**Pain Management**

**Aliases:** Analgesia, pain control, acute pain

For patients with suspected cardiac chest pain, refer to the **Chest Pain/Acute Coronary Syndrome Protocol**.

The goal is to reduce the level of pain for patients in the pre-hospital setting.

All pain should be assessed and scored according to the "Wong Pain Scale". Reassessment should be timed according to medication onset of action, changes in patient condition, patient positioning and other treatments.

**Note:** Medical Control contact is required for patients with labor pains, dental pain, established care plans that deter pain management, and patients with chronic pain who do not have a palliative care plan.

1. Place the patient in the position of comfort.
2. Verbally reassure the patient to control anxiety.
3. If not improved with BLS intervention, consider analgesia.
4. Start an IV NS KVO. If the patient’s systolic blood pressure is clinically hypotensive, and signs of hypoperfusion, administer an IV/IO fluid bolus. Refer to **Vascular Access & IV Fluid Therapy Procedure**.
5. Per MCA selection, for mild to moderate pain (described as 1-4 on the Wong Pain Scale), consider non-opioid analgesia.

### MCA Selected Non-Opioid Analgesia

- ☒ Acetaminophen 15 mg/kg PO (max dose 1 gm)
- ☐ Ibuprofen 10 mg/kg PO (Not appropriate for patients < 6 months or pregnant, maximum dose 800 mg)
- ☒ Ketorolac (Toradol ®)
  - Adult 15 mg IM/IV (not appropriate for pregnancy)
  - Pediatric 1 mg/kg IM/IV (max dose 15 mg)

6. For patients with significant pain (described as greater than 4 on the Wong Pain Scale), consider Ketamine.
   a. Adults (or > 80 lbs.)
      i. 0.2 mg/kg IV/IO or 0.5 mg/kg IN (if available)
      ii. Maximum single dose 25 mg
      iii. May repeat after 10 minutes to a maximum dose of 50 mg
   b. Pediatrics (or < 80 lbs.)
      i. 0.2 mg/kg IV/IO or 0.5 mg/kg IN (if available)
      ii. Maximum single dose 25 mg
iii. May repeat after 10 minutes to a maximum dose of 0.4 mg/kg IV/IO or 1.0 mg/kg IN

7. When administering analgesic medications, patients may experience nausea as a side effect. Consider Ondansetron.
   a. Adults: 4 mg IV/IO or ODT
   b. Pediatrics: 0.1 mg/kg IV/IO (max dose 4 mg)
   c. May repeat one time for continued nausea.

8. If a patient is unable to tolerate Ketamine or has significant pain (described as greater than 8 on the Wong Pain Scale), opioid analgesia may be administered. Patients should receive only one opioid medication.

   MCA Selected Opioid Analgesia

   ☒ Morphine 0.1 mg/kg IV/IO (maximum single dose 10 mg) may repeat one time. Total dose may not exceed 20 mg.
   ☒ Fentanyl 1 mcg/kg IV/IO (IN, if available) Maximum single dose 100 mcg, may repeat one time. Total dose may not exceed 200 mcg.
   ☐ Hydromorphone 0.5 mg IV/IO (for extended transports), may repeat every 10 minutes, for a maximum dose of 2 mg.

9. For patients with refractory pain after Ketamine administration, contact medical control for opioid administration.

10. Administer opioids slowly when using IV or IO routes (Intranasal per MCA selection). Systolic BP should be maintained at > 100 mm Hg for adult patients and > 80 + (2 x age) mm Hg for pediatric patients.

11. For patients with evidence of hypotension or hypoperfusion, contact medical control.

Wong Pain Scale: Pain Assessment Scale
Choose a number from 1 to 10 that best describes your pain

<table>
<thead>
<tr>
<th>No pain</th>
<th>Distressing pain</th>
<th>Unbearable pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

NO HURT HURTS LITTLE BIT LITTLE MORE HURTS EVEN MORE HURTS WHOLE LOT HURTS WORST
In face of the opioid crisis there has been a national push to decrease the use of opioid pain medication. Many EDs are using ALTO programs (Alternative To Opioids) to treat pain in their departments. Opioid medications are only being used for severe pain when alternatives have failed.

This is also addressed in the pain protocol where it says opioid medications should only be used in patients with severe pain (Wong score greater than 8). In order to better serve our patients we are asking that ALS providers consider limiting the use of IV opioids. We now have available several non-narcotic options to address our patient’s pain.

Please restrict IV opioid use to the following indications:

1) Major burns
2) Significant extremity fractures
3) Cardiac chest pain not relieved with administration of 3 SL Nitro tabs
4) Obvious severe kidney stone pain

Please do not use IV opioids for the following indications:

1) Headache
2) Abdominal pain
3) Non kidney stone back pain
4) Any other pain not defined in either of these lists

Contact Medical Control as needed for additional guidance.

Thanks you for your assistance in this endeavor. We know that by appropriately treating pain we will be better serving our patients.

David Hess, DO, FACEP
Medical Director HEMS