



# Pain Control

## History

- Age
- Location
- Duration
- Severity (1 - 10)
- If child use Wong-Baker faces scale
- Past medical history
- Medications
- Drug allergies

## Signs and Symptoms

- Severity (pain scale)
- Quality (sharp, dull, etc.)
- Radiation
- Relation to movement, respiration
- Increased with palpation of area

## Differential

- Per the specific protocol
- Musculoskeletal
- Visceral (abdominal)
- Cardiac
- Pleural/ Respiratory
- Neurogenic
- Renal (colic)



## Specific Complaint Protocol

Assess Pain Severity

Combination of Pain Scale, MOI, circumstances, Injury or Illness severity

Mild < 6/10

Moderate to Severe > 6/10

<b>B</b>	<b>Ibuprofen 10 mg/kg PO</b> (400 – 600 mg typical adult) Maximum 800 mg  Or  <b>Acetaminophen 15 mg/kg PO</b> (325 – 1000 mg typical adult) Maximum 1000 mg
	<b>Nitrous Oxide 70:30 to 50:50 Mix NO/O<sub>2</sub></b>
IV or IO Access Protocol UP 6	
<b>A</b>	<b>Ketorolac 15 mg IV / IO</b> 30 mg IM Peds: 0.5 mg/kg IV / IO / IM Maximum 30 mg
	<b>IV APAP – If not already given PO</b> <b>Acetaminophen 1g IV/IO x 1</b> Peds: 15mg/kg IV over 10 min Max: 1 gram
Monitor and Reassess Every 10 minutes following medication	
If no improvement reassess pain  Consider Paramedic Level Medications <i>if indicated</i>	

IV or IO Access Protocol UP 6	
Cardiac Monitor	
<b>P</b>	<b>Fentanyl 50 – 100 mcg IV / IO / IM / IN</b> Repeat 25 mcg every 10 minutes as needed Maximum 300 mcg  <b>Adult &amp; Ped (&gt;6 mo): 1 mcg / kg IV / IO / IM / IN</b> Repeat 0.5 mcg / kg every 10 minutes prn Max single dose: 100 mcg Adult Maximum: 300 mcg Pediatric Maximum: 100 mcg
	OR  <b>Morphine 2 – 4 mg IV / IO / IM</b> Repeat every 5 minutes as needed Maximum 20 mg
	<b>Ketamine 0.3 mg/kg IV / IO</b> Infuse or IV push over 10 minutes  May repeat every 20 minutes Maximum 30 mg single dose  Maximum 3 total doses Or <b>Ketamine 1 mg/kg IN</b> Maximum 1 total dose

**Notify Destination or Contact Medical Control**



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Fentanyl dosing in adults is at the provider discretion on which method to use – weight based or aliquot methods

Ketamine is a 2<sup>nd</sup> line option after one dose of opioid has been given.

**Nitrous Oxide** is a nonscheduled medical gas. Nonparamedic services wishing to utilize Nitrous Oxide will need a security plan and a method to track usage in PSI, Weight(grams), or minutes administered per use. Nitrous does not require a controlled substance license

(State or Federal DEA is not necessary)

Must be approved by the medical director

**Alternative Medications for Pain:** Hydromorphone Adult: 0.5 mg IV / IO / IM -- Repeat every 10 minutes as

## Pearls

- **Recommended Exam: Mental Status, Area of Pain, Neuro**
- **Pain severity (0-10) is a vital sign to be recorded before and after PO, IV, IO or IM medication delivery and at patient hand off. Monitor BP closely as sedative and pain control agents may cause hypotension.**
- **Ketamine:**  
**Ketamine may be used in patients who are outside a Pediatric Medication/ Skill Resuscitation System product.**  
**Ketamine may be used in patients who fit within a Pediatric Medication/ Skill Resuscitation System product only with DIRECT ONLINE MEDICAL ORDER, by the system MEDICAL DIRECTOR or ASSISTANT MEDICAL DIRECTOR.**
- **Ketamine: appropriate indications for pain control:**  
Patients who have developed opioid-tolerance. Sickle cell crisis patients with opioid-tolerance.  
Patients who have obstructive sleep apnea.  
May use in combination with opioids to limit total amount of opioid administration.
- **Ketamine: caution when using for pain control:**  
Slow infusion or IV push over 10 minutes is associated with less side effects. Do not administer by rapid IV push.  
Avoid in patients who have cardiac disease or uncontrolled hypertension.  
Avoid in patients with increased intraocular pressure such as glaucoma.  
Avoid use in combination with benzodiazepines due to depressed respiratory drive.
- **Both arms of the treatment protocol may be used in concert. For patients in Moderate pain for instance, you may use the combination of an oral medication and parenteral if no contraindications are present.**
- **Pediatrics:**  
For children use Wong-Baker faces scale or the FLACC score (see Assessment Pain Procedure ASP 2)  
Use Numeric (> 9 yrs), Wong-Baker faces (4-16yrs) or FLACC scale (0-7 yrs) as needed to assess pain.
- **Vital signs should be obtained before, 10 minutes after, and at patient hand off with all pain medications.**
- All patients who receive IM or IV medications must be observed 15 minutes for drug reaction in the event no transport occurs.
- Do not administer **Acetaminophen** to patients with a history of liver disease.
- Burn patients may required higher than usual opioid doses to titrate adequate pain control.
- Consider agency-specific anti-emetic(s) for nausea and/ or vomiting.