Procedural Sedation

ED Sedation Procedure

Emergency Care Institute
NEW SOUTH WALES

5 issues that should be addressed prior to progressing to procedural sedation:	
Does the most senior doctor on the floor know about the proposed procedure? • Consider whether the procedure necessary? • Consider whether the patient will be going to OT anyway	✓
Is no alternative (e.g. Biers block, Nitrous Oxide) available?	✓
Is the emergency department the safest place for this procedure? • Patient factors - an unstable patient, anticipated difficult airway • Department factors - adequate staffing, length of procedure	✓
Are the staff who are involved adequately trained to administer the sedation or carry out the procedure?	✓
Does the area have the appropriate resources? • Equipment • Monitoring • Staff	✓

Have all the above issues been addressed? If **YES** then you can proceed.

Patient assessment:

1. A.M.P.L.E
   Allergies
   Medication
   Past medical history
   Last ate/drank
   Events

2. Examination – Usual physical exam being specific for airway e.g. LEMON
   - Look (facial trauma, large incisors, beard/moustache, large tongue)
   - Evaluate 3-3-2 rule (3 fingers mouth opening, 3 fingers between mentum and hyoid, 2 fingers between hyoid and thyroid cartilage)
   - Mallampati[1]
   - Obstruction - the presence of anything causing obstruction
   - Neck mobility

Developed by the ECI

February 2013

ACI/D13/1500

3. ASA classification [2]
4. Informed consent
5. Exercise caution in the following cases:
    - Fasting state; food <6 hours, fluid < 2hours
    - Any positive LEMON findings
    - Mallampati score 3 or 4
    - ASA 4/5 patient may not suitable for ED sedation
    - Obese, elderly, children

Staff:

A minimum of 3 staff is generally required; one to carry out procedure, a second to give sedation / patient monitoring and the third to assist. The level of seniority of the staff involved in the administration of sedation is dependent on the Tier of the sedation (Tier 1, 2 or 3) and local policy. In major metropolitan Emergency Departments this would usually mean an emergency physician or accredited emergency registrar whereas in rural settings local policy and governance arrangements would apply.

Facilities/Equipment:

- Procedures requiring intravenous sedation should be carried out in a resuscitation room or a dedicated procedure room that is equipped to deal with a cardiopulmonary emergency.
- All patients should be on Oxygen via mask, Bag Valve Mask with appropriate facemask available, suction.
- Airway adjuncts and difficult airway trolley should be available.
- Resuscitation trolley and defibrillator should be available.

Monitoring:

- Continuous pulse oximetry
- If available suggest end tidal CO2 for all IV sedation
- 5 minute interval pulse and blood pressure
- ECG monitoring.

Medication:

There is no single agent or combination of agents that can be recommended for every patient or sedation procedure. Agents commonly used include Nitrous Oxide, Midazolam, Fentanyl, Ketamine, and Propofol.

- Choice of medication, appropriate dose calculated, drawn up and labeled
- Adequate IV access with 1 liter bag of 0.9% Normal Saline
- Consider appropriate antagonistic agents.

Documentation:

- Use an emergency sedation record form
- Make note of procedure in the patient notes
- Use a procedural time out form.

Criteria for safe Discharge:

- Vital signs and level of consciousness returned to normal
- Tolerate oral fluids with no vomiting
- In the company of an appropriate person
- Warning not to drive/operate heavy machinery for 12 hours
- Post sedation instruction sheet.

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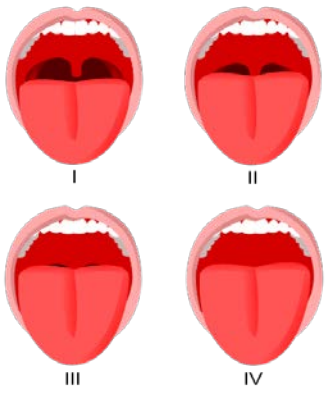
[1] Mallampati score: Patient must be seated, head neutral,mouth wide open and tongue protruding



I.	Full visibility of tonsils, uvula and soft palate
II.	Visibility of hard and soft palate, upper portions of tonsils and uvula
III.	Soft and hard palate and base of uvula are visible
IV.	Only hard palate visible

[2] American Society of Anaesthesiologists:

- Class 1. Healthy patient
- Class 2. Mild systemic disease
- Class 3. Severe systemic disease that limits activity but does not incapacitate
- Class 4. Incapacitating systemic disease that is a constant threat to life
- Class 5. Moribund, not expected to live 24 hours

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