

NURSING SERVICE GUIDELINES GENERAL

Guideline: Patient controlled epidural analgesia



Policy Number Superseded:

Responsibility: Registered Nurse (RN)

Effective Date:
May 2024

Purpose of Guideline: The patient will have adequate pain relief while maintaining satisfactory respiratory status.

Initial Effective Date:
March 2015

Procedure:

- (A) All epidural PCA orders, including bolus doses, must be ordered electronically through the Electronic Medical Record (EMR). Renewal of epidural PCA will be completed every 48 hours thereafter.
- (B) All additional narcotic medications orders for patients receiving continuous epidural infusion must be approved by the Anesthesiology Service prior to administration.
 - (1) No I.M., IV, P.O. opioids, sedatives, or benzodiazepine drugs are to be given to the patient except when ordered or approved by Anesthesiology.
 - (2) The patient will not receive anticoagulants, unless pre-approved by Anesthesiology, while the epidural catheter is in place. The pre-approval of anticoagulants must be clearly documented in the patient's chart.
- (C) An Epidural identification sticker must be placed on the IV tubing throughout the use of the continuous epidural infusion. A sign clearly stating, "Epidural Infusion," will be prominently placed on the wall above the head of the patient's bed.
- (D) Maintain IV access by drip or saline lock during epidural infusion and for 8 hours after discontinuation.

- (E) When a PCEA is initiated, a new syringe is added, setting changes are performed, or upon receiving a transfer patient, a second nurse must check the medication concentration and all pump settings and electronically co-sign, along with first nurse in the EMR.
- (F) Time of initiation of each bag must be recorded, as well as completing all documentation related to administration or wastage as defined in the narcotic policy.
- (G) Documentation must include infusion rate or PCEA settings, respiratory rate, blood pressure, pulse, pain rating, neuro checks, and sedation rating:
 - (1) Upon initiating the infusion or an increase in the setting.
 - (2) Every 1 hour for 12 hours.
 - (3) Then after the first 12 hours, monitor the respiratory rate every 2 hours if > 12, until 8 hours after epidural is discontinued.
 - (4) If respiratory rate \leq 10 per minute, remain at bedside, stimulate patient, and prepare to administer naloxone 0.2 mg over 1 minute, or if patient becomes unarousable during epidural use. Naloxone 0.2 mg over 1 minute may be repeated for a total of 2 doses. Prepare naloxone by mixing 0.4 mg (1ml) with 9 ml of normal saline, each 5ml contains 0.2 mg.
 - (5) Neuro checks every 2 hours until 12 hours after epidural is discontinued.
 - (6) Other vitals as per primary service.
- (H) Notify anesthesiologist on-call for:
 - (1) Reicher of 2 or less.
 - (2) Respiratory rate <10 per minute or less, or with pulse ox reading of 92% or below the patient's base line.
 - (3) Systolic blood pressure of <100 mmHg or when less than 20% of baseline.
 - (4) Inadequate level of analgesia.
 - (5) Temperature of 101.5 (38 C) or greater.
 - (6) Nausea or pruritis, not controlled by therapy.
- (I) Document the running total.
- (J) The pharmacy syringe is good for 24 hours. Date and time the medication syringe, and all epidural pump tubing is to be changed by the nurse every 72 hours.

- (K) After a loading dose is given the patient's blood pressure and respiratory rate should be checked at 10, 20, and 30 minutes after the loading dose or until stable.
- (L) Instruct patient to call for assistance when getting out of bed.
- (M) Instruct patient to report:
- (1) Nausea and vomiting.
 - (2) Itching.
 - (3) Numbness or weakness in legs.
 - (4) Difficulty or inability to void.
 - (5) Numbness or tingling in lips.
 - (6) Any changes in analgesia pattern.
- (N) Examine the dressing over epidural site every shift for intactness or dampness. Notify Anesthesia Service to change the dressing – nurses are not to change or remove the dressing over the epidural catheter.
- (O) Instruct patient on PCEA or continuous epidural infusion.
- (P) Upon discontinuation of epidural infusion, if respiratory rate >12, continue respiratory assessment every 2 hours for an additional 8 hours. If respiratory rate is 10 or less, call Anesthesiology Service immediately.
- (Q) Reference: Pandazi, A., Kanellopoulos, I., Kalimeris, K., Batistaki, C., Nikolakopoulos, N., Matsota, P., Babis, G. C., & Kostopanagiotou, G. (2013). Periarticular infiltration for pain relief after total hip arthroplasty: a comparison with epidural and PCA analgesia. *Journal of Orthopaedic & Trauma Surgery*, 133(11), 1607-12.

Approved by:

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