The Importance of Patient Safety and the Administration of Anesthesia in the Plastic Surgeon’s Office and Ambulatory Centers

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Patient Safety and the Administration of Sedation in the Office-Based Setting

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Disclosures

• No financial disclosures
Goals of Sedation?

**Kids:**
- Pain relief
- Anxiety relief
- Stop undesired movement

“There’s nothing a little duct tape can’t fix.”

**Adults:**
- Pain relief
- Anxiety relief
- And…
Sedation in the Office-Based Setting

• Why safety in the office-based setting is a concern
• Guidelines
• Implementing a sedation plan
  – The nuts and bolts
  – Important considerations
    • Pre-operative evaluation
    • Sedation as a continuum
    • Appropriate monitoring
    • Post-op care and Discharge
Objectives

• To understand the importance of appropriate patient selection
• To understand the concept of sedation as a continuum and the potential for unintended deep sedation as a result
• To understand the importance of appropriate monitoring for safety
OH WOW! PARADIGM SHIFT!
Growth in Office-Based Procedures

Growth in Office-Based Procedures

American Society for Aesthetic Plastic Surgery (ASAPS) statistics for 2010:

- Almost 9.5 million cosmetic procedures
  - 56% were performed in an office facility
  - 24% in Free-standing surgicenter
  - 19% in hospital
- Top 5 cosmetic surgical procedures
  - Breast augmentation
  - Liposuction
  - Eyelid surgery
  - Abdominoplasty
  - Breast reduction

American Society for Aesthetic Plastic Surgery: Cosmetic Surgery National Data Bank 2010
The Allure of the Office-based Setting

• Benefits
  ▪ Greater comfort and privacy – spa-like experience
  ▪ If done under sedation, avoid the complications and recovery from GA
  ▪ Greater convenience – provider/patient access, greater flexibility and ease of scheduling, more efficient check in and recovery
  ▪ Cost saving
The Flip Side

- Compared with acute care hospitals and licensed ambulatory surgical facilities, little or no regulation, oversight or control by federal, state or local laws exist
  - Lack of standards for:
    - Personnel/training
    - Equipment/monitors and their maintenance and upkeep
    - Drugs
    - Facility backups and redundancies in place
    - Administrative policies and protocols for safety
  - No enforcement?
- Risks of sedation in OBS
  - Area of sedation itself remains relatively non-standardized
  - Greater demand means more sedations performed by potentially inexperienced/inadequately trained personnel.

Shapiro FE (2007)
Ahamd S (2010)
DON'T MOVE, or I'll fill you full of 98% lead, 1% antimony, 0.75% silver, 200 parts per million nickel, trace amounts of cobalt, and other components below their respective detection limits!

Wait a minute! Are those values CERTIFIED?!
Taming The Wild Wild West

• 3 organizations perform accreditation of office-based surgical facilities
  • AAHC (The Accreditation Association for Ambulatory Healthy Care)
  • AAAASF (The American Association for Accreditation of Ambulatory Surgical Facilities)
  • JCAHO (The Joint Commission on Accreditation of Healthcare Organizations)
• Dec 2009: 26 states have some regulations for office-based surgery
  • http://www.asahq.org/Washington/rulesregs.htm

Shapiro FE (2007)
Shapiro FE and Urman RD (2011)
Ahmad S (2010)
American Society for Aesthetic Plastic Surgery (ASAPS)

• (July 2002) – All members agreed to perform cosmetic procedures requiring anesthesia only in accredited state licensed or medicare-certified facilities (other than local anesthesia and/or minimal oral or IM tranquilization)

• (Feb 27, 2004) Office Surgery: Guidelines for Patient Safety
American Society of Anesthesiologists (ASA)

- Guidelines for Office-Based Anesthesia (2009)
- Practice Guidelines for Sedation and Analgesia by Non-Anesthesiologists (2002)
- Office-Based Anesthesia: Considerations for Anesthesiologists in Setting up and Maintaining a Safe Office Anesthesia Environment (ASA Committee on Ambulatory Surgical Care and ASA Task Force on Office-Based Anesthesia) (2008)
- Statement on Nonoperating Room Anesthetizing Locations (2008)
- Basic Standards for Preanesthesia Care (2010)
- Standards for Postanesthesia Care (2009)
- Standards for Basic Anesthetic Monitoring (2011)
- Continuum of Depth of Sedation: Definitions of General Anesthesia and Levels of Sedation/Analgesia (2009)

http://www.asahq.org
Guidelines for Office-Based Anesthesia

• Administration and Facility
  – Quality of Care
  – Facility and Safety

• Clinical Care
  – Patient and Procedure Selection
  – Perioperative Care
  – Monitoring and Equipment
  – Emergencies and Transfers

ASA Guidelines for Office-Based Anesthesia (2009)
Guidelines for Office-Based Anesthesia

Clinical Care:
• Patient and procedure selection
• Perioperative care
• Monitoring and equipment
• Emergencies and transfers

ASA Guidelines for Office-Based Anesthesia (2009)
Patient and Procedure Selection:

- Procedure should be within the provider and facility capabilities to accommodate
- Procedure of appropriate degree and complexity
- Patient co-morbidities or conditions suggesting undue risk should be referred to a more appropriate facility for surgical procedure

ASA Guidelines for Office-Based Anesthesia (2009)
Guidelines for Office-Based Anesthesia

Clinical Care

Perioperative care:

- Adherence to basic standards for *pre-anesthesia care*, *monitoring* and *post-anesthesia care*, and guidelines for *ambulatory anesthesia and surgery*
- Anesthesiologist physically present intra-procedure and immediately available until d/c from anesthesia care
- Discharge of patient is the responsibility of the physician
- Provider with advanced life support training should be immediately available until d/c to home

ASA Guidelines for Office-Based Anesthesia (2009)
www.asahq.org
Guidelines for Office-Based Anesthesia

Clinical Care

Monitoring and equipment:
• Reliable source of O2, suction, resuscitation equipment and emergency drugs
• Adequate space for necessary equipment/personnel and access patient
• Availability of back-up power
• Equipment maintained, tested and inspected per manufacturer’s specifications
• Anesthesia equipment/monitors per ASA standards and documentation of regular preventive maintenance
• Appropriately sized equipment, meds, resuscitative capabilities if caring for children

ASA Guidelines for Office-Based Anesthesia (2009)
Guidelines for Office-Based Anesthesia

Clinical Care

Emergencies and Transfers:

- Written protocols for emergencies: CPR, internal or external disasters
- Appropriate training in and regular review of emergency protocols
- Meds, equipment and written protocols to treat malignant hyperthermia (MH) when triggering agents are used
- Written protocol for safe and timely transfer to a pre-specified alternate care facility if needed

ASA Guidelines for Office-Based Anesthesia (2009)
Guidelines for Office-Based Anesthesia

Clinical Care:
• Patient and procedure selection
• Perioperative care
• Monitoring and equipment
• Emergencies and transfers

ASA Guidelines for Office-Based Anesthesia (2009)
An ounce of prevention

- The best way to avoid a complication is not to get yourself there in the first place.
- Assessment of patients/procedure/provider to determine appropriateness for office-based setting
Don’t Go there...the 3 P’s

- Is the **patient** appropriate for office-based setting?
- Is the **procedure** appropriate for office-based setting?
- Is the **provider** appropriate for office-based setting?

- Is the patient an appropriate candidate to receive office-based procedural sedation by a non-anesthesia care provider?
Choose wisely

- It could cost you more than a dollar
- Consider
  - Patient co-morbid conditions
  - Intrinsic risk or invasiveness of procedure
  - Specific co-morbidities that may affect or complicate operative and anesthetic management
ASA Basic Standards for PreAnesthesia Care

• Review available medical record
• Interview and perform focused exam
  – Medical hx, prior anesthetics, Rx
  – Focus on conditions that may affect decisions about periop risk/management
• Order/review pertinent tests, consults as necessary
• Order pertinent preoperative medications
• Informed Consent
• Documentation of the above

ASA Basic Standards for Preanesthesia Care (2010)
ASA Physical Status Classification System

- ASA 1 - A normal healthy patient
- ASA 2 - A patient with mild systemic disease
- ASA 3 - A patient with severe systemic disease
- ASA 4 - A patient with severe systemic disease that is a constant threat to life
- ASA 5 - A moribund patient who is not expected to survive without the operation
- ASA 6 - A declared brain-dead patient whose organs are being removed for donor purposes
- E - Emergency
Maybe not?...

Table 1
Patients not suitable for OBS

<table>
<thead>
<tr>
<th>Cardiac conditions:</th>
<th>Pulmonary conditions:</th>
<th>Central nervous system:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity level: &lt;6 METS</td>
<td>Obstructive sleep apnea: PSG+, STOP questionnaire*+</td>
<td>Multiple sclerosis</td>
</tr>
<tr>
<td>Unstable angina</td>
<td>Severe chronic obstructive pulmonary disease</td>
<td>Cerebrovascular accident</td>
</tr>
<tr>
<td>MI: 0–3 months</td>
<td>Airway abnormality</td>
<td>&lt;3 months</td>
</tr>
<tr>
<td>MI: 3–6 months: must have evaluation by cardiologist before surgery</td>
<td>Previous difficult intubation</td>
<td>Paraplegia/quadriplegia</td>
</tr>
<tr>
<td>Severe cardiomyopathy</td>
<td>Asthma: &lt;8 months since last emergency department visit/acute exacerbation</td>
<td>Seizure disorder</td>
</tr>
<tr>
<td>Poorly controlled hypertension</td>
<td>Lung transplant recipient/candidate</td>
<td>Psychologically unstable: acute anxiety, rage, or anger</td>
</tr>
<tr>
<td>Internal defibrillator or pacemaker</td>
<td></td>
<td>Dementia: disoriented</td>
</tr>
</tbody>
</table>
| Heart transplant recipient/candidate

<table>
<thead>
<tr>
<th>Renal:</th>
<th>Hepatic:</th>
<th>Endocrine:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant renal disease:</td>
<td>Significant liver disease:</td>
<td>Morbid obesity: body mass index ≥35</td>
</tr>
<tr>
<td>Creatinine &gt;2 mg/dL</td>
<td>Elevated bilirubin/ transaminases</td>
<td>Poorly controlled diabetes mellitus:</td>
</tr>
<tr>
<td>End-stage renal disease: on dialysis</td>
<td>Liver transplant candidate</td>
<td>HbA1c &gt;8</td>
</tr>
<tr>
<td>On special diet because of renal disease</td>
<td></td>
<td>Type 1 diabetes mellitus</td>
</tr>
</tbody>
</table>
| Kidney transplant candidate

<table>
<thead>
<tr>
<th>Hematologic:</th>
<th>Musculoskeletal:</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sickle cell disease</td>
<td>H/O malignant hyperthermia</td>
<td>Alcohol/substance overuse</td>
</tr>
<tr>
<td>Anticoagulant therapy</td>
<td>Myasthenia gravis</td>
<td></td>
</tr>
<tr>
<td>von Willebrand disease</td>
<td>Muscular dystrophy or myopathy</td>
<td>No adult escort</td>
</tr>
</tbody>
</table>
| Hemophilia

Anesthesia Referral?

- Patients who have abnormalities of the major organ systems
- Patients who have had previous problems with anesthesia or sedation
- Patients receiving significant amounts of pain medication chronically or who for other reasons may be tolerant to agents used during sedation and analgesia
- **Patients who have a history of stridor, snoring or sleep apnea**
- **Patients who have dysmorphic facial features, such as Pierre Robin syndrome or trisomy 21**
- Patients who have oral abnormalities, such as a small opening (<3 cm in an adult), edentulous, protruding incisors, loose or capped teeth, high arched palate, macroglossia, tonsillar hypertrophy, or a nonvisible uvula
- **Patients who have neck abnormalities, such as obesity involving the neck and facial structures, short neck, limited neck extension, decreased hyoid-mental distance (<3 cm in an adult), neck mass, cervical spine disease or trauma, tracheal deviation, or advanced rheumatoid arthritis**
- **Patients who have jaw abnormalities, such as micrognathia, retrognathia, trismus, or significant malocclusion**

AIRWAY
AIRWAY
AIRWAY
AIRWAY
Clues to a Difficult Airway

• History of a difficult airway
• Things that may make mask fit difficult
  • Dysmorphic facial features (congenital syndromes)
  • Surgery causing facial deformities
  • No teeth
  • “Fluffy” face
  • Beard or other facial hair
• Things that may pre-dispose to obstruction
  – Obesity
  – OSA (snoring)
  – Big tonsils, tongue
  – Small mandible
  – Masses
  – Glycogen storage diseases
  – Infections or masses
  – Trauma
• Things that may restrict motion
  – Obesity
  – Short neck
  – Masses
  – Prior surgery or radiation of the head/neck
  – Cervical spine disease (arthritis, spine fusion, laxity)
• Things that may make for difficult visualization/intubation
  – See above!
  – Teeth (prominent incisors, loose or other “appliances”)
  – Short chin (hyoid-mental distance <3cm in an adult)
  – Small mouth opening
  – Tracheal narrowing or deviation
Preoperative Airway Evaluation

- Thyromental distance
- Mouth opening
- ROM of head/neck
- Ability to bring lower incisors in front of upper incisors
- Mallampati Class
Be afraid...be very afraid...

I HAVE ALTERED THE POOL.
PRAY I DO NOT ALTER IT ANY FURTHER.
The short – absent chin!
Oddly shaped face
This neck don’t move so much...
Fat babies are cute, right?....
Preoperative Patient Selection

- Patient appropriate?
  - Comorbidities and stability/optimization of medical illnesses
  - Hx of adverse experience with anesthesia/surgery, including MH
  - Difficult airway
  - Things that may make sedation difficult
  - Increased risk of developing DVT, PE

- Also consider:
  - Time and nature of last oral intake
  - Psychological status
  - Support system at home
  - Presence of a vested adult who assumes responsibility specifically for accompanying the patient from the office

Office Based Anesthesia (2008)
Don’t Go there...the 3 P’s

• Is the **patient** appropriate for office-based setting?
• Is the **procedure** appropriate for office-based setting?
• Is the **provider** appropriate for office-based setting?
Procedure appropriate?

• “The procedure should be of a duration and degree of complexity that will permit the patient to recover and be discharged from the facility”
  
  • Consider intrinsic risk or invasiveness
  
  • Do you expect significant blood loss, fluid shifts, hypothermia, post-operative pain, immobility?

• ASPS – <6 hours in duration and completed by 1500

ASA Guidelines for Office-Based Anesthesia (2009)
Ahmad S (2010)
Provider Appropriate?

• “The anesthesiologist should be satisfied that the procedure to be undertaken is within the scope of practice of the health care practitioners and the capabilities of the facility”

ASA Guidelines for Office-Based Anesthesia (2009)
Does the anticipated sedation required fall within the scope of practice of the sedation provider (you?)?
Implementing Sedation in the Office

ASA Guidelines for Non-O.R. Anesthetizing Locations

- Sufficient space for equipment/personnel to allow expeditious access to pt, machine, monitoring equipment
- Sufficient electrical outlets, including clearly labeled outlets to backup emergency power, isolated with ground fault circuit interrupters if in a “wet location”
- Adequate lighting and backup illumination available
- Adequate staff trained to support the anesthesiologist
- Immediately available and reliable means of 2-way communication to request assistance.

Statement on Nonoperating Room Anesthetizing Locations (2008)
ASA Guidelines for Non-O.R. Anesthetizing Locations

- Reliable O2 source and back-up supply
- Adequate/reliable suction
- Adequate/reliable scavenging system
- Self-inflating resuscitator bag for PPV
- Adequate anesthesia drugs, supplies, equipment for intended anesthesia care
- Emergency drugs, cart with defibrillator and other equipment for CPR
- Monitoring equipment to adhere to ASA standards
- Appropriate postanesthesia management

Statement on Nonoperating Room Anesthetizing Locations (2008)
Sedation plan

- Techniques range from local infiltration and sedation to general anesthesia
  - Nothing
  - Minimal sedation
  - Moderate sedation/analgesia (conscious sedation)
  - Deep sedation/analgesia
  - General anesthesia
- Plans and preparation may vary depending on intended level of sedation
Sedation, so easy even a caveman could do it.

That is NOT Cool!
ASA Sedation Definitions

- **Minimal sedation (Anxiolysis)** – A drug-induced state during which patients respond normally to verbal commands. Cardiorespiratory function is unaffected.
- **Moderate sedation/Analgesia ("Conscious Sedation")** – A drug-induced depression of consciousness during which patients respond purposefully to verbal commands either alone or accompanied by light tactile stimulation. Cardiorespiratory function should be unaffected.
- **Deep Sedation/Analgesia** – A drug-induced depression of consciousness which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. Airway intervention may be required. Cardiovascular function is usually maintained.
- **General Anesthesia** – A drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. Airway intervention often required. Cardiovascular function may be impaired.
Of note concerning ASA Sedation Definitions

✧ Cannot always predict how a patient will respond to sedative/analgesic medications
✧ Sedation is a continuum
✧ Spontaneous maintenance of cardiorespiratory function will likely decline with increasing levels of sedation/anesthesia

Continuum of Depth of Sedation (2009)
### Continuum of Sedation

<table>
<thead>
<tr>
<th>Minimal Sedation</th>
<th>Moderate Sedation/Analgesia</th>
<th>Deep Sedation/Analgesia</th>
<th>General Anesthesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Anxiolysis”</td>
<td>(Conscious sedation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal response to verbal commands</td>
<td>Purposeful response to verbal commands or light stimulation</td>
<td>Purposeful response to repeated or painful stimulation</td>
<td>Unarousable to painful stimulation</td>
</tr>
</tbody>
</table>

CV function maintained | CV function maintained?

***It is imperative that providers of sedation have the capability to recognize when a patient has entered a level of sedation deeper than intended and have the knowledge and skills to rescue them***
Monitoring Level of Consciousness

- **Moderate sedation** – monitor patient response to verbal commands where appropriate
  - Where verbal response is not possible (endoscopy), thumbs up to verbal or light tactile stimulation corresponds to moderate sedation
- **Deep sedation** – purposeful response to more profound stimulus should be sought unless contraindicated (disruptive or harmful)
  - Reflex withdrawal to pain is NOT a purposeful response

ASA Practice Guidelines for Sedation and Analgesia by Non-anesthesiologists (2002)
So where do we get into trouble?

"I had to get a new imaginary friend, the last one was getting me into too much trouble."
Closed Claims Project

- Initiated in 1984
- Analysis of closed malpractice claims to evaluate adverse anesthetic outcomes
- Identify patterns of injury and damaging events leading to injury
- Devise strategies for prevention and thereby improve patient safety
Closed Claims Project

• Strengths
  • Ability to study a large collection of relatively rare events

• Limitations
  • Cannot know incidence of risk of adverse events without numerator and denominator data
  • Participating insurance companies may influence frequency and type of adverse events due to geographic variations in anesthesia practice
  • Claims represent only a small subset of adverse outcomes (injury without claims, claims without injury)
  • No control group
  • Bias towards more severe and costly injuries
  • Ambiguities in the judgment or appropriateness of care → poor inter-rater reliability and outcome bias
  • Retrospective, non-randomized data that may contain missing or conflicting accounts of the adverse event from various sources

Metzner J et al. (2011)
Closed Claims Project

✧ Cannot be used to test hypotheses or establish cause-effect relationships
✧ Can reveal patterns of injury and identify risk factors to address to improve patient safety
✧ Problem of lag time – 3-5 years for claim to be closed causing delay in implementing change for safer practice
Closed Claims study: MAC

• Monitored Anesthesia Care (MAC) - sedation of varying levels as dictated by the procedure, may convert to GA
Sedation, so easy even a caveman could do it.

That is NOT Cool!
Injury Associated with MAC (1990-2007)

Metzner et al. (2011)
Injury Associated with MAC

- Most common mechanism of injury: inadequate oxygenation/ventilation as a consequence of oversedation
- Majority of cases were deemed preventable by vigilance and better monitoring

Metzner et al. (2011)
## Table 1: Patient Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Ambulatory Anesthesia (n = 753)</th>
<th>Office-Based (n = 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean in years)</td>
<td>41</td>
<td>45</td>
</tr>
<tr>
<td>Female (%)</td>
<td>58</td>
<td>64</td>
</tr>
<tr>
<td>ASA 1-2 (%)</td>
<td>82</td>
<td>89</td>
</tr>
<tr>
<td>Elective surgery (%)</td>
<td>97</td>
<td>100</td>
</tr>
<tr>
<td>Anesthesia type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General (%)</td>
<td>66</td>
<td>71</td>
</tr>
<tr>
<td>MAC (%)</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Surgical procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental (%)</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Plastic surgery (%)</td>
<td>32*</td>
<td>64*</td>
</tr>
<tr>
<td>Other (%)</td>
<td>64†</td>
<td>14†</td>
</tr>
</tbody>
</table>

*P < 0.05 Ambulatory vs. Office-Based  
†P < 0.01 Ambulatory vs. Office-Based  

Percentages do not equal 100% due to rounding
Injury Associated with Office-Based Setting

- Greater severity of injury
- Greater proportion of injuries deemed preventable by better monitoring, especially post-operatively
## Table 2: Damaging Events

<table>
<thead>
<tr>
<th>Type of Event</th>
<th>Ambulatory Anesthesia (n = 666)*</th>
<th>Office-Based (n = 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory</td>
<td>150 (22)</td>
<td>6 (50)</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>67 (10)</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Equipment</td>
<td>74 (11)</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Drug-related</td>
<td>58 (9)</td>
<td>3 (25)</td>
</tr>
<tr>
<td>Block-needle trauma</td>
<td>41 (6)</td>
<td>1 (8)</td>
</tr>
</tbody>
</table>

*Excludes claims with unknown or missing damaging events

Domino KB (2001)
Lessons from Closed Claims

- Over-sedation leading to respiratory depression is common
- Appropriate monitoring, vigilance and early resuscitation could have prevented many of these injuries

Desai MS (2008)
Monitoring Basics

- **Standard I**: Qualified anesthesia personnel shall be present in the room throughout the conduct of care
- **Standard II**: Patient’s oxygenation, ventilation, circulation and temperature shall be continually evaluated
  - Oxygenation – pulse oximetry with variable pitch pulse tone and low threshold alarm that is AUDIBLE to care team personnel, clinical assessment of patient color
  - Ventilation – Clinical signs including visual inspection of chest excursion, auscultation of breath sounds, monitoring for the presence of ETCO2 during moderate and deep sedation
  - Circulation – continuous ECG, arterial blood pressure and heart rate every 5 minutes
  - Body temperature – especially when clinically significant changes in body temperature are intended, anticipated or expected

ASA Standards for Basic Anesthetic Monitoring (2011)
Monitoring guidelines for sedation by non-anesthesiologists

• For moderate Sedation:
  • Pulmonary Ventilation
    • Observation
    • Auscultation
  • ETCO₂ – strongly recommended, especially if separated from the patient

ASA Practice Guidelines for Sedation and Analgesia by non-anesthesiologists (2002)
Monitoring doesn’t end with the procedure…

• Injury due to respiratory depression, preventable by better monitoring

• Recovery should include monitoring of oxygenation/ventilation, circulation and temperature

• Record of vital signs at regular intervals until patient is awake and interactive

Domino KB (2001)
ASA Standards for Postanesthesia Care (2009)
Discharge Criteria

- Patients should meet specific discharge criteria before going home
  - Modified Aldrete score (8-10)
  - Stable vital signs within 25% of baseline (HR, BP, RR, Temp – 36 degrees minimum)
  - LOC at or near baseline
  - Airway clear at rest and when agitated – good neck control
  - Oral intake – nausea controlled, taking and keeping down PO
- Physician responsible for discharge from PACU
- Instructions for discharge including what to do if resedation or other medical problems occur
- Discharge only into the care of a responsible and vested adult
Bottom Line for Patient Safety

• Assure all systems in place prior to performance of sedation in the office-based setting
• Ensure adequate training of personnel involved
• Appropriate patient/procedure/provider selection for office-based setting
• Recognize sedation as a continuum and be able to rescue patients from levels of sedation deeper than intended
• Vigilance and monitoring appropriate to the level of sedation achieved
• Continue vigilance and appropriate monitoring in the postoperative period
Thank you, and...

...LET’S BE CAREFUL OUT THERE.
References

- Domino KB. Office-Based Anesthesia: Lessons learned from the Closed Claims Project. ASA Newsletter 2001; 65(6a):9-11, 15.