

## ED Opiate-free Pain Options by Indication

### **Musculoskeletal Pain:** Acute on chronic opiate-tolerant OR acute opiate-naïve

- No IV access – Intranasal ketamine 50 mg – *100mg/mL product*
- Acetaminophen 1000 mg PO
- Ibuprofen 600 mg PO or Ketorolac 15 mg IV/IM
- Trigger Point injection
  - Lidocaine 1% 1-2 mL SubQ
- Cyclobenzaprine 5 mg PO or diazepam 5 mg PO/IV
- Dexamethasone 8 mg PO/IV
- Ketamine 0.2 mg/kg (*50mg/5mL syringe*) IVP over 3-5 min
  - 0.1 mg/kg/hr (*100 mg/50 mL*) until pain is tolerable
- Lidoderm patch to most painful area, MAX 3 patches
- Gabapentin 300 mg PO (neuropathic component of pain)

### **Recurrent Primary Headache/Migraine:**

- Acetaminophen 1000 mg PO
- Ibuprofen 600 mg PO or Ketorolac 30 mg IV/IM
- 1 L 0.9% NS bolus
- Sumatriptan 6 mg SC
- Cervical or Trapezius Trigger Point Injection with lidocaine 1% 1-2 mL IM
- Metoclopramide 10mg IV
- Promethazine 12.5 mg IV OR prochlorperazine 10 mg IV
- Magnesium 1 gm IV over 60 minutes
- Valproic Acid 500 mg/50 mL NS IV over 20 min
- Levetiracetam 1000 mg/100 mL NS IV over 15 min
- Dexamethasone 8 mg IV (*Migraine only*)
- Haloperidol 2.5 mg IV over 10 min
- Lidocaine 1.5 mg/kg in 100 mL NS over 10 min (max 200 mg)

### **If tension component**

- Cyclobenzaprine 5 mg OR Diazepam 5 mg PO/IV

### **Extremity Fracture or Joint Dislocation:**

Consider regional anesthesia: e.g. nerve blocks: wrist, ankle, ulnar, radial, etc.

### **Immediate therapy** (steps 1-3 while setting up for block)

- Ketamine intranasal 50 mg– *concentration 100 mg/mL*
- Nitrous Oxide titrate up to 70% - *only at SWER*
- Tylenol 1000 mg PO

### **Followed by setting up for**

- Ultrasound Guided Regional Anesthesia
  - Joint Dislocation and Extremity Fracture
    - Lidocaine 0.5% peri-neural infiltration (MAX 5 mg/kg)

### **If unable to do ultrasound guided regional anesthesia**

- Ketamine 0.2 mg/kg in (*50mg/5mL syringe*) IVP over 3-5 min
  - 0.1 mg/kg/hr (*100 mg/50 mL*) until pain is tolerable

**Abdominal Pain:** Gastroparesis-associated or chronic functional abdominal pain:

- Metoclopramide 10 mg IV
- Diphenhydramine 25 mg IV
- Prochlorperazine 10 mg IV
- Dicyclomine 20 mg PO/IM
- Lidocaine 1.5 mg/kg in 100 mL NS over 10 min (max 200 mg)
- Sumatriptan 6 mg SC
- Haloperidol 2.5 mg IV
- Ketamine 0.2 mg/kg (*50mg/5mL syringe*) IVP over 3-5 min
  - 0.1 mg/kg/hr (*100 mg/50 mL*) until pain is tolerable
- Capsaicin 0.025% topical (cannabinoid hyperemesis syndrome)

**Renal Colic:**

- Acetaminophen 1000 mg PO
- 1 L 0.9% NS
- Ketorolac 15 mg IV
- Lidocaine 1.5 mg/kg IV in 100 mL NS over 10 min (max 200 mg)
- Desmopressin 40 mcg IN
- Ketamine 50 mg IN (*100 mg/mL product*)