1175 PROCEDURE PROTOCOL: PAIN MANAGEMENT

Goal of Pain Management

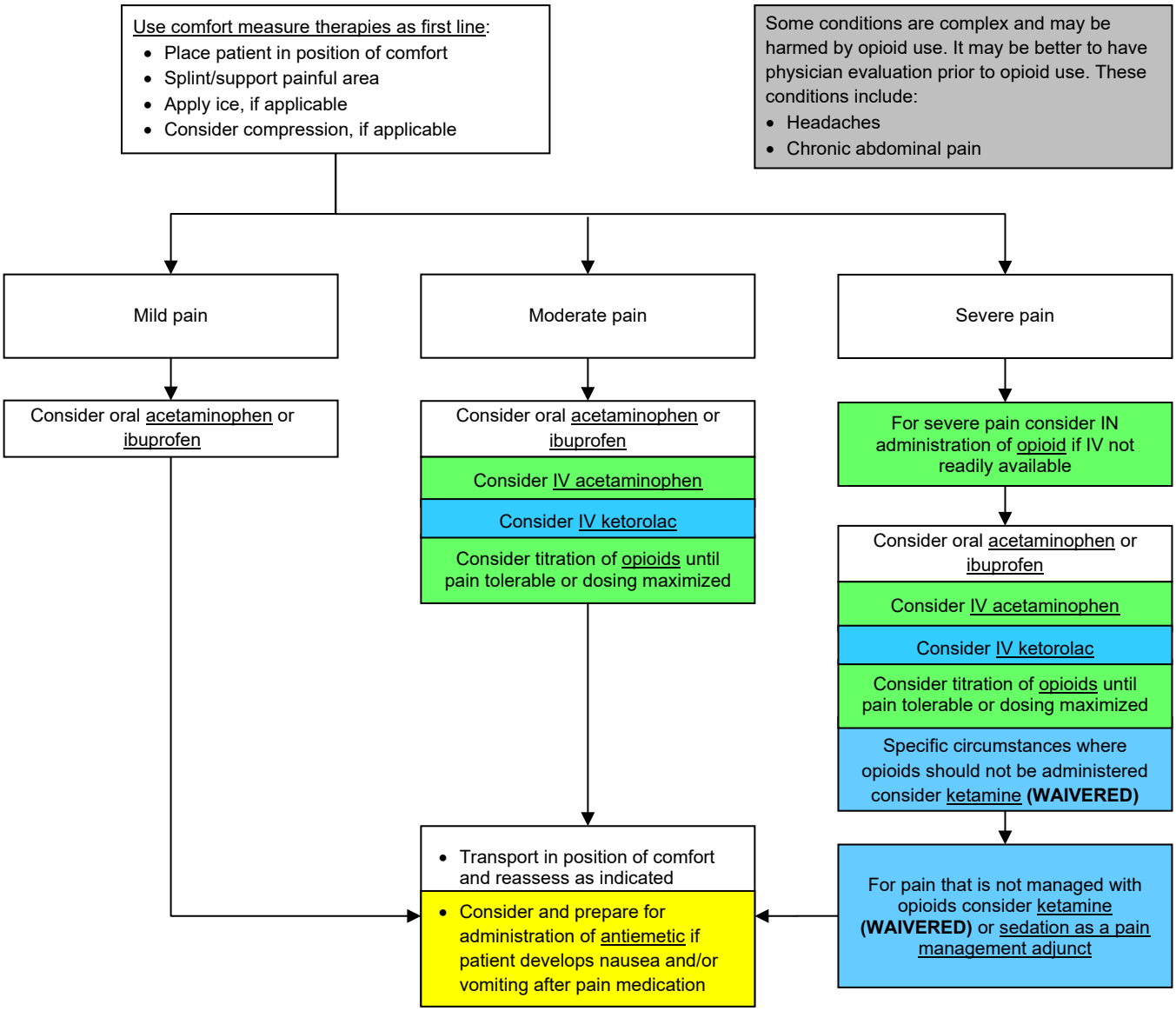
EMR OEC	EMT EMT-IV	AEMT
	EMT-I	Paramedic

A. Use comfort measure therapies as first line.
B. If used, medications should be administered to a point where pain is tolerable. This point is not necessarily pain free.

Assessment

A. Determine patient's pain assessment and consider using a pain scale:
   1. Pediatric use observational scale (see Pediatric Pain Scales)
   2. Adult Self-report scale (Numeric Rating Scale [NRS])
B. Categorize the assessment of pain to mild, moderate, or severe.
   1. Overreliance on pain scores may lead to either inadequate pain control in stoic patients, or over sedation in patients reporting high levels of pain. Use subjective and objective findings to evaluate need for and efficacy of pain management.
   2. For pediatric patients, pain scale use is recommended. A pain score of 0-3 is mild pain, scores from 4-6 moderate pain, and 7-10 severe pain.

General Pain Management Technique



General Information

A. Document assessment or pain scale before and after administration of pain medications. Reassess pain 5 minutes after IV administration.
B. Multi-modal analgesia is reasonable with goal of avoiding combinations of sedating agents reducing the overall need for opiates. It is safe to combine acetaminophen or NSAIDS with opioids or other sedating agents.
C. Strongly consider ½ typical dosing in the elderly or frail patient

Pediatric Pain Scales

Faces, Legs, Activity, Cry, Consolability (FLACC) Behavioral Scale

Appropriate age for use (per guideline): less than 4 years

Categories	Scoring		
	0	1	2
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant frown, clenched jaw, quivering chin
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting back and forth, tense	Arched, rigid, or jerking
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
Consolability	Content, relaxed	Reassured by occasional touching, hugging, or being talked to, distractible	Difficult to console or comfort
Each of the five categories (F) Face; (L) Legs; (A) Activity; (C) Cry; (C) Consolability is scored from 0-2, which results in a total score between zero and ten.			

Recommended Pain Scale for Ages 4-12 Years

Faces Pain Scale – Revised (FPS-R)

0 2 4 6 8 10

1180 PROCEDURE PROTOCOL: SEDATION AS PAIN MANAGEMENT ADJUNCT

Paramedic

The appropriate management of anxiety and pain is an important component of comprehensive emergency medical care. Frequently it is necessary to combine an opioid (analgesic) and a benzodiazepine (sedation) to provide adequate pain management. The combination of an opioid and a benzodiazepine reduces the degree of anxiety, pain, or awareness a patient may experience during a painful illness or injury. The patient retains their ability to maintain a patent airway independently and continuously. They maintain their protective reflexes and their ability to respond appropriately to physical stimulation and/or verbal command and are easily aroused. Using sedation as an adjunct for pain management can only be performed by ALS providers who have met the following requirements: 1) Completed training in the procedure and have met competency requirements set by the medical director. 2) Remain current through continuing education and skills checkoffs as determined by the medical director.

Indications

Pain management using sedation as an adjunct is indicated for conditions that require pain and anxiety management to properly care for a sick or injured adult patient with significant pain.

Precautions

- Patients with cardiopulmonary disorders, multiple trauma, head trauma, or who have ingested a central nervous system depressant such as alcohol are at increased risk of complications and require a high level of vigilance.
- Elderly patients (>65) tend to be more sensitive and therefore should always receive the low end of the dose range. Administration should be slow and titration with additional doses should be given with extreme care.

Complications

A. Common complications include:
   1. Altered mentation
   2. Sedation
   3. Dizziness
   4. Euphoria

B. Other complications include:
   1. Respiratory depression
   2. Hypotension
   3. Bradycardia
   4. Nausea and vomiting
   5. Allergic reactions and anaphylaxis
   6. Bronchospasm

Technique

1. Place patient on the ECG monitor, oxygen, capnography, and the pulse oximeter. Obtain baseline readings. Insert an IV. Make sure airway equipment, suction and naloxone are available and ready.
2. Complete an appropriate history and physical examination.
3. This includes focused exam of heart, lungs and airway evaluation; vital signs including oxygen saturation, level of consciousness/mental status exam; pain scale evaluation.
4. Determine patient's NPO status and determine risk/benefit.

Procedure

A. Administer opioid for analgesia
   - Fentanyl 0.5-1 mcg/kg IV/IO, or
   - Morphine 2-5 mg IV/IO.

B. Administer benzodiazepine for sedation, start at lowest effective dose
   - Midazolam 1-2 mg slow IV/IO push over 2 minutes, or
   - Diazepam 2.5-5 slow IV/IO push over 2 minutes, or
   - Lorazepam 0.5-2 mg slow IV/IO push over 2 minutes.

C. Reassess before and after each administration: responsiveness to commands, O_2 saturation, capnography waveform and value, heart rate, respiratory rate, BP, ECG, and pain scale evaluation

D. Titrate additional drugs to desired effect
   - If the patient needs additional sedation, use same initial benzodiazepine:
     - Midazolam 1 mg slow IV/IO push over 2 minutes, or
     - Diazepam 2.5 mg slow IV/IO push over 2 minutes, or
     - Lorazepam 0.5 mg slow IV/IO push over 2 minutes.
   - If the patient needs additional analgesia, use repeat dose of same initial opioid:
     - Fentanyl 0.5-1 mcg/kg IV/IO, or
     - Morphine 2-5 mg IV/IO.

E. Monitor continuously and document the following:
   - Responsiveness to command
   - Capnography
   - Oxygen saturation
   - Vital signs (heart rate, respiratory rate, BP)
   - ECG rhythm
   - Pain scale evaluation

Special Notes

A. The combination of opioids and benzodiazepines may cause respiratory depression.
B. When both a benzodiazepine and an opioid are used, the opioid, which possesses the greatest risk for respiratory depression, should be given first and the benzodiazepine dose titrated.
C. If the patient has significant respiratory depression perform the following in the order given until improvement occurs.
   1. First, stimulate the patient;
   2. If necessary, then ventilate with a BVM;
   3. *Only if SpO2 does not improve with BVM, consider use of* naloxone.
D. If the patient suffers hemodynamic instability administer a fluid bolus and reassess.
E. The key to minimizing complications during this procedure is the slow titration of drugs to the desired effect.
F. Opioids and benzodiazepines should be given slowly. This may be accomplished in several ways.
   1. The appropriate dose may be diluted in a 10 mL syringe with normal saline and then pushed slowly over 2 minutes,
   2. Or the appropriate dose may be placed in 50 mL of normal saline and administered over 2 minutes.
G. Opioids and benzodiazepines should not be mixed in the same syringe.