Epidural Analgesia and the COVID-19 Patient: Nursing Implications

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Background

- Epidural analgesia is not contraindicated in patients with suspected or confirmed COVID-19 infection.
- Epidural analgesia may decrease the need for general anesthesia in these patients.
- Induction of general anesthesia, endotracheal intubation and extubation are procedures with a high risk of aerosolized spread of the COVID-19 virus. These interventions should be avoided whenever possible.
- Some COVID-19 infected patients have developed thrombocytopenia. Consider checking a platelet count before proceeding with epidural analgesia.
- Epidural analgesia should be performed by the most experienced available anesthesia provider.
- Combined spinal epidural and dural puncture epidural techniques increase the success rate of epidural analgesia and decrease the need for supplemental provider-administered boluses.

Process

Personnel

- Anesthesiologist
- Second anesthesia provider
- Labor RN

Personal Protective Equipment (PPE)

- The anesthesiologist will don the appropriate hospital-prescribed PPE for a non-aerosol generating procedure.
- The RN will likely be in front of the patient and may be at increased risk for exposure to aerosol and droplet contamination. She should don appropriate hospital-prescribed PPE.

Process

- The anesthesiologist will don PPE and prepare the items needed for the procedure outside of the patient’s room.
- The anesthesiologist will not bring the entire epidural cart into the patient’s room. Instead, the anesthesiologist will use a small, mobile, easily cleaned cart.
- While the anesthesiologist is preparing for the procedure, the RN will don her PPE and enter the room to prepare the patient as follows:
  - Make sure that an epidural pump, power cord and patient control “button” are in the room.
  - Have the patient don a yellow facemask.
  - Apply blood pressure cuff and pulse oximeter
  - Position the patient:
    - Sitting

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- Have patient move to center of the bed. Try to avoid having her sit on the seam between the body of the bed and the foot piece.
- Have the patient move to the far edge of the bed opposite the fetal monitor. The patient will need to flex her hips and ideally cross her legs to sit comfortably in this position.
- Adjust elastic monitoring straps. Ideally, move one strap under the patient’s buttocks and slide other one up to her upper back.
  - Lateral
    - Have the patient roll on her side.
    - Have her move her hips and shoulders to the far edge of the bed.
    - The patient should flex her hips and knees as much as possible
    - Have the patient flex her neck and shoulders. Try to keep shoulders perpendicular to the bed. (Sometimes the top shoulder will rotate more than the bottom shoulder. This position can twist the spine.)
    - Adjust elastic monitoring straps. Ideally, move one strap under the patient’s buttocks and slide other one up to her upper back.

- When everyone is ready, the anesthesiologist will enter the room wearing sterile gloves and will bring the prepared epidural cart.
  - The anesthesiologist will place, dose and secure the epidural catheter.
  - The anesthesiologist will program, connect and start the epidural pump.
  - The anesthesiologist will properly dispose the all used sharps and other supplies.
  - The anesthesiologist will wipe down the mobile cart with bleach wipes.
  - After making sure that the patient is comfortable and stable, the anesthesiologist will remove their PPE and leave the room.
- The labor RN will remain in the room and monitor the patient as per BMC policy.

Support Person

- The support person will remain in the labor room during the epidural insertion.
- The support person will usually sit near the entrance alcove.
- Occasionally, the support person may sit close to the patient to help translate and comfort.
- The support person does should wear appropriate hospital-prescribed PPE.

THANKS!!!

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