

# NICU Post-Operative Pain Management Guidelines

v.8/4/25

These guidelines are intended for patients that are opioid-naïve. Discuss alternative regimens for any patient that meets *opioid-tolerant* criteria with multidisciplinary team.

- Use non-pharmacological pain management tools as a first step.
- **Opioid tolerant patient:** any patient exposed to more than 5 days of scheduled or continuous opioids within the past 28 days
- **Uncontrolled pain:** NPASS greater than two above baseline after two consecutive interventions
- Infants older than 3 months of age may require higher doses of enteral morphine. Please discuss with the pharmacist if the first dose does not appear to help with pain within 1 hour of administration.
- **Post-operative assessment:**
  - BP, HR, RR and SPO2, TC02 with pain & sedation score Q 15 min X 4; then Q 30 min x 2; then Q1 hour until stable, then assess pain & sedation scores q3 hours for 12 hours post-op
  - Continuous infusion: complete pain and sedation assessment q1 hour.
  - Document nonpharmacologic and pharmacologic interventions
  - Reassessment: 2 hours after oral pain medication and 1 hour after IV/IM pain medication
  - Sedation score to be completed with scheduled VS and Pain score for 12 hours post administration of Pain or Sedation medication.

Surgical Procedure Category (see appendix A):	0-24 hours	24-48 hours	48-72 hours
White	Acetaminophen every 6 hours IV/PO <b>PRN</b> x 48 hours		Stop Acetaminophen (can resume PRN q 6-hour dosing if PRN Morphine was used)
If pain is not well controlled (NPASS score > 2 above baseline)	Morphine: IV 0.025-0.05 mg/kg every 4 hours PRN x 24-48 hours PO 0.05mg/kg every 4 hours PRN x 24-48 hours		

Surgical Procedure Category (see appendix A):	0-24 hours	24-48 hours	48-72 hours
Green	Acetaminophen scheduled Q6 hours	Acetaminophen scheduled Q6 hours	Acetaminophen PRN q 6 hours x 24 hrs
If pain is not well controlled (NPASS score >2 above baseline)	Morphine: IV 0.025-0.05 mg/kg Q4h PRN x 48 hrs PO 0.05-0.1 mg/kg Q4h PRN x 48 hrs		
Surgical Procedure Category (see appendix A):	0-24 hours	24-48 hours	48-72 hours
Yellow	Scheduled Acetaminophen every 6 hours x72 hours		
	Morphine: IV 0.05-0.1 mg/kg Q4h PRN PO 0.15 mg/kg Q4h PRN	Morphine: IV 0.025-0.05 mg/kg Q4h PRN x 48 hours PO 0.1 mg/kg Q4h PRN x 48 hours	
If pain is not well controlled (NPASS score >2 above baseline)	<ul style="list-style-type: none"> <li>• Increase Morphine frequency as needed</li> <li>• Consider opioid continuous infusion if pain is refractory to intermittent dosing. <ul style="list-style-type: none"> <li>• Initiate Dexmedetomidine at 0.2 mcg/kg/hr if agitation appears to be a component of patient distress. Titrate drip by 0.1 mcg/kg/hr to max of 1.5 mcg/kg/hr.</li> </ul> </li> <li>• Consider Lorazepam 0.05mg/kg IV Q6h PRN for agitation.</li> </ul>		
Surgical Procedure Category (see appendix A):	0-24 hours	24-48 hours	48-72 hours
Red	Scheduled Acetaminophen Q6 hours x72 hours		
	<ul style="list-style-type: none"> <li>• Morphine IV 0.1 mg/kg Q1 hr PRN until drip starts</li> <li>• Begin Morphine continuous infusion at 20 mcg/kg/hr</li> <li>• Morphine IV 0.05 mg/kg every 3 hours PRN</li> <li>• Wean drip as able if patient's pain is well controlled.</li> </ul>		
If pain is not well controlled (NPASS score >2 above baseline)	<ul style="list-style-type: none"> <li>• Titrate Morphine infusion by 10 mcg/kg/hr to a max of 50 mcg/kg/hr.</li> <li>• Initiate Dexmedetomidine at 0.2 mcg/kg/hr if agitation appears to be a component of patient distress. Titrate drip by 0.1 mcg/kg/hr to max of 2 mcg/kg/hr. Consider Dexmedetomidine load if established term infant.</li> <li>• Consider Lorazepam 0.05mg/kg IV Q6h PRN for agitation</li> </ul>		

White	Green		Yellow	Red
Bronchoscopy	Cardiac cath	Orchiopexy/Orchiectomy	Anoplasty/Imperforate anus/ pull through	CDH repair (see CDH algorithm)
Cystoscopy	Chest Tube Placement/Removal	Peritoneal dialysis catheter placement	Choanal atresia	Teratoma resection
Endoscopy	Cholangiogram/liver biopsy	Pyloromyotomy	Duodenal atresia	Trans-abdominal rectopexy
Esophageal balloon dilation	Circumcision (OR)	Supraglottoplasty	Gastroschisis	Trach (will have its own post op order set)
External ventricular drain	Encephalocele	Umbilical hernia repair	Laparotomy (may use block)	
Myringotomy & tube placement	Depressed ping pong skull fracture	Urologic procedures (ureterostomy, vesicostomy, nephrostomy, valve ablation, ureterocele)	Mandibular distraction	
Nasal/lacrimal duct probe & stent	Hemodialysis catheter placement	VP & Subgaleal shunt	Mandibular distraction (hardware removal)	
Removal and placement of ureteral stent	Hydrocelectomy		Nephrectomy (may use block)	
ROP surgery	Inguinal hernia repair		Omphalocele	
Suction rectal biopsy	Laparoscopic G-Tube		Open G-Tube	
Vaginoscopy	Muscle Biopsy		Pyeloplasty (may use block)	
	Myelomeningocele		Pyiform aperture stenosis	
	Nasal endoscopy & dilation		TEF/EA	
			Thoracotomy (may use block)	