



Patient Procedural Sedation

Paramedic Use Only

Purpose: Proper sedation of patients requiring a painful medical procedure.

Indications for Sedation

1. Electrical therapy (cardioversion or transcutaneous pacing)
2. Post intubation sedation
3. CPAP and/or HFNC only under direct Medical Control Order
 - i. ****Ketamine is NOT to be used for this indication**



Contraindications

1. Inability to control the patient's airway
2. As an adjunct for establishing an airway
3. Known allergy to sedation medications

Assessment

1. Evaluate adequacy of airway, ventilation, and oxygenation
2. Monitor vital signs and level of consciousness
3. Monitor ECG
4. Monitor pulse oximetry
5. Monitor capnography

Procedure

1. Maintain airway, provide oxygenation, and support ventilation
2. Obtain vascular access
3. For electrical cardioversion, transcutaneous pacing, and post intubation sedation sedate patient to a level of consciousness where procedure can be performed, per MCA selection
4. Only one MCA authorized sedation medication may be given pre-radio. Medical Control MUST be contacted if a different sedation medication is needed subsequent to initial dose (adults and pediatrics).



Adult Procedural Sedation:

(Titrate to minimum amount necessary)

- x Midazolam** 1-5 mg (0.05 mg/kg) IV/IO titrated slowly (IN, if available); may repeat once in 5 minutes to a maximum of 0.1 mg/kg.
- Diazepam** 5-10 mg (0.1 mg/kg) IV/IO titrated slowly, may repeat every 5 minutes to a maximum of 0.3 mg/kg.
- x Fentanyl** 50-100 mcg (1 mcg/kg) IV/IO titrated slowly (IN, if available); may repeat every 4 minutes to a maximum of 3 mcg/kg.
- Ketamine** 4 mg/kg IM or 1.5 mg/kg IV/IO (IN if available) titrated slowly to sedation (max dose 500 mg). **NOT** for CPAP/HFNO sedation



Oakland County Medical Control Authority
PROCEDURES
PATIENT PROCEDURAL SEDATION

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Section 7-17



5. For pediatrics, administer MCA selected medications per MI MEDIC cards. If MI MEDIC cards are not available administer as follows per MCA selection.

Pediatric Procedural Sedation:
(Titrate to minimum amount necessary)

- ✘ **Midazolam** 0.05 mg/kg IV/IO titrated slowly (IN, if available); may repeat once in 5 minutes to a maximum of 0.1 mg/kg.
- ✘ **Fentanyl** 1 mcg/kg IV/IO titrated slowly (IN, if available); may repeat every 5 minutes to a maximum of 3 mcg/kg.

Ketamine 4 mg/kg IM or 1.5 mg/kg IV/IO (IN if available) titrated slowly to sedation. NOT for CPAP/HFNO sedation

Medication References

Diazepam
Fentanyl
Ketamine
Midazolam

Protocol Source/Reference: Michigan 7.17 Procedural Sedation; Version 2/24/23.

MCA Name: Oakland County
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MDHHS Approval: 10/11/2023