8.12 PEDIATRIC PAIN CONTROL

BLS – FAQ Link

- Position of comfort
- NPO
- Reassurance and redirection,
  Ice or heat as indicated
- **Oxygen** as indicated

ALS

Normal Saline
IV/IO of Normal Saline TKO.

Manage pain. Manage N/V as needed

Nausea/Vomiting?

Ondansetron
< 6 months: Contraindicated.

≥ 8kg and < 15kg: 2mg ODT

≥ 15kg: 4 mg ODT

-or-

6 months – 12 years OR < 40 kg:
0.1 mg/kg slow IVP/IO up to 4 mg (IV over 2-5 min).

> 12 years or > 40KG:
4 mg slow IVP/IO (IV over 2-5 min). May repeat in 20 minutes up to 12 mg.

Severity

Pain score 1-6

Ibuprofen
10 mg/kg up to
600 mg PO x 1 dose

If no contraindications.

Pain score > 6

Fentanyl
IV/IO 1 mcg/kg dose up to 50 mcg slow IV push (over 1 minute).

May repeat every 10 minutes. Subsequent dose of 0.5 mcg/kg not to exceed 25 mcg. Maximum of 4 doses not to exceed 100mcg

--or--

IN/IM 2 mcg/kg dose IN, or IM (IN preferred) up to 50 mcg.

May repeat every 10 minutes. Subsequent dose of 0.5 mcg/kg not to exceed 25 mcg. Maximum dose 100 mcg total.

OR

Ketamine
IV/IO (3 years and up) 0.25 mg/kg in 100mL of NS/D5W slow infusion over 10 minutes

--or--

0.5 mg/kg IN. **Do not co-administer Fentanyl and Ketamine.**

Base Hospital Contact Criteria

Base Hospital Physician consult is required for patients whose parents are requesting an AMA after receiving **Fentanyl** or **Ketamine** or patients requiring additional doses after maximum outlined in protocol.

Notes

- If administering 2 or more doses of **Fentanyl** or **Ketamine**, patient shall be placed on continuous EtCO2. 2 or more readings, 10% or more above baseline indicates the need for reassessment of patients respiratory status and ventilatory support should be provided to return EtCO2 to baseline.
- ODT Ondansetron preferred for children if appropriate.

Effective: 10/01/24
Supersedes: 10/29/18

8.12 PEDIATRIC PAIN CONTROL

BLS Treatment
• Position of comfort. • NPO • Reassurance and redirection. • Ice or heat as indicated. • **Oxygen** as indicated**.**
ALS Treatment
• IV/IO with **Normal Saline** TKO as indicated. • If pain score 1-6 by Pediatric Pain Rating Scale, give a single dose of PO **Ibuprofen** 10mg/kg up to 600 mg (if no contraindications). • If pain score is greater than 6, give IN/IV/IO/IM **Fentanyl** 1 mcg/kg dose IV/IO up to 50 mcg slow IV push (over 1 minute). May repeat every 10 minutes. Subsequent dose of 0.5 mcg/kg not to exceed 25 mcg. Maximum of 4 doses not to exceed 100mcg • If no IV/IO, 2 mcg/kg dose IN, or IM (IN preferred) up to 50 mcg. May repeat every 10 minutes. Subsequent dose of 0.5 mcg/kg not to exceed 25 mcg. Maximum dose 100 mcg total. OR IV/IO **Ketamine** (3 years and up) moderate to severe pain where Ibuprofen is insufficient for pain control. 0.25 mg/kg in 100 mL of NS/D5W slow infusion over 10 minutes or 0.5 mg/kg IN. **Do not co-administer Fentanyl and Ketamine.** • **Ondansetron** as needed. < 6 months: Contraindicated. ≥ 8kg and < 15 kg: 2mg ODT. ≥ 15kg: 4 mg ODT or 6 months - 12 years OR < 40 kg: 0.1 mg/kg slow IVP/IO up to 4 mg (IV over 2-5 min). > 12 years OR > 40 kg: 4mg slow IVP/IO (IV over 2-5 min). May repeat in 20 minutes up to 12 mg. • Document pain score and vital signs before and after medication administration on PCR.
Base Hospital Contact Criteria
• Base Hospital Physician consult is required for patients whose parents are requesting an AMA after receiving **Fentanyl** or **Ketamine** or patients requiring additional doses after maximum outlined in protocol.
Notes

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- **Fentanyl**, **Ketamine**, and/or **Midazolam** may act synergistically to cause respiratory depression and should not be combined unless seizures or other indications for Midazolam use is present. Contact Base Hospital MD for consultation if needed for this combined use.

- If utilizing 2 or more doses of **Fentanyl**, **Ketamine**, and/or **Midazolam**, patient shall be placed on continuous end tidal CO2 monitoring. A trend of increasing EtCO2 readings (2 or more readings, 10% or more, above baseline) indicates the need for immediate re-assessment of patient's respiratory status to include rate and depth of respirations. Ventilatory support should be provided as necessary to return EtCO2 to baseline.

- All injectable pain medications shall be cross-checked with a Paramedic (secondarily an EMT) for correct medication and dose at time of administration unless transporting in the back of an ambulance without a second attendant.
- ODT Ondansetron preferred for children if appropriate.