



Indications:

- Pain secondary to any nature of illness, or mechanism of injury.

Contraindications:

- Medication specific hypersensitivity/allergy
- Active Labor

Equipment:

- Full monitoring capabilities should be utilized as soon as patient condition allows.

General:

- The following list of medications are available for the provider to administer when pain management is indicated. There is no single medication that is ideal for all situations. The selection of medication should be based on the provider's clinical impression of the patient, the patient's expected clinical course, and available resources. See individual Medication References for contraindications, dosing, and further information.

Medications:

- **Fentanyl** is generally effective for treating moderate/severe pain level of any etiology. At appropriate dosing, Fentanyl has no sedation or amnesiac properties. Fentanyl has no vasodilatory properties and may be utilized safely for musculoskeletal injuries and patients at-risk for further hemorrhage. Fentanyl is not preferred for patients who might benefit from the dissociative effects of Ketamine.
- **Ketamine** is the preferred agent for treating pain in patients in shock regardless of etiology. Ketamine is effective for treating moderate/severe musculoskeletal pain, especially when a potential exists for the patient condition to require sedation/dissociation, or intubation. Ketamine is a single agent providing analgesia, sedation, and at higher doses dissociation. Ketamine has a positive hemodynamic effect on blood pressure so may be utilized safely for trauma patients and patients at-risk for further hemorrhage.
- **Ketorolac** may be considered first-line in known kidney stones, chronic back pain, and in minor isolated extremity injuries. Ketorolac is a non-selective COX inhibitor and, as a result, should not be administered to patients at-risk of bleeding or actively bleeding.
- **Nitrous Oxide** may be considered first-line, or as a supplement, for treating all levels of pain. Nitrous Oxide is especially beneficial in the pediatric population or in cases which the patient benefits from having a task to perform thereby distracting them from the injury.
- **Acetaminophen/Ofirmev** may be considered for generalized pain/malaise especially in the pediatric population. Acetaminophen is a COX-2 inhibitor with weak anti-inflammatory properties and no effect on bleeding.

Considerations:

- Splinting of fractures, and providing other means to make patient comfortable (such as pillow/blanket) increase the impact pharmaceutical treatment.
- In cases in which the patient is experiencing pain, but does not have an apparent life-threat (such as isolated extremity injury) it is expected that the pain is managed prior to moving the patient or performing additional interventions.