Establishing A Culture of Safety for Anesthesiology in Dentistry
On a regular basis we have many opportunities to help increase patient safety, both as a society and as individual members. The theme for this issue of The Pulse is “Establishing a Culture of Safety for Anesthesiology in Dentistry”. What could possibly be more important than safety in anesthesia? A great resource, of course is the Anesthesia Patient Safety Foundation (APSF) http://apsf.org. The ADSA is a “Grand Sponsor” of the APSF.

One very important thing that we can each do is to stay involved in the decision making process and provide our individual input into those regulations, laws and guidelines that define how anesthesia and sedation are to be provided. This is often at the state level but also at the national level. Committee H (Committee on Anesthesiology) of the ADA has again proposed changes to the ADA Guidelines for the Use of Sedation and General Anesthesia by Dentists and the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students. This document with the proposed changes may be accessed at: http://tinyurl.com/q9kgtzr.

Upon publication, this document was sent to the communities of interest for comment. Many of you as individuals commented on this document, and the ADSA also provided a very well reasoned, logical and scientifically based recommendation to the ADA.

As of the writing of this column (September 1, 2015) it is not known what Committee H will take from the comments they received, how they will alter their original proposed changes or even if they will submit a document to the ADA House of Delegates for consideration at the annual meeting in early November. If there is such a document submitted to the House, I ask each of you to carefully read it and digest what it says. See if the recommendations are based soundly in science and supported by the peer reviewed published literature. Determine what changes you feel should be made, show up at the ADA House of Delegates and make your voice heard.

This cannot be about politics; it must only be about patient safety. We must stand together to ensure that the highest scientific standards are clearly presented and upheld. Patient safety must be the driving force behind any changes to the standards we currently follow as sedation/anesthesia providers. By actively participating in conversations about patient safety, each of us can help with creating a culture of safety for anesthesiology in dentistry.
Establishing A Culture of Safety
Lessons Learned From Under The Sea

As a certified rescue diver and dive master, I have long appreciated the commonalities between anesthesiology and scuba diving. Matters involving gas physics, respiratory, cardiovascular and central nervous system physiology, safety and rescue protocols, and the need for redundant systems and situational awareness are shared by both endeavors. Both activities involve a fair amount of risk that is managed through standardized initial training and continuing education, continuous monitoring, and reliance on a team of individuals to maintain safety.

Scuba diving, like anesthesia, has not always been as safe as it is today. Following the development of the Aqua Lung by Jacques-Yves Cousteau and Emile Gagnan in 1942, early scuba divers were exposed to significant risk and many perished. However, with the establishment of standardized training guidelines, uniform equipment standards, and research-based diving protocols, safety associated with scuba diving greatly improved and it is now considered safer than many other sporting activities.

Key to this improvement was the establishment of a “culture of safety” within the diving industry. Dive safety researcher Petar Denoble, MD, defines safety culture as the product of individual and group values, attitudes, competencies and patterns of behavior that determine the commitment to, and the style and proficiency of an organization’s health and safety programs’. The establishment of the “culture of safety” in scuba diving involved everyone: the equipment manufacturers, the dive shops, the boat captains and dive masters, the instructors and the individual divers. Everyone had - and continues to have - a role to play.

The term culture of safety or safety culture first appeared following the Chernobyl nuclear accident in Ukraine in 1986 when the International Atomic Energy Agency listed a “poor safety culture” as a contributing factor in the explosion and fire which released massive amounts of radioactive particles over the U.S.S.R. and Europe. Since that time, the concept has been adopted by many other industries including the transportation, construction and healthcare industries. A culture of safety exists in any industry or organization when everyone associated with that industry or organization, regardless of position, takes an active role in accident prevention without fear of reprisal. It is a team effort.

Do we have a “culture of safety” for anesthesiology in dentistry? Does a passion for patient safety permeate the anesthesia and sedation practices of every dentist in practice today? Is the development and promotion of safety culture paramount to every organization in the dental anesthesia community? If the answer is no, then we as a profession must take a serious look at ourselves in the mirror and work toward that goal to ensure our continued right and privilege of providing our own anesthesia and sedation care. We must put our egos aside and respect and recognize the special talents and knowledge that the various groups within the anesthesia community in dentistry bring to the table and combine those talents and knowledge to do what is best for our patients.

Developing and sustaining such a culture requires a collective effort and no organization is better equipped and positioned to lead that effort than ADSA. Our members, by virtue of their support and participation in the organization, have largely embraced a culture of safety. Unfortunately, development of the Aqua Lung by Jacques-Yves Cousteau and Emile Gagnan in 1942, early scuba divers were exposed to significant risk and many perished. However, with the establishment of standardized training
Establishing A Culture of Safety

our 5000 members are a relative minority in the sea of dentists providing anesthesia and sedation. For a culture of safety for anesthesiology in dentistry to be realized by the entire profession, all ADSA members must become engaged and take ownership by sharing our commitment with our colleagues. ADSA members must serve as role models and reach out to non-member colleagues and share our passion for patient safety, encourage them to become members of ADSA, and join us in our commitment by attending one of our upcoming meetings. We must also elect leaders to other dental organizations who share our concern for patient safety and are willing to collaborate with the entire dental anesthesia community to foster a culture of safety for the benefit of our patients.

This and future editions of The Pulse will be dedicated to ADSA’s role in establishing a culture of safety for anesthesiology in dentistry. In the pages that follow you will find details of our upcoming courses including our human simulation courses and our review courses for deep sedation/general anesthesia, moderate sedation, and pediatric sedation providers as well as courses for dental assistants who serve as anesthesia team members. Also in this issue, former ADSA president Dr. Robert Campbell reviews a new text which should be in the library of every dentist practicing office based anesthesia and sedation entitled: Anesthesia Complications in the Dental Office. This and more dedicated to patient safety in this edition.

As I close this editorial, I am reminded of one final similarity between scuba diving and anesthesia practice. The number one rule every scuba diver learns in his or her initial certification course is: “Never hold your breath - Always keep breathing”. I find this wise advice for our patients under anesthesia as well.

Best Regards,
Roy L. Stevens, D.D.S.
Editor


Upcoming CE Meetings

ADSA
www.adsahome.org

GENERAL ANESTHESIA
December 6-7, 2015
Swissotel Chicago
Chicago, Illinois
March 4-5, 2016
Aria Hotel & Casino
Las Vegas, Nevada

MINIMAL & MODERATE SEDATION
December 6-7, 2015
Swissotel Chicago
Chicago, Illinois
March 4-5, 2016
Aria Hotel & Casino
Las Vegas, Nevada

PEDIATRIC ANESTHESIA & SEDATION
March 4-5, 2016
Aria Hotel & Casino
Las Vegas, Nevada

ANNUAL SESSION
April 7-9, 2016
Marriott Brooklyn Bridge
New York, NY

SIMULATION COURSES
December 5, 2015
Swissotel Chicago
Chicago, Illinois
March 3-4, 2016
Aria Hotel & Casino
Las Vegas, Nevada

ASSISTANT COURSES
December 6-7, 2015
Swissotel Chicago
Chicago, Illinois
March 4-5, 2016
Aria Hotel & Casino
Las Vegas, Nevada
April 7-8, 2016
Marriott Brooklyn Bridge
New York, NY

IFDAS ANNUAL SESSION
October 8-10, 2015
Intercontinental Hotel
Berlin, Germany

UP TO DATE INFO ONLINE AT:
www.adsahome.org
The ADSA Deep Sedation/General Anesthesia Review Course in Chicago will offer a comprehensive review for the deep sedation/general anesthesia provider with specific focus on anesthetic techniques and principles. With a rapidly growing segment of the U.S. population consisting of medically compromised patients, the need for an understanding of specialized anesthesia care for the medically complex dental patient continues to be an important topic. This course will review common medical disorders that may be encountered while treating this population and their impact on safe and effective anesthesia and sedation care during office based procedures. Some anesthesia providers may become complacent over time. Thus, a review of common medical emergencies is presented along with a discussion of office preparation and training of the practitioner and staff for improved patient outcomes. In a high-risk, low-tolerance crisis, an organized, concise plan of action will significantly elevate the bar of patient safety.

Critical aspects involved in head and neck surgery for the pediatric and adult patient will be reviewed as well as newly developed techniques, medicaments and equipment which will provide the anesthesia provider with more consistent outcomes. The course will conclude with a thorough discussion of pain management followed by a grand rounds-style discussion of morbidity and mortality cases.

### Sunday, December 6, 2015

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<thead>
<tr>
<th>8:00</th>
<th>Introduction</th>
<th>Dr. Jason Brady - Chair</th>
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<tr>
<td>8:15</td>
<td>Anesthesia for Orthognathic Surgery</td>
<td>Dr. Andrea Fonner</td>
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<td>10:00</td>
<td>Break</td>
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<td>10:15</td>
<td>Anesthesia for Patients with Endocrine Disorders</td>
<td>Dr. Deepak Krishnan</td>
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<td>11:30</td>
<td>Checklist</td>
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<td>12:00</td>
<td>Lunch</td>
<td>Dr. Jason Brady</td>
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<td>1:00</td>
<td>Management of Patients with Cardiovascular Disease</td>
<td>Dr. Deepak Krishnan</td>
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<td>2:15</td>
<td>Anesthesia for Patients with Pulmonary Disease</td>
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<td>3:30</td>
<td>Medical Assessment</td>
<td>Dr. Nicole Tenn-Lyn</td>
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### Monday, December 7, 2015

| 8:00 | Crisis Management in Office Based Practice | Dr. James Phero |
| 8:15 | Pediatric Airway Consideration | Dr. Andrea Fonner |
| 10:00 | Break | |
| 10:15 | Pharmacology of IV Anesthetic Agents | Dr. Kyle Kramer |
| 12:00 | Lunch | |
| 12:00 | Armamentarium, Drugs, and Techniques | Dr. Kyle Kramer |
| 2:00 | Pre-, Peri- and Post-Operative Pain Management in Patients with Chronic Pain | Dr. Nicole Tenn-Lyn |
| 3:15 | Break | |
| 3:30 | Morbidity and Mortality Case Studies | Drs. Brady and Stevens - Moderators |

### Monday, December 7, 2015

| 8:00 | Managing Complications Associated with Procedural Sedation | Dr. Michael Rollert |
| 8:15 | Medical Assessment and Patient Medications | Dr. Michael Rollert |
| 10:15 | Break | |
| 10:30 | Anesthesia for Patients with Endocrine Disorders | Dr. Ernie Luce |
| 12:00 | Lunch | |
| 1:00 | Pharmacological Considerations for Procedural Sedation | Dr. Daniel Becker |
| 2:15 | Epinephrine Revisited | Dr. Daniel Becker |
| 3:00 | Break | |
| 3:15 | Adjuncts for Procedural Sedation | Dr. Jason Brady |
| 4:00 | Crisis Resource Management: Preparing the Team | Dr. James Phero |

Speakers & Topics Subject to Change

The ADSA Minimal and Moderate Sedation Review Course in Chicago is a two day course reviewing topics related to the safe and effective delivery of minimal and moderate sedation by inhalation, enteral and parenteral routes of administration. The first day of the course will begin with an extensive discussion of pre-operative patient evaluation and how medications the patient may be taking affects the sedation procedure. Current standards in patient monitoring during moderate sedation will be reviewed including a discussion of capnography and the controversies surrounding its use for moderate sedation. The pharmacology of sedative agents will be reviewed as well as a re-examination of long held beliefs regarding epinephrine. Adjunct medications used for augmenting moderate sedation procedures including a review of alpha adrenergic receptor agonists will be reviewed and the day will conclude with a discussion of how the moderate sedation provider can prepare their team for crisis resource management. The second day begins with an update on management of life threatening complications as well as a discussion of non-life threatening complications seen during moderate sedation. The course will also review the latest information on post-operative pain management. The lecture portion of the course will conclude with a review of controversial topics pertaining to procedural sedation followed by a grand rounds-style discussion of morbidity and mortality cases with attendees from the Deep Sedation/General Anesthesia Course.

### Sunday, December 6, 2015

| 8:00 | Introduction - Chair | Dr. Roy Stevens |
| 8:15 | Pre-, Peri- and Post-Operative Pain Management in Patients with Cardiovascular Disease | Dr. Ernie Luce |
| 10:00 | Break | |
| 10:30 | Anesthesia for Patients with Endocrine Disorders | Dr. Ernie Luce |
| 12:00 | Lunch | |
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| 4:00 | Crisis Resource Management: Preparing the Team | Dr. James Phero |

Speakers & Topics Subject to Change
The ADSA Simulation Course in Chicago places the participant into realistic clinical simulations which represent emergencies most commonly encountered during the delivery of all levels of sedation up to general anesthesia. Situational scenarios will specifically emphasize hands-on training in airway management. Participants are divided into two groups based on type of practice, either moderate sedation or general anesthesia. The SIM course will include pre-simulation didactics, followed by a review of essential emergency management principles. Participants will then break into smaller groups to practice emergency patient management on High-Fidelity Laerdal SimMan 3G human patient simulators in real time. Each participant will contribute to various emergency scenarios customized to the provider’s level and type of sedation used over the course of the session. Following each scenario, participants will share in a debriefing to discuss the efficacy of each intervention.

In preparation, registrants will be provided with pre-requisite reading materials, including treatment algorithms, and an optional online course pretest that may be completed prior to the course date for additional 2 CE credits. To make the best use of the available time, participants will also be provided with a list of mock drugs and available equipment.

This course is intended for dental practitioners trained in the delivery of intravenous moderate sedation to general anesthesia. Emergency scenarios will be customized to the level of sedation and anesthesia the practitioner provides, and the emergencies likely to be encountered. Course space is limited to provide each registrant with a low student/faculty ratio and an optimal hands-on experience. Because emergency crisis is best managed by a team approach, participants will practice scenarios as supportive groups. Doctors are highly encouraged to include their office staff in this course, so as to mimic an actual emergency situation.

HUMAN SIMULATION - SATURDAY, DECEMBER 5, 2015

The ADSA Assistant’s Review Course in Chicago is a 12 hour course designed to review important topics of interest to dental staff members who assist with anesthesia and sedation procedures in the dental office. It is appropriate for staff members assisting with moderate sedation or deep sedation/general anesthesia procedures.

The course includes reviews of understanding the nature of the apprehensive patient and methods used for evaluating the suitability of that patient to undergo anesthetic or sedation procedures. General concepts of pharmacology will be discussed as well as a review of specific drugs used during anesthetic and sedation procedures.

Time will also be spent reviewing patient monitoring as well as special populations and how their specific presentations affects the anesthetic or sedation procedure.

The course will conclude with a discussion of preparation for crisis resource management as well as an opportunity to participate in interactive emergency scenarios.

Sunday, December 6, 2015
8:00 Introduction
Dr. Andrea Bell - Chair
8:15 Pre-Operative Patient Assessment - Claudine M. Sordyl
9:15 Approaching the Apprehensive Patient
April Patton, CDA
10:30 Break
10:45 General Concepts and Principles of Pharmacology
Dr. Andrea Bell
12:00 Lunch
1:00 Monitoring
Dr. Ernie Luce
2:15 Anesthetic Drugs
Dr. Andrea Bell
3:00 Break
3:15 Geriatric Patient Management
Dr. Kyle Kramer
4:00 Pediatric Patient Management
Dr. Kyle Kramer
11:45 Course Comments/Questions
Dr. Andrea Bell
The ADSA Deep Sedation/General Anesthesia Review Course in Las Vegas will offer more value than ever. We have pulled together material that is applicable to your daily office based anesthesia practice with topics that will have an immediate impact. The course will begin with exploration of new concepts in anesthesia as the science of physiology is applied to the art of anesthesia. This is followed by a discussion of the importance of airway management as the central tenant of office based anesthesia.

Day one will also feature a practical review of patient selection for office based anesthesia as well as the latest concepts in airway management and a state of the art look at simulation in anesthesia.

Day two will feature a review of common emergencies and urgencies of the post anesthesia period along with a ‘Medicine Update’ on relevant medical disorders commonly encountered in office based anesthesia practices. The course will conclude with a grand rounds-style discussion of morbidity and mortality cases presented by many of our faculty.

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**Friday, March 4, 2016**

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Introduction</td>
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<tr>
<td>8:15</td>
<td>Bodywerks - The Science of Physiology Applied to the Art of Anesthesia</td>
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<td>Break</td>
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<td>Airway-Centric Anesthesia</td>
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<td>1:00</td>
<td>Pitfalls and Perils of Patient Selection for Office Based Anesthesia</td>
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<td>3:00</td>
<td>Break</td>
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<td>3:15</td>
<td>What’s New in Airway Management? What Good is This Capnography Anyways?</td>
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**Saturday, March 5, 2016**

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<tr>
<td>8:00</td>
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<tr>
<td>8:15</td>
<td>A Visit to the Discovery Room - Post-Operative/Recovery Area Concerns</td>
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<td>10:15</td>
<td>Medicine Update: Hypertension.JNC-8, Diabetes Mellitus, COPD-Asthma</td>
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<td>12:00</td>
<td>Lunch</td>
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<td>1:00</td>
<td>Medicine Update: Obesity and OSA, Chronic Pain Patients, Cancer Patients/RA/Crohn’s, Immunosuppressed Individuals</td>
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<td>Break</td>
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<td>Morbidity and Mortality Case Studies</td>
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The ADSA Minimal and Moderate Sedation Review Course in Las Vegas is a two day course reviewing topics related to the safe and effective delivery of minimal and moderate sedation by inhalation, enteral and parenteral routes of administration.

The first day of the course will begin with an extensive discussion of pre-operative patient evaluation and how medications the patient may be taking affects the sedation procedure. Current standards in patient monitoring during moderate sedation will be reviewed including a discussion of capnography and the controversies surrounding its use for moderate sedation. The pharmacology of sedative agents will be reviewed as well as a re-examination of long held beliefs regarding epinephrine. Adjunct medications used for augmenting moderate sedation procedures including a review of alpha adrenergic receptor agonists will be reviewed and the day will conclude with a discussion of how the moderate sedation provider can prepare their team for crisis resource management.

The second day begins with an update on management of life threatening complications as well as a discussion of non-life threatening complications seen during moderate sedation. The course will also review the latest information on post-operative pain management. The lecture portion of the course will conclude with a review of controversial topics pertaining to procedural sedation followed by a grand rounds-style discussion of morbidity and mortality cases with attendees from the Deep Sedation/General Anesthesia Course.
Pediatric Sedation Review Course - Las Vegas 2016

The ADSA Pediatric Sedation Review Course in Las Vegas is a two day course reviewing topics related to the safe and effective sedation of children. It is specifically designed for both pediatric dentists as well as non-pediatric dentists who sedate children during dental procedures.

The course reviews the unique anatomical and physiological aspects of pediatric patients of concern during procedural sedation as well as the pharmacological aspects of the various agents used in this population. Alternative methods of patient management will be reviewed as well as a thorough discussion of patient monitoring necessary during sedation procedures.

The course will feature a thorough discussion of sedative techniques for special populations of children including those with developmental disabilities and medical challenges. The course will conclude with a thorough discussion of management of emergencies seen during procedural sedation of children.

Friday, March 4, 2016
8:00 Introduction
Dr. David Rothman - Chair
8:15 Definition of a Pediatric Patient
Dr. David Rothman
9:15 Physiology
Dr. David Rothman
10:15 Break
10:30 Nitrous Oxide
Dr. Robert Bosack
11:00 Local Anesthesia
Dr. Joseph Giovannitti
12:00 Lunch
1:00 Drugs & Drug Regimens
Dr. Ronald Kosinski
2:00 Alternatives - IV Sedation/GA Options
TBA
3:00 Break
3:15 Monitoring
Dr. Ernie Luce
3:45 Non-Pharmacologic Behavior Management
Dr. David Rothman

Saturday, March 5, 2016
8:00 Treating Disabled Patients
Dr. Ronald Kosinski
9:00 Human Simulation
Dr. Ronald Kosinski
10:00 Break
10:15 Medical Emergencies
Dr. Michael Webb
11:00 Children with Medical Challenges
Dr. David Rothman
12:00 Lunch
2:45 Break
3:00 Pediatric Sedation for the Autistic Patient
Dr. Ronald Kosinski

Speakers & Topics Subject to Change

Human Simulation - Las Vegas 2016

The ADSA Simulation Course in Las Vegas places the participant into realistic clinical simulations which represent emergencies most commonly encountered during the delivery of all levels of sedation up to general anesthesia. Situational scenarios will specifically emphasize hands-on training in airway management. Participants are divided into two groups based on type of practice, either moderate sedation or general anesthesia. The SIM course will include pre-simulation didactics, followed by a review of essential emergency management principles. Participants will then break into smaller groups to practice emergency patient management on High-Fidelity Laerdal SimMan 3G human patient simulators in real time. A more comprehensive pre-simulation didactic presentation will be offered for the Las Vegas course. Each participant will contribute to various emergency scenarios customized to the provider’s level and type of sedation used over the course of the session. Following each scenario, participants will share in a debriefing to discuss the efficacy of each intervention.

In preparation, registrants will be provided with pre-requisite reading materials, including treatment algorithms, and an optional online course pretest that may be completed prior to the course date for additional 2 CE credits. To make the best use of the available time, participants will also be provided with a list of mock drugs and available equipment.

This course is intended for dental practitioners trained in the delivery of intravenous moderate sedation to general anesthesia. Emergency scenarios will be customized to the level of sedation and anesthesia the practitioner provides, and the emergencies likely to be encountered. Course space is limited to provide each registrant with a low student/faculty ratio and an optimal hands-on experience.

Because emergency crisis is best managed by a team approach, participants will practice scenarios as supportive groups. Doctors are highly encouraged to include their office staff in this course, so as to mimic an actual emergency situation.

HUMAN SIMULATION - MARCH 3-4, 2016
The ADSA Assistant’s Review Course in Las Vegas is a 12 hour course designed to review important topics of interest to dental staff members who assist with anesthesia and sedation procedures in the dental office. It is appropriate for staff members assisting with moderate sedation or deep sedation/general anesthesia procedures.

The course includes reviews of understanding the nature of the apprehensive patient and methods used for evaluating the suitability of that patient to undergo anesthetic or sedation procedures. General concepts of pharmacology will be discussed as well as a review of specific drugs used during anesthetic and sedation procedures.

Time will also be spent reviewing patient monitoring as well as special populations and how their specific presentations affects the anesthetic or sedation procedure.

The course will conclude with a discussion of preparation for crisis resource management as well as an opportunity to participate in interactive emergency scenarios.

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**Friday, March 4, 2016**

8:00  Introduction  
Dr. Andrea Bell

8:15  Pre-Operative Patient Assessment  
Dr. Andrea Bell

9:15  Approaching the Apprehensive Patient  
April Patton, CDA

10:30  Break

10:45  General Concepts and Principles of Pharmacology  
Dr. Andrea Bell

12:00  Lunch

1:00  Physiology  
Dr. Robert Bosack

2:15  Monitoring  
Dr. Ernie Luce

3:00  Break

3:15  Geriatric Patient Management  
Dr. Michael Rollert

4:00  Pediatric Patient Management  
Dr. Michael Rollert

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**Saturday, March 5, 2016**

8:00  Anesthetic Drugs  
Dr. Andrea Bell

9:00  From Start to Finish: Dental Assistant’s Point of View  
Claudine M. April Patton, CDA

10:00  Break

10:30  Preparing for the Worst Case Scenario  
Dr. Andrea Bell

11:45  Course Comments/Questions  
Dr. Andrea Bell
Anesthesia Complications in the Dental Office edited by Drs. Robert Bosack and Stuart Lieblich has “something” for everyone: generalist, specialist, anesthesiologist, surgeon, anesthesia assistant and other dental professionals and ancillary personnel who concern themselves with recognizing and treating anesthesia-related complications.

Structurally, the book has eleven sections and, for the most part, each section has several chapters expanding on the title. Interestingly, sections 1 and 10 are very unique in dealing with the “philosophy” of staying out of trouble: Anesthetic complications -- how bad things happen (section 1) and When should you say no? (section 10).

In section 1, Bosack defines complications, lists some triggering events and states that to err is human no matter how much “cognitive horsepower” the practitioner has. He provides an interesting graph on how low and high stress levels of the anesthesia care provider adversely affect performance levels. The references are also uniquely presented in the form of author and date at the end of each chapter rather than just numbered like most textbooks. I personally find this easier to look up in the reference section at the end of each chapter. The appendices include three chapters: A pilot’s perspective on crisis resource management, Medical emergency manual for the general practitioner, and Malignant hyperthermia, questions and answers.

Crisis resource management aka cockpit resource management, was one of the original concepts called upon 43 contributors to lend their expertise thus exposing each chapter and subject to broad knowledge input.

Anesthetic considerations for patients with cardiovascular disease, in section 3 is the most detailed and longest chapter as one would expect given its importance in anesthesia care. It has numerous graphs, illustrations and color plates demonstrating various disease states, heart structures, and electrocardiograms that affect anesthesia planning and decision making. Tables in this chapter categorize drugs for hypertension, heart valve pathology, EKG interpretation, and perianesthetic dysrhythmias. The management of patients with cardiovascular implanted electronic devices is also discussed, simplified and well organized but thorough enough to help make the correct decisions on whether or not to move forward to administer office anesthesia.

Bosack and Lieblich have constructed short easy to read chapters with a large assortment of easy to interpret graphs and great color clinical photographs illustrating most clinical anesthesia situations in the dental setting. The cover of the book is just an example of the quality of the photographs and illustrations inside. These alone are more than worth the cost of the book. Most of these are “home grown” while some are from other textbook sources with permission. He has also called upon 43 contributors to lend their expertise thus exposing each chapter and subject to broad knowledge input.

Anesthetic considerations for patients with respiratory disease in section 3 has several unique color plates on clinically applicable respiratory anatomy, spirometers, and practical nasal mask/ cannula equipment. It contains tables comparing obstructive disease, classification of reactive airway/asthma conditions and the common drugs and treatments used for each disease process.

Many anesthesia texts go into great detail on monitoring especially the basics. But this book takes a unique approach in the section 5 chapter of Limitations of patient monitoring during office-based anesthesia. Given this is an area of frequent controversy, Bosack addresses pulse oximetry and capnography in detail as it applies to the open airway techniques commonly used in dental anesthesia. The accuracy of the numbers depends at least in part the limitations of present technology.

Sections 6, 7, and 8 are in my opinion the highlight of the book: Preparation for adversity, Anesthetic adversity, and Post anesthetic adversity. How interesting to have sections with this common theme: adversity! These chapters have been written by a large number of solid, experienced clinicians. At the risk of being repetitive, but it is appropriate to emphasize, the clinical color plates are outstanding; better than any textbook I’ve seen. Bosack is challenged with writing on the subject, Post-anesthetic recall of intraoperative awareness in chapter 39. On a difficult topic he presents a thorough explanation of memory, recall and external and internal factors affecting intraoperative awareness.

Awareness under general anesthesia is frequently mention in patients who are intentionally or unintentionally under dosed with anesthetic agents. Prevention is not always possible but several management principles are presented, not the least of which, is be careful with what the patient is promised and has agreed to on the consent form.

The appendices begin with, A pilot’s perspective on crisis resource management a.k.a. cockpit resource management then changed to crew resource management (CRM). Two acronyms are presented; one directed toward the guidance qualities of the “pilot” or team leader and another identifies the decision-making skills, situational awareness of assigned team functions before “takeoff and landing” aka “induction and emergence”.

Pharmacology of modern anesthesia practice has met the challenges of understanding of complex diseases processes i.e. patients with addiction, mental and physical challenges, obesity, difficult airways and the undertaking of advanced surgical procedures in the office e.g. longer pediatric dental rehabilitation in open airway and orthognathic surgery. Today we have better equipment and shorter acting agents than what was available in the 1960’s and 70’s. The application of these modern anesthetic practices is addressed in the middle sections of the book.

While basic physiology has not changed much, our understanding of new drugs available and their application of these modern anesthetic practices is impressively expounded. It covers almost anything one could expect in a book titled Anesthesia Complications in the Dental Office.

This textbook belongs in the library of every anesthesia care provider working in a dental office practicing the spectrum of pain control from local anesthesia alone to full general anesthesia. There is “something” for every practitioner in Anesthesia Complications in the Dental Office.
Abstract:
How safe is deep sedation or general anesthesia while providing dental care?
Jeffrey D. Bennett, DMD, Kyle J. Kramer, DDS, Robert C. Bosack, DDS
JADA, Volume 146, Issue 9, Pages 705–708

Background
Deep sedation and general anesthesia are administered daily in dental offices, most commonly by oral and maxillofacial surgeons and dentists.

Methods
The goal of deep sedation or general anesthesia is to establish a safe environment in which the patient is comfortable and cooperative. This requires meticulous care in which the practitioner balances the patient’s level of sedation and level of responsiveness while maintaining airway integrity, ventilation, and cardiovascular hemodynamics.

Results
Using the available data and informational reports, the authors estimate that the incidence of death and brain injury associated with deep sedation or general anesthesia administered by all dentists most likely exceeds 1 per month.

Conclusions
Airway compromise is a significant contributing factor to anesthetic complications. The American Society of Anesthesiology closed claim analysis also concluded that human error contributed highly to anesthetic mishaps. The establishment of a patient safety database for anesthetic management administration would allow for a more complete assessment of morbidity and mortality that could direct efforts to further increase safe anesthetic care.

Practical Implications
Deep sedation and general anesthesia can be safely administered in the dental office.

Optimization of patient care requires appropriate patient selection, selection of appropriate anesthetic agents, utilization of appropriate monitoring, and a highly trained anesthetic team. Achieving a highly trained anesthetic team requires emergency management preparation that can foster decision making, leadership, communication, and task management.

Dr. Weaver Receives IFDAS Badge of Honor: Y. Kubota Distinguished Service Award

The International Federation of Dental Anesthesiology Societies (IFDAS) will be presenting the inaugural IFDAS Badge of Honor: Y. Kubota Distinguished Service Award to ADSA member and former Editor of Anesthesia Progress, Dr. Joel Weaver at the 14th International Dental Congress on Anesthesia, Sedation and Pain Control in Berlin, Germany October 8-10, 2015.

The IFDAS Badge of Honor: Y. Kubota Distinguished Service Award is named for Yasuya Kubota, M.D., D.D.S., D.Sc., the first Chair of the Department of Dental Anesthesiology, School of Dentistry, Tokyo Medical and Dental University and a pioneer of dental anesthesia in Japan.

The award will be presented at the 14th International Dental Congress on Anesthesia, Sedation and Pain Control in Berlin, Germany October 8-10, 2015.

Dr. Quinn Receives Horace Wells Award

The University of Pittsburgh School of Dental Medicine recently recognized ADSA member Dr. Joseph Giovannitti with their Distinguished Alumni Award in Advanced Education Programs.

Dr. Giovannitti currently is professor and chair of the Department of Dental Anesthesiology at the School of Dental Medicine and also serves as the anesthesia director for the school’s Center for Patients with Special Needs where he provides exemplary and caring anesthesia services to children and adults with significant disabilities and complex medical conditions.

Dr. Giovannitti has authored numerous journal articles and text book chapters and is a frequent presenter at ADSA review courses. His dedication to students, residents, colleagues and his patients is at the heart of his pursuit of advances in education and clinical anesthesiology practice. ADSA wishes to congratulate Dr. Giovannitti on this prestigious award.
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Educational Purpose
The ADSA online programs are part of its mission to promote safe and effective patient care for all dentists who have an interest in anesthesiology, sedation and the control of anxiety and pain.