OHSU

Healthcare Delegation Protocol
Pain, Fever, and Anxiolysis Management -- Pediatric

Doc. #: HC-DP-281-PRO REV. 020424	Category: Delegation Protocol: Emergency Department	
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Reviser (Title): Assistant Nurse Manager, Pediatric Emergency Services	Owner (Title): Medical Director, OHSU Pediatric Emergency Department	

PURPOSE:

This Delegation Protocol provides direction for initiation of care by authorized non-DO/MD/NP/PA for patients who have mild to moderate pain, fever, and/or procedure related anxiety based on specific criteria outlined below. This protocol is intended to improve quality of care and patient experience and is based on best available evidence. The protocol affects approximately 700 patients a month.

DEFINITIONS:

- **EHR**: Electronic health record
- **FLACC**: (FLACC Non-Verbal Pain Scale) Face, Legs, Activity, Cry, Consolability scale is a pain scale for non-verbal children
- **IN:** Intranasal
- **LMX:** Lidocaine 4% topical anesthetic cream
- **LET Gel:** Lidocaine 4%, Epinephrine 0.05%, Tetracaine 0.5%
- **Mild pain:** nagging, annoying pain that does not interfere with daily living activities (pain scale 1-4)
- **Moderate pain**: interferes significantly with daily living activities (pain scale 4-6)
- **PO**: Per oral
- **PR:** Per rectum
- **RN:** Registered nurse
- **Severe pain:** Distress, significantly limits ability to perform daily activities (pain scale 7-10)

STAFF AUTHORIZED TO INITIATE THE DELEGATION PROTOCOL:
Authorized staff are RNs

INCLUSION CRITERIA:

- Pediatric patients' birth-19 years who present with:
  - Mild to moderate pain
  - Undergoing a minor procedure (e.g., venipuncture, urinary catheterization, laceration repair, etc.)
  - Fever ≥ 38.0 Celsius

EXCLUSION CRITERIA:

- Patients with severe pain, Pain score great than 8(contact provider)
- Patients with known sickle cell disease
- Allergies/hypersensitivity to proposed agent to be used
- Patients presenting with abdominal pain (Ibuprofen)

- Neonates (midazolam)
- Patients with respiratory depression (midazolam)
- Premature Infants <28 weeks current or adjusted age (LMX/Lidocaine)
- Broken Skin (LMX)

METHOD OF DOCUMENTING THAT THE DELEGATION PROTOCOL WAS USED TO INITIATE CARE:
The RN will enter orders using Per "Delegation Protocol" order mode and sign the order using the order set: ED Ped Common Orders: PO-7848.

PROTOCOL REQUIREMENTS:
The nurse may initiate the following for patients with mild to moderate pain, anxiolysis, or undergoing a minor procedure. For patients in severe pain, shock, or respiratory depression notify a provider immediately.

Start with acetaminophen for mild to moderate pain or as an antipyretic if acetaminophen has not been given at home within the last 4 hours, the patient does not have an allergy to acetaminophen, and patient does not have known liver disease

A. For mild to moderate pain or for fever ≥38.0 if last dose >4 hours
  I. Acetaminophen 12.5mg/kg PO/PR, not to exceed 650 mg per dose

Give ibuprofen for mild to moderate pain or as an antipyretic if acetaminophen was given at home in the last 4 hours, if the patient has an allergy to acetaminophen, or if the patient continues to have mild to moderate pain or fever after administration of acetaminophen. Do not give if the patient has an allergy to Ibuprofen or if the patient has oncological or hematological disease.

A. For mild to moderate pain or for fever ≥38.0 if last dose >4 hours
  I. Peds ≥ 6 months of age: Ibuprofen 10 mg/kg PO, not to exceed 600 mg PO, if last dose > 6 hours

Nitrous Oxide Gas for Anxiolysis
See RN Administered Nitrous Oxide in Doernbecher Children's Hospital: HC-PC-442-POL

A.

Topical 4% Lidocaine Cream (LMX)

A. Apply 4% LMX cream topical to diminish/relieve short term procedural pain for newborn infants (≥37 week's gestation) and children.
B. Apply 30-60 minutes prior to a painful procedure 4% LMX cream generously to intact skin at the injection site.

J-Tip Lidocaine 1%

A. Follow the J-Tip Venipuncture Pain Management delegation protocol: HC-DP-297-PRO REV. 061721

Intradermal Lidocaine 1% injection

A. Inject lidocaine 1% intradermally; 0.5 cm to the side of the venipuncture site until a small wheal form.

Urojet Sterile Lidocaine Jelly for Urinary Catheterization

- **A.** Apply small amount of sterile lidocaine jelly via cotton ball to head of penis or vaginal area approximately 1-2 minutes prior to start of catheter insertion.
  Note: maximum dose: 3mg/kg/dose; do not repeat within 2 hours. *
- **B.** Alternatively, may lubricate catheter with sterile lidocaine jelly rather than another lubricant.

LET Gel for Lacerations: Lidocaine 4%, Epinephrine 0.05%, Tetracaine 0.5%

- **A.** Apply LET gel to Laceration. Paint 3 mL of LET gel to the wound and wound edges using a cotton-tipped applicator. Then cover area with a cotton ball soaked in LET gel for 20-30 minutes.

LITERATURE DEMONSTRATING THAT THE DELEGATION PROTOCOL IS EVIDENCE-BASED (IF ANY):

Frampton, A., Browne, G. J., Lam, L. T., Cooper, M. G., & Lane, L. G. (2003). Nurse administered relative analgesia using high concentration nitrous oxide to facilitate minor procedures in children in an emergency department. *Emergency Medicine Journal*, *20*(5), 410-413.

Gazzelloni, A., Maio, M., Romano, M., Marcone, I., Marino, F., & Labalestra, M. C. (2016). OC39 - The efficacy of a participatory approach in reducing pain related to venipuncture in children. *Nurse Child Young People*, *28*(4), 81. https://doi.org/10.7748/ncyp.28.4.81.s70

Kearl, Y. L., Yanger, S., Montero, S., Morelos-Howard, E., & Claudius, I. (2015). Does Combined Use of the J-tip® and Buzzy® Device Decrease the Pain of Venipuncture in a Pediatric Population? *J Pediatric Nurse*, *30*(6), 829-833. https://doi.org/10.1016/j.pedn.2015.06.007

Malia, L., Laurich, V. M., & Sturm, J. J. (2019). Adverse events and satisfaction with use of intranasal midazolam for emergency department procedures in children. *Am J Emergency Medicine*, *37*(1), 85-88. https://doi.org/10.1016/j.ajem.2018.04.063

Martin, H. A., Noble, M., & Wodo, N. (2018). The Benefits of Introducing the Use of Nitrous Oxide in the Pediatric Emergency Department for Painful Procedures. *J Emerg Nurs*, *44*(4), 331-335. https://doi.org/10.1016/j.jen.2018.02.003

Robert M.Kennedy, M. a. J. D. L., MD. (1999). THE "OUCHLESS EMERGENCY DEPARTMENT*": Getting Closer: Advances in Decreasing Distress During Painful Procedures in the Emergency Department. *Science Direct*, *46*(6), 1215-1247. https://doi.org/https://doi.org/10.1016/S0031-3955(05)70184-X

Pansini, V., Curatola, A., Gatto, A., Lazzareschi, I., Ruggiero, A., & Chiaretti, A. (2021). Intranasal drugs for analgesia and sedation in children admitted to pediatric emergency department: a narrative review. *Annals of Transl Medicine*, *9*(2), 189. https://doi.org/10.21037/atm-20-5177

Schmitz, M. L., Zempsky, W. T., & Meyer, J. M. (2015). Safety and Efficacy of a Needle-free Powder Lidocaine Delivery System in Pediatric Patients Undergoing Venipuncture or Peripheral Venous Cannulation: Randomized Double-blind COMFORT-004 Trial. *Clinical Therapy*, *37*(8), 1761-1772. https://doi.org/10.1016/j.clinthera.2015.05.515

REVIEWED BY:

Interdisciplinary development occurred by the Pediatric Emergency Medicine Section with review and approval by the Delegation Protocols and Protocol Orders Steering Committee and the Clinical Knowledge and Therapeutics Executive Committee.

PROTOCOL OWNER:
Medical Director, OHSU Pediatric Emergency Department

Responsible Parties for Reviewing and Implementing Protocol
Medical Director, OHSU Pediatric Emergency Department
Assistant Nurse Manager, OHSU Pediatric Emergency Department

APPROVING COMMITTEE(S):
Delegation Protocols and Protocol Orders Steering Committee
Clinical Knowledge and Therapeutics Executive Committee

REVISION HISTORY

Revision History Table

Document Number and Revision Level	Final Approval by	Brief description of change/revision
HC-DP-281-PRO REV. 031022	DPC	Updated template. Updated References. Added hyperlinks to related documents
HC-DP-281-PRO REV. 061423	DPC	Modified midazolam dosing to ensure safety and optimize efficacy
HC-DP-281-PRO REV. 020424	DPC	Updated to match orderset

ADDENDUM (IF ANY):
NA