

PROTOCOL FOR: Epidural Anesthesia: Care of the Patient

- POLICY:**
1. Following a patient assessment by the physician, the anesthesiologist will be notified of the request for epidural anesthesia.
 2. An RN must remain with the patient at all times during the placement of the epidural. After the epidural has been placed and the patient is stable, the RN may leave the room. However, both side rails must be up and the call bell within reach if the patient is left alone.
 3. Bladder assessment must be made at least every hour and prn (i.e., following fluid bolus). Straight cath as needed or place Foley catheter as ordered.
 4. Continuous fetal monitoring must be maintained throughout initiation and for the duration of the epidural anesthesia/administration.
 5. Postpartum patients who have received epidural anesthesia for labor and have delivered will be considered at least a low risk level on the falls risk assessment for the period from delivery until the anesthesia effects are absent.

SUPPORTIVE

DATA: The epidural catheter size is 20ga and is threaded through a specialized 18ga epidural needle. The needle is inserted between the lumbar vertebrae so that the tip lies within the epidural space. The catheter tip can be advanced into the epidural compartment to any degree but most commonly it will be threaded at least 2-3cm to a maximum of 10cm.

DESIRED PATIENT

OUTCOME: The patient will be relieved of pain with minimal or no complications as a result of the epidural.

EPIDURAL PLACEMENT & ADMINISTRATION

**CLINICAL
ASSESSMENT AND**

- CARE:**
1. Obtain the patient's medical history for possible contraindications, such as:
 - a. Neurological abnormalities (i.e., multiple sclerosis)
 - b. Coagulation abnormalities (i.e., abnormal bleeding time, platelets < 100k, abnormal PT/PTT)
 - c. Skin infection at the site of insertion
 - d. History of back injuries/problems
 - e. Hypovolemia, bleeding
 2. Initiate maternal pulse oximeter monitoring. The anesthesiologist may order ECG or Doppler monitoring.
 3. Bolus the patient with at least 500cc of Lactated Ringers Solution prior to the procedure and maintain the IV rate of 125-150 cc/hr during epidural placement unless contraindicated.

PROTOCOL FOR: Epidural Anesthesia: Care of the Patient

4. Position the patient either side-lying or sitting as ordered by the anesthesiologist.
5. Place patient on automatic blood pressure machine and initiate BPs every 3 minutes during the epidural placement. After initiation of the block and with each successive dose, blood pressures must be taken at least every 5 minutes for 20 minutes and then every 15 minutes.
6. Position patient in a lateral tilt with a hip wedge after epidural has been placed. Uterine displacement must be maintained throughout epidural anesthesia to prevent hypotension and vena caval syndrome.
7. Patients with a continuous epidural infusion should be turned every hour to prevent the block from disappearing from the patient's elevated side. Assess for headache or neck pain which may indicate that the continuous epidural infusion rate is too high. Despite a continuous infusion, the block may descend and the patient may need to have a re-injection of the epidural medication to bring the block back to an acceptable level.
8. During or after placement, if the patient's blood pressure falls by more than 30% of systolic pressure or 15% of diastolic pressure from baseline values prior to epidural placement:
 - a. Begin an IV bolus of 500cc, preferably Lactated Ringers.
 - b. Secure left uterine displacement, preferably turn her to her left side.
 - c. Elevate the patient's legs on several pillows.
 - d. Administer O₂ at 10L/min by mask.
 - e. Notify anesthesia immediately.
 - f. Notify obstetrician.
 - g. Repeat BPs at least every 3 minutes until stable.
9. If the patient complains of inability to talk, facial numbness, difficulty breathing or appears confused or disoriented, frank convulsions may be imminent. Notify anesthesia and OB Physician immediately and be prepared to ventilate patient with 100% oxygen and assist with manual ventilation. If the patient has a continuous epidural infusion, immediately shut off the pump.

REPLACING MEDICATION BAGS ON CONTINUOUS EPIDURALS

1. Two RNs must check the infusion bag and confirm the rate prior to hanging a replacement bag.
2. For the Abbott Pump:
 - a. Press run/stop

PROTOCOL FOR: Epidural Anesthesia: Care of the Patient

- b. Change bag
 - c. Press #2 to set a "new container"
 - d. Press run/stop
3. If there is a need for a change in the concentration or the infusion rate, anesthesia must be notified to do this.

DISCONTINUING THE EPIDURAL INFUSION

1. The epidural infusion should be discontinued at the time of delivery unless an extensive repair or other complication is anticipated.
2. After discontinuation of the infusion during the immediate postpartum period, the patient should be assessed for fall risk and appropriate measures should be in place (i.e., room labeled for fall risk, patient to call for assistance, dangle legs before rising) until the effects of the anesthesia are absent. A fall risk identification bracelet is not required for this short term period of recovery, provided the patient is identified by a magnet on her door.
3. When the anesthesia effects are absent, assist patient to the bathroom on her first OOB experience after delivery.
4. After the first OOB experience when the patient has demonstrated the ability to self ambulate, she may be re-evaluated for fall risk and returned to universal status.
5. The epidural catheter after discontinuation of the infusion may remain in place during the recovery period until it is determined that no further intervention is necessary (i.e., D&C, hematoma evacuation, or a planned postpartum tubal ligation).
6. If a tubal ligation is planned, the catheter may be left in place when the patient is transferred to postpartum with an order from the anesthesiologist.
 - a. Disconnect the catheter from the tubing and cap the proximal end of the catheter with the red caps provided by the anesthesia department prior to transfer.

REMOVAL OF EPIDURAL CATHETER

1. Peel off the adhesive dressing and ask the patient to lean forward, which will open the intervertebral space. The catheter position is maintained only by a sterile adhesive dressing applied to the patient's skin in the lumbar area. The tissues through which the catheter passes will provide a small degree of retention.
2. Grasp the catheter with a gloved hand and attempt to withdraw the catheter smoothly. This should result in the catheter easily being withdrawn from the patient. Do not attempt to jerk or rapidly pull the catheter out. It should be virtually pain-free for the patient so there is no need to rush. If the catheter is trapped within the

PROTOCOL FOR: Epidural Anesthesia: Care of the Patient

spine, aggressive withdrawal forces could break off the tip of the catheter.

If the catheter does not easily come out, do not persist attempting to remove it but rather consult the obstetric anesthesiologist (voice pager # 567-0159).

3. After removal, examine the catheter tip. You should see a colored mark on the end of the catheter. If you have doubts about whether the catheter was removed intact, please consult the anesthesiologist.
4. Clean the lumbar area with a clean cloth and apply a Band-Aid or other dressing to the puncture site as you would after an IV removal.
5. Document the time of removal and whether the tip was intact.

APPROVAL: Department of Anesthesia
Nursing Standards Committee

EFFECTIVE DATE: 1985

REVISION DATES: 5/91, 8/91, 12/91, 9/93, 1/97, 3/00, 8/08

REVIEWED DATES: 5/09