

## LABOR: Stage III (Placental Expulsion)

Stage III of labor begins with the birth of the baby and is completed with placental separation and expulsion. Lasting anywhere from 1–30 min, with an average length of 3–4 min in the nullipara, and 4–5 min in the multipara, this stage is the shortest. Careful management and monitoring are necessary, however, to prevent short- and long-term negative outcomes.

### CLIENT ASSESSMENT DATA BASE

#### Activity/Rest

Behaviors may range from excitement to fatigue.

#### Circulation

BP increases as cardiac output increases; then returns to normal levels shortly thereafter. Hypotension may occur in response to analgesics and anesthetics. Pulse rate slows in response to change in cardiac output.

#### Food/Fluid

Normal blood loss is <500 ml.

#### Pain/Discomfort

May complain of leg/body tremors/chills, leg cramps

#### Safety

Manual inspection of uterus and birth canal determines presence of tears or lacerations. Extension of the episiotomy or birth canal lacerations may be present.

#### Sexuality

Dark vaginal bleeding beginning as a trickle occurs as the placenta separates from the endometrium, usually within 1–5 min after delivery of the infant. Umbilical cord lengthens at vaginal introitus. Uterus changes from discoid to globular shape and rises in abdomen.

### NURSING PRIORITIES

1. Promote uterine contractility.
2. Maintain circulating fluid volume.
3. Promote maternal and newborn safety.
4. Support parental-infant interaction.

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**NURSING DIAGNOSIS:****Risk Factors May Include:****Possibly Evidenced By:****Fluid Volume risk for deficit**

Lack/restriction of oral intake, vomiting, diaphoresis, increased insensible water loss, uterine atony, lacerations of the birth canal, retained placental fragments

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

**DESIRED OUTCOMES/EVALUATION  
CRITERIA—CLIENT WILL:**

Display BP and heart rate WNL, palpable pulses.  
Demonstrate adequate contraction of the uterus with blood loss  
WNL.

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**ACTIONS/INTERVENTIONS**

**RATIONALE**

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**Independent**

Instruct the client to push with contractions; help direct her attention toward bearing down.

Client attention is naturally on the newborn; in addition, fatigue may affect individual efforts, and she may need help in directing her efforts toward assisting with placental separation. Bearing down helps promote separation and expulsion, reduces blood loss, and enhances uterine contraction.

Assess vital signs before and after administering oxytocin.

Hypertension is a frequent side effect of oxytocin.

Palpate uterus; note “ballooning.”

Suggests uterine relaxation with bleeding into uterine cavity.

Monitor for signs and symptoms of excess fluid loss or shock (i.e., check BP, pulse, sensorium, skin color, and temperature). (Refer to CP: Postpartal Hemorrhage.)

Hemorrhage associated with fluid loss greater than 500 ml may be manifested by increased pulse, decreased BP, cyanosis, disorientation, irritability, and loss of consciousness.

Place infant at client’s breast if she plans to breast-feed.

Suckling stimulates release of oxytocin from the posterior pituitary, promoting myometrial contraction and reducing blood loss.

Massage uterus gently after placental expulsion.

Myometrium contracts in response to gentle tactile stimulation, thereby reducing lochial flow and expressing blood clots.

Record time and mechanism of placental separation; i.e., Duncan’s mechanism (placenta separates from the inside to outer margins) versus Schulze’s mechanism (placenta separates from outer margins inward).

Separation should occur within 5 min after birth. The Duncan’s mechanism of separation carries increased risk of retained fragments, necessitating close inspection of the placenta. Failure to separate may require manual removal. The more time it takes for the placenta to separate, and the more time in which the myometrium remains relaxed, the greater the blood loss.

Inspect maternal and fetal surfaces of placenta. Note size, cord insertion, intactness, vascular changes associated with aging, and calcification (which possibly contributes to abruption).

Helps detect abnormalities that may have an impact on maternal or newborn status.

Obtain and record information related to inspection of uterus and placenta for retained placental fragments.

Retained placental tissue can contribute to postpartal infection and to immediate or delayed hemorrhage. If detected, the fragments should be removed manually or with appropriate instruments.

## Collaborative

Avoid excessive traction on umbilical cord.

Administer fluids through parenteral route.

Administer oxytocin (Pitocin) through IM route, or dilute IV drip in electrolyte solution, as indicated. IM methylergonovine maleate (Methergine) or prostaglandins may be given at the same time.

Obtain and record information related to inspection of birth canal for lacerations. Assist with repair of cervix, vagina, and episiotomy extension.

Assist as needed with manual removal of placenta under general anesthesia and sterile conditions.

Elevate fundus by dipping fingers down behind and moving uterine body up away from symphysis pubis.

Force may contribute to breakage of the cord and retention of placental fragments, increasing blood loss.

If fluid loss is excessive, parenteral replacement helps restore circulating volume and oxygenation of vital organs.

Promotes vasoconstrictive effect within the uterus to control postpartal bleeding after placental expulsion. IV bolus may result in maternal hypertension. Water intoxication may occur if electrolyte-free solution is used. Note: Methergine is contraindicated in presence of hypertension/hypotension.

Lacerations contribute to blood loss; can cause hemorrhage.

Manual intervention may be necessary to facilitate expulsion of placenta and stop hemorrhage.

May be requested by practitioner to facilitate internal examination.

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### NURSING DIAGNOSIS:

#### Risk Factors May Include:

#### Possibly Evidenced By:

#### DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:

### Injury, risk for maternal

Positioning during delivery/transfers, difficulty with placental separation, abnormal blood profile

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

Observe safety measures.

Be free of injury.

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## ACTIONS/INTERVENTIONS

## RATIONALE

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### Independent

Palpate fundus to note “ballooning” of uterus, and massage gently.

Helps identify relaxation of uterus and subsequent bleeding into the uterus and facilitates placental separation.

Gently massage fundus after placental expulsion. (Refer to ND: Fluid Volume, risk for deficit.)

Enhances uterine contraction while avoiding overstimulation/trauma to fundus.

Assess respiratory rhythm and excursion.

Clean vulva and perineum with sterile water and antiseptic solution; apply sterile perineal pad.

Remove client's legs simultaneously from leg supports, if used.

Assist in transfer from delivery bed to recovery cart, as appropriate.

Assess client's behavior, noting central nervous system (CNS) changes.

Obtain sample of cord blood; send to laboratory for blood typing of newborn and banking as desired. Record information regarding the sample being sent.

### Collaborative

Assist with episiotomy repair, as necessary.

Use ventilatory assistance if needed.

If uterine inversion occurs:

Administer volume replacement, insert indwelling urinary catheter; obtain blood type and cross-match; monitor vital signs, and maintain careful intake/output records.

Administer oxytocin IV, replace uterus under anesthesia, and give ergonovine maleate (Ergotrate) IM after replacement. Assist with packing of uterus, as indicated.

Administer prophylactic antibiotics.

With placental separation, danger exists that an amniotic fluid embolus may enter maternal circulation, causing pulmonary emboli, or that fluid changes may result in emboli mobilization.

Removes possible contaminants that might result in an ascending tract infection during postpartal period.

Helps avoid muscle strain.

Although many clients remain in labor/delivery bed for recovery period, if transfer is required, client may be unable to move lower limbs due to continued effects from anesthesia/leg "heaviness" or cramping.

Increased intracranial pressure during pushing and a rapid increase in cardiac output place the client with preexisting cerebral aneurysm at risk for rupture.

If infant is Rh-positive and client is Rh-negative, the client will require immunization with Rh immune globulin (Rh Ig) in the postpartal period. (Refer to CP: The Client at 4 Hours to 2 Days Post Partum.) Note: Banking of cord blood is suggested in presence of strong family history of leukemia/other cancers, or for minorities who are significantly underrepresented in bone marrow donor programs. Cord blood may also be donated for the use of others.

Approximation of edges facilitates healing.

Respiratory failure may occur following amniotic or pulmonary emboli.

Rapid maternal hemorrhage and shock follows inversion, and immediate lifesaving interventions may be necessary. Kidney function is a useful indicator of fluid volume levels/tissue perfusion. Promotes contractility of uterine myometrium.

Limits potential for endometrial infection.

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#### NURSING DIAGNOSIS:

**Risk Factors May Include:**

**Possibly Evidenced By:**

#### DESIRED OUTCOMES/EVALUATION

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#### Family Processes, risk for altered

Developmental transition (gain of a family member), situational crisis (change in roles/responsibilities)

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]

Demonstrate behaviors indicative of readiness to

**CRITERIA—CLIENT WILL:**

actively participate in the acquaintance process when both mother and infant are physically stable.

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**ACTIONS/INTERVENTIONS**

**RATIONALE**

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**Independent**

Facilitate interaction between the client/couple and the newborn as soon as possible after delivery.

Fosters the beginning of lifelong emotional ties between family members. Both mother and infant have a critically sensitive period during which interactional capabilities are enhanced.

Provide client and father with the opportunity to hold baby immediately after birth if infant’s condition is stable.

Early physical contact helps foster attachment. Fathers are also more likely to participate in infant caretaking activities and feel stronger emotional ties if they are actively involved with the infant soon after birth.

Delay installation of eye prophylaxis ointments (containing erythromycin or tetracycline) until client/couple and infant have interacted, and dim room lights.

Allows infant to open eyes fully to establish eye contact with parent(s) and actively participate in the interaction, free from the blurred vision caused by medication.

(Refer to CP: The First Hour of Life.)

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**NURSING DIAGNOSIS:**

**Knowledge deficit [Learning Need], regarding labor process**

**May Be Related To:**

Lack of information and/or misinterpretation of information

**Possibly Evidenced By:**

Verbalizations of questions/concerns, lack of cooperation

**DESIRED OUTCOMES/EVALUATION CRITERIA—CLIENT WILL:**

Verbalize understanding of physiological responses.

Actively engage in efforts to push to promote placental expulsion.

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**ACTIONS/INTERVENTIONS**

**RATIONALE**

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**Independent**

Discuss/review normal processes of stage III labor.

Provides opportunity to answer questions/clarify misconceptions, enhancing cooperation with regimen.

Explain reason for such behavioral responses as chills and leg tremors.

Understanding helps client accept such changes without anxiety or undue concern.

Discuss routine for recovery period during the first 4 hr following delivery. Orient client to new staff and unit if transfer occurs at the end of this stage.

Provides continuity of care and reassurance; enhances cooperation.

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**NURSING DIAGNOSIS:****Pain [acute]****May Be Related To:**

Tissue trauma, physiological response following delivery

**Possibly Evidenced By:**

Verbalizations, changes in muscle tone, restlessness

**DESIRED OUTCOMES/EVALUATION  
CRITERIA—CLIENT WILL:**Verbalize management/reduction of pain.

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**ACTIONS/INTERVENTIONS**

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**RATIONALE****Independent**

Assist with use of breathing techniques during surgical repair, as appropriate.

Breathing helps direct attention away from the discomfort, promotes relaxation.

Apply ice bags to perineum after delivery.

Constricts blood vessels, reduces edema, and provides local comfort and anesthesia.

Change wet clothing and bedding.

Promotes warmth, comfort, and cleanliness.

Provide a heated blanket.

Postdelivery tremors/chills may be caused by sudden release of pressure on pelvic nerves or may possibly be related to a fetus-to-mother transfusion occurring with placental separation. Warmth promotes muscle relaxation and enhances tissue perfusion, reducing fatigue and enhancing sense of well-being.