

Acute Pain Assessment

Pain Assessment

1. Assessment on initial evaluation
2. Assessment per unit standards
3. Assessment with change in condition
4. Assessment before & after pain intervention
5. Assessment per CHOC Policy for patients on advanced pain therapies (PCA, epidural, on-q pump, ketamine)

Pain Pathway

Choose pain scale

Scale	Population
Revised FLACC Scale (rFLACC)	Infants, toddlers, other pre/non-verbal patients
FACES Pain Scale–revised (FPS-R)	Children > 3 years
Numerical Rating Scale (NRS)	Children > 10-12 years
Neonatal Pain Assessment & Sedation Scale (N-PASS)	Neonates and infants vented/sedated, residing in NICU only

Mild Pain

Non-Opioid ± Adjuvant

Moderate to Severe pain

Opioid ± Non-Opioid ± Adjuvant

Acute Pain Management

Adjuvants—steroids, neuropathic agents, antidepressants, muscle relaxants, alpha-adrenergic agonist, topical local anesthetic (lidocaine, capsaicin)

- Oral dosing of medications whenever possible
- Around –The-Clock, rather than On-Demand administration
- Analgesics prescribed according to pain intensity as evaluated by pain severity scale
- No standardized dosage in pain treatment
- Individualized therapy addresses concerns of patient. Balancing desired effects and minimizing side effects.

Non-pharmacological pain interventions —swaddling, sucrose, pacifier, calm environment, contact, cuddling, distraction, environmental stimulation, guided imagery, Traditional Chinese Medicine, meditation.

Use multi-modal approach in ALL pain management treatment.

Patient Controlled Analgesia (PCA)

- Self-administration of pre-programmed opioid medication via locked infusion pump. GOAL: optimal analgesia, minimize sedation.
- **Demand ONLY** PCA appropriate for severe intermittent acute pain relieved by PRN opioids.
- **CONTINUOUS** (CAUTION in opioid naïve) + **Demand PCA** appropriate for severe acute pain requiring scheduled opioids for control.
- For increased or persistent severe pain on PCA therapy:
 - * Re-educate patient on use of PCA
 - * Demand only PCA? Consider adding low basal rate
 - * Basal rate (+demand dose)? Consider increasing basal rate by 20%
 - * If 2+ PRN boluses required within 6 hour time frame, consider increasing PCA settings
- Operation of PCA dose by anyone else besides patient **PROHIBITED**. May cause excessive sedation -overriding “patient-controlled safety mechanism”.
- Requires assessment of pain intensity & sedation level. Refer to “Opioid Induced Side Effects” for guidelines on sedation/respiratory depression.
- Patients on continuous or around-the-clock opioid therapy 5 days or longer, must be weaned off and monitored for withdrawal symptoms. Utilize Withdrawal Assessment Tool (WAT-1).
- Refer to “Advanced Pain Therapy Care Guideline” on PAWS or Policy F929 (Patient-Controlled Analgesia)
- **Consult Pain Team for assistance in PCA management or Fentanyl PCA.**

Opioid	PCA dose	Lock-out Interval	Cont Dose (caution for opioid naïve patients)	Max Limit (1hr)
Morphine	0.01-0.02 mg/kg	10 min	0.01-0.02 mg/kg/hr	Total PCA dose+ Cont Dose in 1 hour
Dilaudid (hydro morphone)	0.002-0.004 mg/kg	10 min	0.002-0.004 mg/kg/hr	Total PCA dose+ Cont Dose in 1 hour

Epidural Management

Epidural & Nerve Catheters:

Contact On-Call Pain Team during weekdays.

After 4 pm weekdays & on weekends, notify anesthesiologist who placed catheter (contact info found in patient’s physical chart). If unable to get a hold of attending, contact OR control desk (ext. 19190) for alternate communication options or speak with on-call anesthesiologist.

Pediatric Acute Pain Management Reference Guide

Every patient at CHOC deserves to have their comfort managed



“Pain is whatever the experiencing person says it is, existing whenever the experiencing person says it does.” – McCaffery, 1968

Consult days: Monday-Friday, exception holidays. *Order for pain consult DOES NOT notify Pain Service. VOALTE or Page Pain Service.*

Nurse Practitioner:

Sue Park, CPNP
sue.park@choc.org
 Please contact on Voalte
 Ext. 14055

Director:

Dr. Da Wang
dwang@alliedanesthesia.com
 Pgr 714-432-2020

This document intended as reference material ONLY. NOT substitution for clinical judgment. Consider allergies, history, underlying condition, response to previous treatments, and concurrent therapies for management. Refer to CHOC Lexicomp for additional information.

Procedural Pain

- Long-term consequences of untreated procedural pain: needle phobia, pre-procedural anxiety, hyperalgesia, avoidance of healthcare, and increase in morbidity and mortality.
- Potentially painful minimally invasive procedures: venipunctures or uncomplicated dressing changes. More invasive procedures: complex wound care, lumbar punctures, fracture reductions, biopsies, etc.
- Pain is personal and influenced by biopsychosocial factors. Provide risk-minimizing, evidenced-based & multimodal approach.
- Ensure **CHILD LIFE** is involved for **ALL** procedural pain events.
- Evidenced based support for procedural pain:

Numbing Medicine: LMX, J-tip, Pain-Ease Spray

Comfort Positions: secure comfort holding. Never hold down.

Oral Sucrose: can be used in babies up to 12-15 months.

Distraction: Child Life, books, music, bubbles, videos

For invasive procedures: recommend systemic agents for support along with the above. May consult Pain Team for evaluation and recommendations for procedural pain support.

Complex Pain Team

- Consider Complex Pain Team consult for pain unresponsive to standard pain treatment, pain difficult to explain by organic pathology, and pain affecting many aspects of function.
- Multidisciplinary team (hospitalist, pain management, PT/OT, child psychologists, TCM and child life) with focus on pain reduction through functional rehabilitation, cognitive-behavioral techniques, traditional Chinese medicine, and sometimes medications.
- Please order "Complex Pain Team Consult" and Voalte, Dr. George Pechulis.

Low Dose Ketamine Infusion

*** Ketamine infusions and titrations started during the hours while Pain Service or Palliative is available ***

Recommended starting dose: 0.05 -0.1 mg/kg/hr (using ideal body weight for dosing for obese patients)

Analgesia: dosing range 0.05—0.3 mg/kg/hr **MAX**, unless permission given by Pain or Palliative Care Teams

End of life: dosing based on titration to clinical effect/comfort and to avoid occurrence of any undesirable dose limiting side effects. Max doses determined per patient’s clinic effect by the **Palliative Care Team**

Non-Opioid Adjuncts

Medication	Dose	Max Dose
PO Acetaminophen	15 mg/kg/dose Q6 hours	75 mg/kg/day OR 4000 mg/day
IV Acetaminophen < 2 y/o	7.5 – 15mg/kg/dose Q6 hours	60 mg/kg/day
IV Acetaminophen > 2 y/o	15 mg/kg/dose Q6 hours	75 mg/kg/day OR 3750 mg/day
PO Ibuprofen	5-10 mg/kg/dose Q 6-8 hours	40 mg/kg/day OR 2400 mg/day
IV Ketorolac	0.5 mg/kg/dose Q 6-8 hours	30 mg per dose max 5 days
PO Celecoxib	10-25 kg -----> >25 kg ----->	50 mg PO BID 100 mg PO BID

Oral Opioids

Opiate Combo	Dose	Max Dose
Hydrocodone/acetaminophen	0.1-0.2 mg/kg, Q 4-6 hrs	10 mg/dose
Oxycodone/acetaminophen	0.05-0.15 mg/kg, Q 4-6 hrs	10 mg/dose

Use Acetaminophen dosing guidelines per CHOC Lexicomp to stay under the maximum dose of Acetaminophen per kg/day

Parenteral Opioid

Start with conservative dosing for opioid naïve patients and titrate slowly (~25%) as needed. **Use ideal body weight for dosing.

Parenteral Opioid	Intermittent Dosing	Max
IV Morphine	0.05 - 0.1mg/kg/dose IV Q 2-4 hours PRN (moderate to severe pain)	4 mg/dose
IV Hydromorphone	0.015 mg/kg/dose IV Q 3-6 hours PRN (moderate to severe pain)	1 mg/dose

Opioid Conversion

- Lexicomp > Calculators > "Equianalgesic Dose Estimation (Opioids)
- Globalrph.com > Calculators > "Morphine Equivalent Dose (MED) - Opioid Conversions

When converting opiates, decrease dose by 25% – 50% due to incomplete cross-tolerance between opiates.

Opioid Induced Side Effect Treatment

NAUSEA	Ondansetron, Granisetron				
PRURITIS	Diphenhydramine Naloxone low dose infusion				
CONSTIPATION	"Mush and Push" – stool softer with osmotic laxative (osm) & stimulate GI with stimulant laxative (stim) MiraLax (osm) + colace (stim) Milk of Magnesia (osm) Bisacodyl suppository (stim)				
SEDATION	Obtain PASERO Opioid Sedation Scale (POSS) Score: POSS 3 , notify ordering medical staff, possibly reduce opioid by 25- 50% POSS 4 , STOP all opioids immediately, notify order medical staff, consider Naloxone partial reversion. RRT if indicated. Consider naloxone for oversedation if conservative measures show no effect Pasero Opioid-Induced Sedation Scale (POSS) 5 = Sleep, easy to arouse 1 = Awake and alert 2 = Slightly drowsy, easily aroused 3 = Frequently drowsy, arousable, drifts off to sleep during conversation 4 = Somnolent, minimal or no response to verbal and physical stimulation				
RESPIRATORY DEPRESSION	Respiratory depression – STOP infusion and administer reversal dose of naloxone if indicated. If patient is cyanotic and unresponsive, STOP all opiate infusion, call code white, assist ventilation and call for naloxone				
CAUTION in pre-prescribing opiates for at-risk opioid-induced respiratory depression patients: Obesity, History of snoring (OSA) Pneumonia, Requiring oxygen therapy, First 24 hours of opioid, Young age Craniofacial malformation, Cardiac disease, Polypharmacy, Continuous opioid infusions in opioid-naïve patients	<table border="1"> <tbody> <tr> <td>Naloxone (partial dose) *Recommended dosing*</td> <td>0.001mg/kg/dose IV Q2 mins until symptoms improved</td> </tr> <tr> <td>Naloxone (full reversal dose)</td> <td>0.1mg/kg/dose IV</td> </tr> </tbody> </table>	Naloxone (partial dose) *Recommended dosing*	0.001mg/kg/dose IV Q2 mins until symptoms improved	Naloxone (full reversal dose)	0.1mg/kg/dose IV
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