PREAMBLE

1. Intrapartum bladder care, including the prevention and management of postpartum urinary retention is of great clinical importance.

2. The following guidelines provide Registered Nurses and Licensed Practical Nurses in the Women’s and Newborn Health Program consistent direction for bladder assessment and care of the obstetrical patient during the intrapartum and postpartum period.

POLICY STATEMENTS

1. Registered Nurses and Licensed Practical Nurses will complete bladder assessments and provide bladder care as per the procedure and guidelines outlined in this policy to all patients admitted to the Women’s and Newborn Health Program for intrapartum and postpartum care.

2. An authorized prescriber’s order is required for the insertion of a urinary catheter. Refer to preprinted orders (Birth Unit Form # IWKBUIN and Postpartum Form # IWKROUPO).

GUIDING PRINCIPLES AND VALUES

1. Labor may result in displacement of the bladder and stretching of the urethra. Other factors that interfere with normal micturition include the numbing effect of anesthesia and
the temporary neural dysfunction of a traumatized bladder. These may cause decreased sensitivity. Thus, over-distention and incomplete emptying may occur.

2. Many risk factors have been identified for the development of postpartum voiding dysfunction, including the following:
   2.1. Primiparity
   2.2. Instrumental delivery
   2.3. Epidural analgesia
   2.4. Prolonged labor
   2.5. Perineal trauma

3. Signs of bladder distention include uterine atony reflected in increased lochia, displacement of the uterus to the right and significantly above the umbilicus, decreased urine output in comparison to oral and intravenous intake, and a “soft fullness” sometimes with a palpable margin in the suprapubic area.

4. The physiologic reversal of the extracellular or interstitial fluid accumulated during a normal pregnancy begins during the immediate postpartum period. Diuresis begins within 12 hours after birth and continues up to 5 days.

5. Postpartum diuresis combined with, at times, a large amount of IV fluids administered during labor can result in bladder filling in a short time. The patient should be encouraged to void as soon as possible after delivery to avoid bladder filling which can inhibit uterine contractions, thus predisposing to postpartum hemorrhage.

6. Some patients may report an urge but inability to urinate. Spontaneous voiding typically resumes by 6 to 8 hours after birth and bladder tone usually returns to normal by 5 to 7 days postpartum. The effects of trauma from labor on the bladder and urethra diminish during the first 24 hours, unless a urinary tract infection is present.

7. Urine output varies amongst obstetrical patients’ and is dependent on their clinical status and total intake and output. Therefore, voiding/catheterizing times need to be individualized. For example, large outputs (greater than or equal 500 mL) will require an increase in the frequency of assessments/interventions.

8. Some patients require in/out catheterization to empty their bladder in the immediate postpartum period. Avoid rapid emptying of the bladder if catheterization is performed. No more than 800 mL of urine should be removed at one time. This can avoid a precipitous drop in intraabdominal pressure, which may result in splenic engorgement and hypotension.

**PROCEDURE**

1. Encourage patient to void every 2 hours.
2. Bladder assessment should include:
   2.1. Review of bladder activity (last time of void/catheterization, amount, description).
   2.2. Assessment of the patient’s need (i.e. urge to void).
      2.2.1. If she feels the **urge to void**:
         2.2.1.1. Assist up to void or give bedpan/commode.
2.2.1.2. Assess current void for amount (See definition of adequate voiding), color, consistency and odour.

2.3.1. If patient feels no urge to void assess/ palpate bladder for distention.

2.1.3.1 If bladder is distended, assist patient in getting up to void or give bedpan.

2.1.3.2 If able to void, assess the amount, color, consistency and odour (see definition of adequate voiding in Appendix A).

2.1.3.3 If unable to void and bladder is distended, perform in/out catheter as per physician preprinted orders.

3. When assessing bladder function, the following signs and symptoms may indicate a need for consultation with the attending physician to direct further investigation and/or intervention (examples: infection, retention, over distention):

3.3. Frequency of urination

3.4. Small frequent voids

3.5. Urgency (“must void now”, “cannot wait”)

3.6. Incontinence (including dribbling, involuntary urinating while pushing)

3.7. Hematuria

3.8. Pain in abdomen or subapubic area

4. Document on the permanent health record:

4.3. Bladder assessment and interventions,

4.4. The patient’s response to any interventions,

4.5. Intake and urine output.

INTRAPARTUM GUIDELINES

1. Complete a bladder assessment at a minimum frequency of every 2 hours during labour and encourage the patient to void as per the procedure outlined above on page 2.

2. Monitor oral and intravenous fluid intake and output hourly.

3. If patient unable to void and bladder distended, perform an in/out catheterization as per Birth Unit Orders (Form IWKBUIN). If in/out catheterization results are greater than 800mL, notify primary care provider for order to insert indwelling catheter for remainder of first stage of labor.

3.1. For second stage of labour, remove catheter and reinsert postpartum.

4. Based on bladder assessment and management during labour and in/out catheterization results following delivery:

4.1. If in/out catheterization results are between 800 and 1000 mL, insert indwelling catheter for 24 to 48 hours as per physician’s orders.

4.2. If greater than 1000 mL leave indwelling catheter in place for 5 to 7 days as per physician’s orders.

5. Consult Attending Physician to complete the referral to Healthy Recovery from Childbirth Clinic (HRCC). Contact Dr. Pearce/Dr. Amir/delegate for follow-up if ongoing problems. If patient had dense regional analgesia, operative delivery with significant edema with regional analgesia or 3rd/4th degree tear, patient may require a Physician’s order for the
insertion of indwelling catheter. The catheter should remain inserted for 24-48 hours postpartum.

POSTPARTUM GUIDELINES (See Appendix B: Postpartum Voiding Algorithm)

1. Interventions for bladder care may include orally administered analgesia (as per physician’s orders), mobilization, privacy, warm bath/sitz baths, and/or submerging hands in cold water.
2. Bladder assessment should occur at a minimum of every hour until voiding adequately (See Appendix A for definition of adequate voiding).
3. If a patient’s uterus is deviated from midline, the patient is having increased vaginal bleeding/trickling, or it has been 4 hours since bladder was emptied (i.e. since last void, in/out catheterization, or indwelling catheter removal) encourage patient to void.
4. If able to void, measure 1st and 2nd voids and document on Intake and Output Record.
   4.1. If patient voids adequately on the 1st and 2nd void, continue with routine bladder care and monitoring.
   4.2. If patient does not adequately void on the 1st or 2nd void, assess bladder and perform bladder scan.
      4.2.1. If bladder scans for less than 400mL, assess bladder every hour for two consecutive assessments.
      4.2.2. Encourage patient to void at a minimum of every 2 hours.
5. If the patient is still unable to void or is symptomatic (i.e. bladder scans for greater than 400 mL, uterus is deviated from midline, or patient is having increased PV bleeding or trickling) perform in/out catheter as per Post Partum Order (Form IWKROUPO) and document. If output from catheter is:
   5.1. Less than 800 mL: Restart the Postpartum Voiding Algorithm (See Appendix B) and complete the steps using the time that the bladder was emptied as the start time.
   5.2. Between 800 and 1000 mL: Notify care provider, obtain order and insert indwelling catheter for 24-48 hours.
   5.3. Greater than 1000 mL:
      5.3.1. Notify care provider, obtain order for indwelling catheter for 5-7 days and insert.
      5.3.2. Contact Dr. Pierce or Dr. Amir for follow-up while patient admitted to hospital (if weekend/holiday page next working day). If unable to contact Dr. Pierce or Dr. Amir, then call the patient’s attending to determine discharge and follow up plan.
      5.3.3. Complete and fax the HRCC referral form.
6. When completing the steps in the guidelines for a second time, if the patient scans for greater than or equal to 400 mL, has increased PV bleeding, trickling, uterus deviated from midline, an urge to void, or 6 hours have elapsed, and patient is unable to void, notify primary care provider and obtain order to insert indwelling catheter for 24 to 48 hours.
7. If the patient fails to void adequately after catheter has been in for 24 to 48 hours:
   7.1. Notify primary care provider.

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7.2. Obtain orders to insert indwelling catheter for 5 to 7 days.
7.3. Send urine sample for urinalysis and culture and sensitivity as per physician orders.
7.4. Contact Dr. Pierce or Dr. Amir for follow-up while in hospital (if weekend/holiday page next working day). If unable to contact Dr. Pierce or Dr. Amir, then call the patient’s attending to determine discharge and follow up plan.
7.5. Complete and fax the HRCC referral form.
REFERENCES


RELATED DOCUMENTS

Policies
IWK Health Centre Policy # 40050: Maternal Nursing Assessment for the Postpartum Patient
IWK Health Centre Policy # 7002: Patient Controlled Epidural Analgesia (PCEA) for Women in Labour

Forms
Post Partum Orders Form # IWKROUPO
Birth Unit Orders Form # IWKBUIN

Appendices
Appendix A – Definitions
Appendix B – Postpartum Voiding Algorithm
Appendix A

Definitions

**Diuresis**: an increased production of urine. It occurs in response to the decrease in estrogen that stimulated fluid retention during pregnancy, the reduction in venous pressure in the lower half of the body and the decrease in residual hypervolemia. Urine output may be 3000 mL or more each day.

**Micturition**: the act of passing urine; urination; contraction of the walls of the bladder and relaxation of the trigone and urethral sphincter in response to a rise in pressure within the bladder; the reflex can be voluntarily inhibited and the inhibition readily abolished to control **micturition**.

**Postpartum urinary retention**: the inability to completely void after giving birth.
- **Symptomatic (overt)**: the inability to void spontaneously within 6 hours of a vaginal delivery or 6 hours after the removal of an indwelling catheter after cesarean section requiring catheterization.
- **Asymptomatic (covert)**: a post void residual bladder volume of greater than or equal to 150 mL after spontaneous urination, verified by ultrasound or catheterization.

**Voiding adequately**: All of the following criteria must be met in order for a patient to be considered to be voiding adequately: two measured voids of greater than 150 mL, a steady stream of urine when voiding, and the bladder feels emptied by assessment and by patient self-report.
Appendix B

Postpartum Voiding Algorithm

Postpartum Voiding

Uterus deviated from midline OR Increased PV bleeding/trickling OR Urg to void OR 4 hours since bladder empty

Measure 1st void

Adequate?

YES → Can patient void?

Less than 800 mL

Notify care provider Obtain order and insert foley x 24-48 hr

Greater than 400 mL OR bleeding, trickling, deviated uterus, urge to void

Assess & bladder scan

Adequate?

YES → Measure 2nd void

NO → IN/OUT catheter and document

Adequate voiding:
- Measured greater than 150 mL
- Steady stream
- Completely emptying (Patient has no urge)

Assess bladder hourly x2.

Can patient void?

YES → Measure x 2 for voiding adequacy

NO → Assess bladder hourly x2.

Less than 400 mL

800 - 1000 mL

1000 mL or more

Notify care provider Obtain order for foley x5-7 days. Send referral to HRCC & page Dr. Pierce or Dr. Amir for follow-up. If weekend/holiday page next working day (If still unable to reach Dr. Pierce or Dr. Amir call attending physician attending to plan discharge and follow up)

If algorithm is being followed for a second time and patient scans for 400mL or more, has increased bleeding, trickling, deviated uterus, urge to void, or 6 hours has elapsed and patient is unable to void, notify care provider and obtain order for foley for 24-48hr

Restart Algorithm
District Health Authority/IWK Policies Being Replaced

(Please List)

### Version History

(To Be Completed by the Policy Office)

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