

Emergency Scenarios with Case Review - Sedation

This emergency scenario reviews over-sedation, and is set up for role-play and case review with your staff.

- 1) The person facilitating scenarios can print out the pages below.
- 2) Cut up the "role" pages, and assign several roles, distributing the "roles" to appropriate participants in clinic.

Patient who is over-sedated during a procedure

Medical Assistant

Nurse

Doctor or Clinician

Clinician or additional nurse

2nd Clinic Assistant

Manager or Administrator

- 3) If your staff is smaller, you can cut optional roles. Any additional staff can be asked to observe and discuss.
- 4) Following role-play, gather the staff to review questions for debriefing and teaching.
- 5) Repeat scenario for further practice as time allows.
- 6) Record date of scenario and topic on your emergency scenario log (as appropriate)

Scenario – Sedated patient not breathing well (8 roles)

Tonya – Abortion Client.

You are a 19 year old G1P0 woman who just finished your abortion procedure (at 14 wks) and have been brought to the recovery room. You were very nervous prior to the procedure, so you asked for IV sedation, and received both Fentanyl and Versed. They had difficulty placing your heplock due to you “poor veins”. You use no other medications, have no medical history, and no known drug allergies.

You brought your friend with you, who was with you during the procedure, and is now in the waiting room. In recovery, you become progressively sleepy, and start to nod off. At one point your respiratory rate falls to 6, and you start to turn blue. When given reversal medicines, you will not awaken until a second medicine is given.

**Vitals: Level of alertness: Asleep, Resp 6-8, Pulse 66, BP 90/60, O2 saturation 88%
After 1st reversal med: Alertness: groggy; Resp 10, Pulse 90, BP 120/70, O2 Sat 93%
After 2nd reversal med: Alertness: awake, Resp 18, Pulse 100, BP 130/80, Sat 97%**

Doctor / Clinician

You have just finished an MVA on your last client for the day, and everything seems stable, so you leave clinic, giving your cell phone number to the staff. Your last client was a 19 year old G1P0 patient who weighs 123 pounds, and is about 14 weeks EGA. The patient chose to have IV sedation due to extreme anxiety. She denied recent medication, alcohol or drugs, though the nurse mentioned some difficulty placing her heplock due to possible scarring. You administered fentanyl 100 ug IV, and Versed 1 mg IV. The procedure went well, and the clients seemed stable afterward, so you finished charting, and left the clinic. When they call you, you are resistant to returning but do so.

Nurse

You are caring for the last couple clients in recovery after an abortion clinic. The last client of the-day was brought into recovery a few minutes ago. The AB doctor was impatient to leave the clinic, so handed you the client’s chart, along with her/his cell phone number before leaving. You have 2 other clients in recovery. After a few minutes, you notice the client is falling asleep, and is not easily arousable.

The chart tells you she is a 19 year old G1P0 patient, and was 14 weeks EGA. The patient chose to have IV sedation due to extreme anxiety, and still has a heplock in place (which you had difficulty placing due to either small veins or scarring). She denied medication, recent alcohol or drugs, allergies or past med history. She received fentanyl 100 ug IV, and Versed 1 mg IV.

Clinician or Additional nurse

You are taking care of a Med AB client when you are called to recovery room, where a post-AB client is very sedated (asleep), not breathing well, and looking a little blue.

Medical Assistant

You are starting to clean up the AB rooms after clinic. You just finished taking the last client to recovery a few minutes ago. You are day-dreaming about your plans to go out for dinner with your beau tonight, when you hear the nurse calling for help in the recovery room, because your last client seems to be falling asleep and not breathing well. You know that she received Fentanyl and Versed by IV.

Front Desk Person

You are in the process of setting up follow-up appointments for the afternoon AB clients. You hear the overhead safety alarm go off, because of a post-AB client in the recovery room.

Another Medical Assistant

You are deep in a gab session with one of the volunteers in the lab, after helping the last clients partner into the waiting room. The afternoon AB clients are all done. You hear the overhead safety alarm go off, because of a post-AB client in the recovery room.

Manager or Administrator

You are working at the computer near the front desk, near the end of AB day. You hear the overhead safety alarm go off, because of a post-AB client in the recovery room, and go looking around the clinic to find out what is wrong.

Scenario Review:

I) General debriefing questions: How did it go?

- 1) Did delegation of roles happen smoothly? Any unnecessary delays?
- 2) Did delays affect the patient outcome?
- 3) Did the alarm system get activated (if appropriate)?
- 4) Were other patients attended properly?
- 5) Was the support person or family alerted to what happened?
- 6) Did transfer occur smoothly? The decision? The communication? The paperwork?

II) 1) What are the most likely causes of excessive sedation in our clinic?

Narcotics and benzodiazapines that we give.
Street drugs.
Long waits causing boredom (wink).

2) Which medications that we use are respiratory depressants.

Both fentanyl and versed (midazolam) cause sedation. Narcotics are respiratory depressants, Benzodiazapines (like Ativan, Valium or Versed) make people sedated, which can add to respiratory depression. Both can be reversed using antidotes (antagonist reversal agents) as needed.

3) Why is it important to know about street drugs before giving sedative medications?

- a) Substance abuse can interrupt with true informed consent, warranting a delay in a procedure.
- b) Narcotic tolerance and / or diminished pain threshold among substance abusers occurs, legitimately requiring higher doses.
- c) Street drugs interact with drugs given in clinic.
- d) Rapid reversal of narcotics in chronic users can provoke violent withdrawal, agitation, and even seizures. We use fairly small doses of Narcan, to help avoid this (0.1 – 0.2 mg (0.25 - 0.5 ml) IV /IM each min (max 0.4 mg = 1 ml). Such Narcan dosing can be repeated every minute or two in a stepwise fashion. If you gave the whole vial of Narcan – realize that is wrong, and could be dangerous in chronic narcotic users.

4) How can over-sedation be prevented?

Prevention can be aided by using a stepwise approach to sedation. Use smaller doses for low weight patients, Asians, and those with known sensitivity. Carefully mark syringes (with med & client name) prior to use to avoid confusion. Serial doses are helpful until the appropriate sedation is achieved. Ask about street drugs, and tell the client why this is important. Convey your concerns to the MD if you think the client may not be truthful.

III) What are key parts of the management?

Use of antagonists can be done in a stepwise fashion, so medication can be slowly reversed. If a procedure is still in progress, that will allow completion with some sedation. The following guidelines can be followed

<u>O2 Saturation</u>	<u>Management</u>
95 –100%	Continue monitoring
90 - 94%	Check lead placement Advise deep breathing
89% or less	Initiate oxygen therapy Consider appropriate antagonists (stepwise) Transfer if persistent.

Antagonist / Reversal Drugs:

Narcotic Reversal	Narcan	0.1 – 0.2 mg (0.25 - 0.5 ml) IV /IM; each min (max 0.4 mg = 1 ml)
Benzodiazapine Reversal (Midazolam)	Romazicon (Flumazanil)	0.2 mg (2cc) IV; repeat each 1 min to max 1 mg (10 cc)

IV) Potential Skills to Review:

Use of O2 Sat Monitor (what each number means and how to respond at different O2 Sats)
Where antagonist medications are kept.
Use of antagonist medications (IV vs. IM doses).