - Assume side-lying position when possible and avoid prolonged sitting
 - Adequate fluid intake and stool softeners

Afterpains

- Prone positioning with a pillow beneath the abdomen
 - May at first intensify the discomfort for about 5 minutes, but discomfort then diminishes greatly if not completely

Discomfort Caused by Immobility, Stirrups, and Extreme Positioning

- Early ambulation
 - Reduces incidence of complications such as constipation and thrombophlebitis
 - Promotes feeling of general well-being
- Nurse provides information about ambulation and the importance of monitoring

Postpartum Diaphoresis

- Clean bed linen
- Cool shower
- Warm or cool cloth
- Warm or cool beverage

Suppression of Lactation in the Nonbreastfeeding Mother

- Tight-fitting sports bra
- Apply ice to breasts
- Avoid breast stimulation

END