

ADMINISTRATION

1. Ideal Sedation Level
Signs/Symptoms

2. Technique of Administration
 1. Patient preparation

 2. Establish gas flow

 3. Titration

 4. Termination/Recovery

COMPLICATIONS - SIDE EFFECTS

1. Oversedation - unlikely with careful titration
Signs
 1. Persistent closing of mouth
 2. Spontaneous mouth breathing
 3. Pt. states too intense or uncomfortable or complains of nausea
 4. Pt. fails to respond rationally or responds sluggishly to commands
 5. Pt. states he is about to fall asleep
 6. Pt. talks incoherently or appears to be dreaming
 7. Pt. becomes uncooperative
 8. Pt. laughs, cries, or becomes giddy
 9. Pt. has uncoordinated movements
 Management: decrease N₂O flow 0.5 lit per min. (5%-10% per min.), repeat as needed until patient reaches ideal sedation level

2. Excessive perspiration
 1. Perspiration alone (due to peripheral vasodilation)
Mgmt = decrease N₂O flow 0.5 lit per min. (5%-10% per min.), repeat as needed until patient reaches ideal sedation level
 2. Perspiration with pallor, drop in blood pressure, increased heart rate (possible MI)
Mgmt = stop N₂O, 100% O₂, life support as needed

3. Expectoration
Could be injured when sitting up to spit
Mgmt = good evacuation/suction

4. Behavior problems
 1. Compulsive pt.
Mgmt = let pt. "titrate"
 2. Excessive talking
Mgmt = decrease N₂O flow 0.5 lit per min. (5%-10% per min.), wait one minute, observe symptoms.
Repeat as needed until patient reaches ideal sedation level.

5. Vivid dreams
Mgmt = decrease N₂O flow 0.5 lit per min. (5%-10% per min.), wait one minute, observe symptoms.
Repeat as needed until patient reaches ideal sedation level.

6. Shivering
occurs near end of procedure, vasodilation = cooler body temperature
Mgmt: warm patient with blanket

7. Nausea

* Recognize and manage nausea so it doesn't develop into vomiting

1. inform pt. prior to tx to say something if they don't feel comfortable (avoid suggestion of nausea)

2. causes

depth of sedation

length of sedation

pt's emotional status

inherent tendency

presence or absence of food

changing level of sedation - "roller coaster"

changing pt. position

3. Mgmt.: decrease N₂O 0.5 lpm (5%-10% per min) , wait one minute, observe symptoms. Repeat until patient is comfortable.

8. Vomiting

* Potentially very serious - can obstruct airway; aspiration pneumonitis and/or lung abscess

1. more common in children

more difficult to communicate

mouth breathing = "roller coaster"

2. signs = pallor, sweating, cold clammy hands, increase salivation, active swallowing

3. Mgmt

a. pre-vomit

1. immediate 100% O₂

b. vomit

1. remove hood, turn pt head and body to side

2. clear mouth, airway

3. replace hood, 100% O₂ for 3-5 min., or until pt. is comfortable

N₂O-O₂ SEDATION - ADMINISTRATION

Armamentarium

N₂O Tank

750 psi

O₂ Tank

2000 psi

Reservoir Bag

1. "Back-up" if pt. takes very deep breath

2. monitor respiration

3. provide O₂ during assisted respiration

Safety Features

1. Pin Index Safety System

2. Diameter Index Safety System

3. Minimum O₂ liter flow

4. Minimum O₂ percentage

5. O₂ Failsafe

6. O₂ Flush

7. Color-coding

8. Quick-connect for positive pressure O₂