

MEDICAL CENTER

Chapter Clinical Practice

Guideline: Pediatric Pain Management Approval Date: September 2021

Review Date: September 2023

Applicable to
\square VUH \boxtimes VCH \square DOT \square VMG Off-site locations \square VMG \square VPH \square Other
Team Members Performing
□All faculty ☑ Faculty & staff ☑ MD ☑ House Staff ☑ APRN/PA ☑ RN □ LPN & staff providing direct patient care or contact □Other:
Content Experts
Ryan Stark, M.D. Assistant Professor of Pediatrics Division of Pediatric Critical Care Medicine
Anne L. Wagner, MD, FACS Burn Director, Vanderbilt Burn Center
Associate Professor of Surgery
Division of Acute Care Surgery

Table of Contents

I.	Purpose:
II.	Policy:
III.	Specific Information:
IV.	Patient/Family Education and Engagement:
V.	Documentation:
VI.	References:



I. Purpose:

To establish a comprehensive approach to the needs of pediatric burn patients who experience pain.

II. Policy:

Caregivers monitor patient's pain and take appropriate actions within their scope of practice.

III. Specific Information:

- A. Patient rights include an assessment and appropriate management of pain. This right is addressed in the following ways:
 - 1. Included in the Patient Bill of Rights, which is provided to each patient upon admission to the hospital and posted in each outpatient practice area;
 - 2. Included in patient teaching at the time of patient admission; and
 - 3. Included in Discharge Instructions.
- B. Pain management is a multidisciplinary responsibility:
 - 1. The patient's physician or other provider with prescriptive privileges is responsible to develop a plan and prescribe medications based on the patient's medical condition.
 - 2. RNs have responsibility for evaluating the effectiveness of pain management in the inpatient setting, to include the assessment of pain.
 - 3. Specialized consultative services are available to assist in pain management.

C. Determination of Pain:

1. Pain Scales:

Pain scales are age specific and in accordance with cultural and barrier findings. Pain scales may include assessment for behavioral cues, vocalization, nonverbal/verbal/physiologic cues of discomfort:

- a. Numeric;
- b. Wong-Baker Faces Scale;
- Neonatal Pain Agitation Sedation Scale (N-PASS);
- d. Neonatal Infant Pain Scale (NIPS); and
- e. Face, Legs, Activity, Cry, and Consolability (FLACC)



- 2. Alternate methods of evaluating pain include, but are not limited to the following:
 - Assume pain is present. For patients who are unable to communicate and who are experiencing conditions, problems or procedures known to cause pain, the nurse may assume that pain is present and consider appropriate interventions.
 - b. Surrogate report (as deemed appropriate by health care team).
- D. The pain intensity goal is established in collaboration with the patient, when possible, during initial comprehensive assessment using a numeric score. This goal will help the providers evaluate the effectiveness of pain interventions.
- E. Pain screening, assessment and reassessment:
 - 1) Initial pain screening addresses current and/or recent pain. This screening is performed:
 - a. Upon admission to the hospital;
 - b. During initial assessment and triage in the Emergency Department (ED); and
 - c. During preoperative evaluation or upon early morning admission, prior to going to any tests or procedures.
 - 2) Comprehensive Pain Assessment:
 - a. Based on patient's ability to communicate, may include elements such as:
 - i. Pain score;
 - ii. Location;
 - iii. Character;
 - iv. Pattern;
 - v. Intensity;
 - vi. What exacerbates pain;
 - vii. What helps to reduce pain; and
 - viii. Duration.
 - b. Performed in the following situations, but is not limited to:
 - i. Positive screen;
 - ii. Admission physical assessment; and
 - iii. Patient description of new or different type of pain.

3) Ongoing screening/assessment:

Performed in the following, but not limited to, situations to identify if a patient is currently experiencing pain:

- a. With initial physical assessment;
- b. With change in primary caregiver;
- c. With change in level of care; and
- d. After procedures including wound care, and before and after therapy sessions
- 4) Pain reassessment following intervention is performed:
 - a. At a frequency based on patient's condition, type and route of pharmacologic intervention.
 - b. Using appropriate scale for the patient's age, cultural background and condition. When possible, use one consistent tool for assessing pain when patient is awake.
 - c. If patient is sleeping, it is acceptable to document this as a response to intervention.
 - d. A reassessment is not required for doses of analgesics administered on a scheduled basis.
 - e. Using documentation system designated and appropriate for the clinical setting.
 - f. Based on patient presentation or change in patient condition when the patient is experiencing pain and requests intervention.
 - g. Factors determining reassessment criteria and frequency of review of pain goal may include, but are not limited to:
 - i. Current condition;
 - ii. Phase in episode of illness;
 - iii. Nature of treatments/procedures;
 - iv. Level of care;
 - v. Change in caregiver;
 - vi. Nature of goals to be met; and
 - vii. Other factors relevant to patient population (e.g., biophysical, psychological, safety, comfort).
 - h. Consider the following options when the patient describes continued pain exceeding pain intensity goal, describes worsening of pain, displays nonverbal behavior reflecting pain, or identifies pain in a new or different location:
 - i. Perform a comprehensive pain assessment;
 - ii. Try other pharmacological measures that are ordered;
 - iii. Implement non-pharmacological pain-relief measures;



- iv. Ask family members what might be helpful; and
- v. Notify medical staff or designee of significant change.

5) Types of pain experienced by burn patients:

- a. Basal or background pain secondary to their burn injury. This is the inflammatory nociceptive pain that the patient experiences all the time secondary to their burn and tissue injury and is exacerbated by movement or interventions. This pain is best treated by a scheduled, multimodal regimen. Long-acting opioid dosing in these patients can decrease the amount of opioid required for procedural pain and results in less hemodynamic instability.
- Procedural or interventional pain is the pain the patient experiences with wound care, therapy, and other interventions. This pain is treated with anticipatory dosing of opioids either enterally (preferred) or parenterally.
- c. Breakthrough pain is the more intense, episodic pain associated with activities of daily living and other minor activities.
- d. Neuropathic pain and itch. This pain is the burning, pins and needles, throbbing pain related to nerve inflammation and injury caused by the burn. This pain is not well treated with opioids.
- e. Anxiety. While not directly a type of pain, anxiety can worsen a patient's pain and needs to be addressed

F. Treatment of pain:

- 1. Use a multi-modal approach to maximize pain relief while minimizing risks and side effects.
- Select interventions based on evidence of best practices. The following is the ideal regimen for a burn patient based on existing evidence, patients with contraindications to any of these medications should not receive them.
 - a. Basal pain: A multimodal regimen of scheduled Tylenol, Ibuprofen (use only after approval from the attending burn surgeon), and in large burns (≥30% TBSA), Methadone. Scheduling short-acting opioids is not preferred unless the patient is demonstrating an inability to convey their pain despite being in pain.
 - Procedural pain: Early in the hospital course or for patients with large burns, daily conscious sedation is performed for wound care.
 For patients not requiring sedation or for therapy sessions,
 Oxycodone is dosed 30 minutes prior to planned interventions. If the intervention is unplanned or the patient is having pain that is



- not allowing the intervention to take place without intolerable pain, IV opioids should be given.
- c. Breakthrough pain: Treat with enteral or parenteral short acting opioids. If patient is requiring several doses for breakthrough pain in a day, the basal pain regimen should be changed.
- d. Neuropathic pain and itch: Scheduled Gabapentin should be started as soon as the patient is able to take enteral meds and should be titrated as needed. Cetirizine should also be started early to address burn itch as the patient heals. This can be dosed BID.
- e. Child life should be present for all planned interventions to reduce anxiety and distract the patient. Benzodiazepines are occasionally required to address severe anxiety that limits necessary interventions.
- 3. Available medications for routine and procedural related pain under "Pediatric Burn Pain Protocol Panel" in eStar.

IV. Patient/Family Education and Engagement:

The patient and family are educated at the level of their understanding regarding the following.

- A. How and when to request interventions for comfort/symptom relief;
- B. Pain scale in use, as well as the pain intensity goal;
- C. Realistic expectations of their pain goal with consideration of current illness; and
- D. Pain management discharge planning:
 - 1. Detail the interventions patients and families can utilize to manage pain following hospitalization.
 - 2. Provide a contact and telephone number for questions or problems.

V. Documentation:

- A. In Inpatient areas, document the following with date and time:
 - 1. Pain screening, on the Admission History form within eight hours of admission.
 - 2. Pain screening/assessment and documentation at least once each shift and when there is a change in the patient's condition or primary caregiver.
 - 3. Reassessment of pain response to interventions is documented at an interval based on patient condition and type and route of pharmacologic intervention.
 - 4. Patient/family teaching regarding pain management.
 - 5. Discharge instructions regarding pain management.

VI. References:

- Gordon, D., Dahl, J., Miaskowski, C., McCarberg, B., & Knox, T. (2005) American Pain Society Recommendations for Improving the Quality of Acute and Cancer Pain Management. Archives of Internal Medicine, 165, 1574-1580.
- 2. Gordon, D., Rees, S., McCausland, M. (2008). Improving Reassessment and Documentation of Pain Management, The Joint Commission Journal on Quality and Patient Safety, 34, 509-517.
- 3. Herr, K., Coyne, P., Key, T., McCaffrey, M. (2006). Pain Assessment in the Non-verbal Patient: Position Statement with Clinical Practice Recommendations. Pain Management Nursing, 7(2) 44-51.
- 4. The Joint Commission, Comprehensive Accreditation and Certification Manual. (2017). Retrieved via Eskind Digital Library http://library.vanderbilt.edu/biomedical/search.php?letter=j#tab-search-databases, then search Joint Commission.
- 5. Rights and Responsibilities Standards RI.01.07.03. Performance Improvement Standards PI.01.01.01. Provision of Care Standards PC.02.03.01, PC.01.02.07
- 6. VUMC Policy Manual. (2017). Retrieved from https://vanderbilt.policytech.com.
- 7. Clinical Operations Category:

 <u>Patient Rights and Responsibilities</u>
- 8. Clinical Practice Category:

<u>Change in Patient Condition – Escalation/Physician Notification Nursing Clinical Practice Guidelines - Adults, Children, and Neonates Nursing Admission History (Document archived October 2017.) Outpatient Interdisciplinary Plan of Care</u>

- 9. Medication Management Category:
 - MM SOP Patient-Controlled Analgesia (PCA) and Continuous Controlled Substance Infusion: Administration and Management
 - (a) MM SOP Epidural Analgesia Administration and Management
- 10. Wells, N., Pasero, C., McCaffrey., (2008). Improving the Quality of Care through Pain Assessment and Management. Hughes RG (ed.) (2008) Patient Safety and Quality: An Evidence Based Handbook for Nurses. AHRQ Publication Rockville, MD.
- 11. World Health Organization (WHO) Analgesic Ladder. (2017). Retrieved via E- Docs (search word "WHO") from http://edocsprod/EDocsView.aspx?EDocsId=1202
- 12. 12. Elefritiz, JL., Murphy, CV., Papadimos, TJ., Lyaker, MR., Methadone analgesia in the critically ill. Journal of Critical Care, August 2016.
- 13. 13. Jones, GM., Porter, K., Coffey, R., Miller, SF., Cook CH., Whitmill, ML., Murphy, CV. Impact of Early Methadone Initiation in Critically III Burn Patients: A Pilot Study. Journal of Burn Care and Research, May 2013.
- 14. 14. Griggs, C., Governman, J., Bittner, E., Levi, B., Sedation and Pain Management in Burn Patients. Clinical Plastic Surgery, July 2017.
- 15. 15. Taverner, T., Prince, J., Acute Neuropathic Pain Assessment in Burn Injured Patients: A Retrospective Review. Journal of Wound Ostomy Continence Nursing, January-February 2016.
- 16. 16. Faucher, L., Furukawa, K., Practice Guidelines for the Management of Pain. Journal of Burn Care and Research, June 2006.