Pain Management

- Non-pharmacologic pain control can be as effective or more effective than pain medications.
  - Splinting/Ice
  - Movement Restriction/Position of Comfort
  - Distraction
  - Reassurance
  - Anxiety Control

"DO YOU NEED SOMETHING FOR YOUR PAIN?"

↓ Yes

Severe pain or pain preventing interaction or movement?

↓ Yes

Give **Fentanyl** (1-2 mcg/kg IV/IM/IO/IN) if no contraindications

↓ Ongoing pain?

No ↓

Give IV **Acetaminophen** (1000 mg drip) if no contraindications.

OR

Give **Ketorolac** (15 mg IV/IM) if no contraindications
Preferred for severe flank, low back, or musculoskeletal pain

OR

Give **Ketamine** (0.25 mg/kg IV/IO drip in saline or 0.5mg/kg IM) if no contraindications. Preferred if BP <90mmHg

↓

Contraindications, ongoing pain or unable to administer alternative

↓

Give **Fentanyl** (1-2 mcg/kg IV/IM/IO/IN) if no contraindications

↓

Does the patient require additional pain medication?

- Multimodal approach is preferred
  - Switch medication if possible
- Number of repeat doses / cumulative total dose prior to base contact per specific DM or CSPH medication protocol
- Refer to Extended Transport Guidelines if applicable

1. Document pain level before intervention
2. Document pain level 5 min after intervention
3. Monitor as per protocol
   - Ketamine requires $ETCO_2$, SPO2, and continuous cardiac monitoring

Acetaminophen Contraindications:

- Chronic liver disease
- Recent acetaminophen use:
  - Therapeutic dose in the last 6 hours
  - More than 3 grams in last 24 hours

NSAID Contraindications:
(Ketorolac and Ibuprofen)

- Age:
  - <8 or >65 years old
- Bleeding risk:
  - Multisystem trauma
  - Anticoagulants, antiplatelet agents, or bleeding disorder
  - Head injury or suspected intracranial hemorrhage
  - History of severe GI bleeding or active stomach ulcer.
- Pregnancy:
  - Pregnant or breastfeeding
- Kidney issues:
  - Severe dehydration
  - Renal transplant or chronic kidney disease/ESRD

Pediatric Moderate to Severe Pain:

- Under 1 year:
  - Fentanyl IN **contact base** if not for burn or fracture
- 1 year and older:
  - Fentanyl IN (2 mcg/kg)
    OR
  - Ketamine IN (0.25mg/kg)
- 8 years or older
  - Ketorolac IV/IN 10 mg (8-11yrs)
    15 mg (>11yrs)

Considerations:

- IN administration is preferred for initial dose
- Placement of IV or IO exclusively for pain medication administration should be avoided
- Repeat doses per protocol