Implementation of a Postoperative Pain Management Program

Maverick
Regional Anesthesia Education, LLC
Why go to the effort?

- Patient satisfaction (superior analgesia, quicker recovery, reduced postanesthesia care time, reduced hospital in house days, etc.)
- Surgeon satisfaction
- Business satisfaction
It’s Jus Bidness!!

- If you do just ONE CPNB (BP) per day and average $25 per anesthetic unit:
  - $200 per Day
  - $1000 per Week
  - $52,000 per Year
  - Fem/Sciatic= $350/d; $1,750/wk; $91,000/yr.
Number One Priority:

The Block
Must, Must, Must

Work!!!!
Construct Protocols for:

- The Placement of CPNB catheters
- The Maintenance of CPNB catheters
- The Care of CPNB catheters
- The Removal of CPNB catheters
Construct:

- Patient information booklet
- Plan for adequate Informed Consent
- Record for Placement of Block Catheters
- Record for catheter Care and Removal
Form Alliances with:

- Operating Room Director
- Pain Service Director
- Orthopedic Surgeons
- Nursing Personnel
- Hospital Administrators
Implement 6 Month Evaluation Plan

- Financial Audit (how many, how much??)
- Patient Satisfaction/ Complications
- Method for tracking failed blocks
- Plan to make changes to protocols as needed.
Billing for PNBs

- Develop Charge Bundles:
  - Single Injection
  - CPNB
- All billing for POPM should include a Modifier -59 to distinguish the block from the intraoperative anesthetic technique.
- Add itemized lists of supplies to be added to the peri-operative charges
Separate Procedure Note:

- POPM blocks are Type 2 services
  - Not time based; 10 day bundle
- Anesthesia record should NOT mention the block performed
- Separate Provider should do block if possible
- Physician referral MUST be documented
- Indication for procedure Must be documented
# CPT Codes: Single Shots

<table>
<thead>
<tr>
<th>Injection Site</th>
<th>CPT Code</th>
<th>Units Charged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brachial Plexus</td>
<td>64415</td>
<td>8</td>
</tr>
<tr>
<td>Axillary</td>
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<td>8</td>
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<tr>
<td>Femoral</td>
<td>64447</td>
<td>7</td>
</tr>
<tr>
<td>Sciatic</td>
<td>64445</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>64450</td>
<td>5</td>
</tr>
</tbody>
</table>
# CPT Codes: CPNBs

<table>
<thead>
<tr>
<th>Catheter Site</th>
<th>CPT Code</th>
<th>Units Charged</th>
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<tbody>
<tr>
<td>Brachial Plexus</td>
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</tr>
<tr>
<td>Femoral</td>
<td>64448</td>
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</tr>
<tr>
<td>Lumbar Plexus</td>
<td>64449</td>
<td>12</td>
</tr>
<tr>
<td>Sciatic</td>
<td>64446</td>
<td>12</td>
</tr>
</tbody>
</table>
## ICD-9 Pain Diagnosis Codes

<table>
<thead>
<tr>
<th>Pain Site</th>
<th>ICD-9 Code</th>
<th>Pain Site</th>
<th>ICD-9 Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoulder</td>
<td>719.41</td>
<td>Hip</td>
<td>719.45</td>
</tr>
<tr>
<td>Upper Arm</td>
<td>719.42</td>
<td>Thigh/Groin</td>
<td>719.45</td>
</tr>
<tr>
<td>Elbow</td>
<td>719.42</td>
<td>Lower leg</td>
<td>719.46</td>
</tr>
<tr>
<td>Forearm</td>
<td>719.43</td>
<td>Knee</td>
<td>719.46</td>
</tr>
<tr>
<td>Wrist</td>
<td>719.43</td>
<td>Ankle</td>
<td>719.47</td>
</tr>
<tr>
<td>Hand</td>
<td>719.44</td>
<td>Foot</td>
<td>719.47</td>
</tr>
</tbody>
</table>
Neuraxial and Peripheral Nerve Block Procedure Note

Neuraxial / Peripheral Nerve Block requested for post-operative analgesia by Dr. ______________________

DIAGNOSIS:
☐ Post-operative ______________________ pain. (Body area)
☐ Post-operative pain expected to be/is inadequately managed by oral or I.V. medicines.
☐ Regional anesthetic expected to facilitate rehabilitation and/or timely discharge from facility.
☐ Other ______________________

PROCEDURE PERFORMED:
☐ Thoracic Epidural Level: _____________
☐ Lumbar Epidural Level: _____________
☐ Intraspinal Narcotics Level: _____________
☐ Interscalene
☐ Axillary
☐ Wrist
☐ Lumbar Plexus (Psoas Compartment)
☐ Sciatic (Classic, Parasacral, Anterior)
☐ Femoral
☐ Popliteal (Posterior or Lateral)
☐ Ankle
☐ Ultrasound
☐ Other ______________________

PROCEDURE DETAILS:
☐ Risks and benefits explained, informed consent obtained, and patient wishes to proceed.
☐ Conscious sedation with indicated monitors
☐ Patient positioned, pertinent anatomy defined, sterile technique
☐ Needle used:
☐ Loss of twitch @ #1 _____________ mA #2 _____________ mA
☐ Attempts:
☐ Medicines injected: ______________________ Amt: ______________________
☐ ______________________ Amt: ______________________
☐ ______________________ Amt: ______________________
☐ Intermittent aspiration during local anesthetic administration.
☐ No symptoms of intraneural or intravenous injection
☐ Patient tolerated procedure well.

COMMENTS:

__________________________________________

M.D.

OR-57 7/08 Date ______________ Time ______________
### Peripheral Nerve Block Analgesia Orders

**Department of Anesthesia**

**MEDICATIONS:** Place list of home meds, on chart for physician medication reconciliation.

- 100 ml Cassette (inpatient)
- 400 ml On Q pump (fill to 550 ml)
- 600 ml On Q pump

<table>
<thead>
<tr>
<th>Nerve Block</th>
<th>Medication</th>
<th>Concentration</th>
<th>Rate</th>
<th>Demand Dose</th>
<th>Lockout</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ml/hr</td>
<td>ml/hr</td>
<td>min</td>
</tr>
</tbody>
</table>

The following medications will be continued if nerve block is discontinued:

- Ketorolac 15 mg IM/IV every 6 hrs X 48 hrs (for patients greater than 65 yrs or Sgr greater than 2.0)
- Ketorolac 30 mg IM/IV every 6 hrs X 24 hrs
- Ketorolac 5 mg IM/IV, every 6 hrs PRN moderate pain (4-6) X 72 hrs (for patients greater than 65 yrs or Sgr greater than 2)
- Ketorolac 30 mg IM/IV every 6 hrs PRN moderate pain (4-6) X 72 hrs
- Acetaminophen 1000 mg IV over 15 min every 6 hrs X 48 hrs
- Acetaminophen 1000 mg IV over 15 min every 6 hrs PRN moderate pain (4-6) X 72 hrs

*Discontinue Acetaminophen IV when patient tolerating orals.*

When patient is tolerating PO may give:

- Hydrocodone/APAP 5/500 mg 1 PO every 4 hrs PRN mild pain (0-3)
- Hydrocodone/APAP 5/500 mg 2 PO every 4 hrs PRN moderate pain (4-6)
- Tramadol 50 mg PO every 6 hrs PRN mild pain (0-3)
- Tramadol 100 mg PO every 6 hrs PRN moderate pain (4-6)

Nausea/Vomiting

- Ondansetron 4 mg IV every 6 hrs PRN nausea/vomiting – 1st line agent
- Promethazine 12.5 IM every 4 hrs PRN nausea/vomiting – 2nd line agent

Sleep

- Zolpidem 5 mg PO QHS PRN insomnia (when patient tolerating oral medication)

**Additional Orders:**

**NURSING:**

- Vital signs
- Pain assessment
- Sedation and level of consciousness assessment
- Neuro checks for mobility, strength, and sensation
- While patient in PACU: perform assessments every 30 min
- After transfer to floor perform vital signs and assessments every 30 mins X 4 hrs, then every 4 hrs X 4, then every 4 hrs
- Maintain peripheral intravenous access unless ordered to discontinue

*Joint University patients only:*

Unless otherwise specified by physician, nursing to remove nerve block catheters on POD 42 AM per Peripheral Nerve Block Catheter Removal Protocol.

**These guidelines may need to be adapted to meet specific patient needs as determined by the physician.**

<table>
<thead>
<tr>
<th>Anesthesiologist Signature (Required)</th>
<th>Time</th>
<th>Date</th>
</tr>
</thead>
</table>

**NOTED BY (NURSE):**

<table>
<thead>
<tr>
<th>Time</th>
<th>Date</th>
</tr>
</thead>
</table>
General Instructions for Nerve Blocks

1. Nerve blocks are designed to minimize pain after surgery, not eliminate it completely. Some patients who have had similar surgeries with and without nerve blocks report a 90%+ reduction in their pain. Patients subsequently can get quite comfortable with pain medicines and/or nerve block infusions. It is common, however, for patients to magnify the small fraction of pain sensed since they have no reference to "unblocked" pain. Regrettably, some patients have removed their catheters thinking that the catheter is not working. Please consider this when you sense some discomfort.

2. A completely numb or paralyzed limb for 8-24 hours after surgery is possible. The nerve block will wear off gradually. You will experience some tingling and return of sensation and motion as your limb recovers. When you leave the hospital today, your limb may be completely numb. Please do not turn the pain pump off because of this initial numbness as it will most likely resolve in the middle of the night. If your numbness has worn off and you are able to move your arm/shoulder/knee/ankle and are having minimal pain, the block is most likely still working.

3. Be sure not to place your anesthetized limb on an object or in a position that may harm it. Your normal protective mechanisms are not intact and you may suffer burns, compression injuries, etc. Rest your limb on a pillow and move it slightly every hour or two.

4. Take your oral pain medicines when you begin to feel discomfort. Do not wait until the pain is intolerable as the medicines will not be as effective. It is not advisable to take pain medicines while you are pain free, as you risk nausea and other undesired side effects.

5. The symptoms of an adverse reaction to the local anesthetics in your nerve block are confusion, incoherent speech, ringing in one's ears or "tingling" around one's lips or a metallic taste in the mouth. If you notice these symptoms please turn off the pump and call the doctor or come to the emergency room.

6. Areas of numbness or tingling and some muscle weakness are normal while the catheter is in place. You should notify your anesthesiologist if any numbness or weakness persists for more than 24 hours after the catheter is removed.

7. Report any swelling or severe bruising at your nerve block site.

8. You may perform your physical therapy exercises as directed by your surgeon.

9. You may bathe via a sponge bath, as showering will likely dislodge the catheter. The catheters are held in place by the dressing and tape on your skin. They are quite resilient, however, excessive movement, pulling and friction can dislodge them. If the dressing appears to be pulling free, you may secure it with scotch tape. Avoid changing the dressing yourself as it is likely that you will pull the catheter out inadvertently.

10. A small amount of dark fluid around the nerve block catheter is normal. You may also see some clear fluid leaking around the catheter site and dressing. If you see the pump or tubing leaking, please call. This situation can be corrected.

11. If you feel that your arm or hand is too numb, you may turn off your pain pump temporarily or turn the rate down. Turn the pump back on or turn the rate up before it becomes too painful.
pump contains no narcotic so you may also take your oral pain medication. Do not take your
pain pills if you are not having pain.

13. Occasionally, you may see air bubbles in the tubing. They are harmless.

14. To remove the catheter: 1) Wash hands 2) Remove the dressing 3) Gently pull the catheter out
   and discard it.

15. When you pull the catheter look at the tip of it. It has a small mark on the tip of it that indicates
   that it is intact. If you think that the full catheter is not intact, please save the catheter and bring it
   to the anesthesiologist.

16. Please call the Anesthesiologist on call for questions regarding your pain management so that we
   may help you troubleshoot your pump and help you maintain maximum comfort.

17. Someone from Brazos Anesthesiology will call you every day. If you get a message and do not
   need any assistance, you do not need to call us back.

Surgery: __________________ Type of Peripheral Nerve Block __________________

Medication in Pump: __________________ Rate: __________________

Remove Catheter on: __________________ Witness: __________________

Shoulder/Interscalene Nerve Block
Common Side Effects:

- Shortness of Breath (try resting in a recliner or with some pillows propped behind you)
- Horseness
- Eyelid sag and warm dry face on surgical side
- Facial Numbness on surgical side

Femoral/Sciatic—Knee/Ankle
Common Side Effects:

- Thigh/leg/ankle/foot/toe numbness and weakness
- Tingling in extremity

Contact Information:

Pager (Day or Night): ____________
(call and put your phone number in and press #)

Office (only daytime): ____________
# Outpatient Pain Management Progress Note

<table>
<thead>
<tr>
<th>Date</th>
<th>PODM</th>
<th>Office Visit</th>
<th>Telephone</th>
<th>No answer</th>
<th>Left message</th>
<th>Pump settings</th>
<th>Medication</th>
<th>Basal Rate</th>
<th>PCA</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VAS at rest</td>
<td>VAS with activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

- VAS: Visual Analog Scale
- PODM: Postoperative Day Management
- Office Visit: Office Visit Notes
- Telephone: Telephone Notes
- No answer: No Answer Notes
- Left message: Left Message Notes
- Pump settings: Pump Settings Notes
- Medication: Medication Notes
- Basal Rate: Basal Rate Notes
- PCA: Patient Controlled Analgesia
- Volume: Volume Notes

**Verbal Analog Scale for Pain (VAS):**
- 0 = no pain
- 10 = worst imaginable pain

**Satisfaction Scale at time of service completion:**
- 1 = poor
- 5 = very satisfied


Questions?

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