Procedure 703 | Pain Management | Rev: 2/18

- Purpose:
  - To provide monitored pain reduction to patients having moderate to severe pain. The purpose of this procedure is to provide *pain management*, not to eliminate pain altogether.
  - BLS measures should always be used prior to medication to reduce pain. BLS measures include, but are not limited to; cold packs, repositioning, elevation, splinting/immobilizing, psychological coaching, and bandaging.
- Guidelines:
  - Gather a thorough patient description of the pain.
    - PQRST and 1-10 scale rating or other, age appropriate assessment tools.
    - Gather a thorough physical assessment of the patient including vital signs, oxygen saturation, capnography, and EKG (when appropriate).
  - **Morphine**
    - Drug of choice for suspected cardiac chest pain.
  - **Fentanyl**
    - Preferred for adults and pediatrics: quicker onset, less nausea than Morphine
    - Fentanyl is 10 times more potent than Morphine; **Fentanyl** 100 mcgs = **Morphine** 10 mg.
      - **Fentanyl** is not indicated for cardiac chest pain
  - **Midazolam**
    - **Midazolam** reduces psychological and physiological response to severe pain.
    - **Midazolam** is used with **Morphine** only, NOT to be used adjunctively with **Fentanyl**
      - The goal of **Midazolam** use is *not* to induce heavy sedation, but rather to improve pain management. To this end, only small doses of **Midazolam** will be used after initial Morphine administration is found not to provide adequate pain relief.
    - **Midazolam** may cause respiratory depression and hypotension, particularly when used with Morphine
      - Use only in situations which truly warrant its administration. In these instances, patients should be carefully monitored for adverse reactions or over sedation.
      - When a patient has received both **Morphine** and **Midazolam**, two EMS providers (EMT/paramedic or two paramedics) must accompany the patient in the ambulance to the hospital. This will insure that the patient will be properly managed should severe respiratory depression occur.
  - When administering **Fentanyl, Morphine and Midazolam**, monitor the patient closely. Have **Narcan** readily available to reverse any respiratory depression that may occur. Monitor with continuous pulse oximetry and

end tidal capnography.

- Document all medication responses in PCR; this should include any changes in the patient's pain status, as well as reassessments of vital signs.
- The preferred route of administration is IV or IO; however, if an IV or IO cannot be established, administer the medication IM (except for cardiac chest pain patients).
- Measurement of a patient's pain is largely subjective; therefore s/he is the best determinant of the presence and severity of pain. All patients expressing verbal or behavioral indicators of pain shall have an appropriate assessment and management as indicated and allowed by this policy.
- This policy is specifically indicated for patients with moderate to severe pain. Make base station contact if there is any question about whether or not the patient meets inclusive criteria. Co-morbid factors such as extremes in age and significant medical problems can affect the patient's ability to tolerate pain medication. In these cases, dosing should be adjusted accordingly.

❖ Pain Management and Medication Administration

- **Midazolam** (adjunctive to **Morphine**-not to be used adjunctive to **Fentanyl**)
  - Adults:
    - **Midazolam** 1-2.5 mg IV/IO, or 2.5-5 mg IM. Make base station contact for further dosing. Monitor the patient carefully for hypotension and hypoxia.
  - Pediatrics:
    - **Midazolam** 0.05 mg/kg IV/IO to a maximum of 2 mg total, or 0.1 mg/kg IM to a maximum of 3 mg total. Make base station contact for further dosing. Monitor the patient carefully for hypotension and hypoxia.

❖ Relative Contraindications:

- Closed head injury
- Decreased respirations
- Inadequate perfusion
- Evidence of hypoxia or hypercapnea
- Altered mental status
- Sudden onset acute headache

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Table 1: Pain Management			
Pain Management Criteria	Base Station Contact	Treatment	
		Adult	Pediatric
Any patient with a complaint of significant pain, including: • Significant extremity injuries • Burn patients • Crush injury patients • Prolonged Extrication • Severe back and spinal pain • Immobilized patients • Abdominal pain • Hip fracture or dislocation • Back Pain • IO Fluid Administration • Snake Bites • Chest Pain	No (unless more than 15mg needed)	• **Morphine Sulfate** ○ 2 - 5 mg IVP/IO, or ○ 10 mg IM ○ 15 mg max • **Fentanyl Citrate** ○ 50- 100 mcg IVP, IO, IM, or IN ○ 200 mcg max	• **Morphine Sulfate** ○ 0.1 mg/kg IV/IM ○ 10 mg max • **Fentanyl Citrate** ○ 1mcg/kg IV/IO, IM or IN; may repeat 1 mcg/kg in 10-15 minutes prn pain for a total of 2 mcg/kg; max of 100 mcg total.
• Abdominal Trauma • Thoracic Trauma	No (unless more than 5mg needed)	• **Morphine Sulfate** ○ 2 - 5 mg IVP/IO, or ○ 10 mg IM ○ 5 mg max • **Fentanyl Citrate** ○ 50 - 100 mcg IVP, IO, IM, or IN ○ 200 mcg max	• **Morphine Sulfate** ○ mg/kg IV/IM ○ 5 mg max • **Fentanyl Citrate** ○ 1mcg/kg IV/IO, IM or IN; may repeat 1 mcg/kg in 10-15 minutes prn pain for a total of 2 mcg/kg; ○ 75 mcg max
Other patients with a complaint of significant pain, including: • Head Trauma • Decreased respirations • Altered mental status • Women in labor • B/P < 90 systolic • Patients with pain not covered above	Yes	• Contact Base Station prior to administering any pain medication	• Contact Base Station prior to administering any pain medication •

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