Disclosures

- Do not have a financial arrangement or affiliation with any corporate organizations offering financial support or grant monies for this continuing dental education program, nor do I have a financial interest in any commercial products or services discussed in the presentation.

Objectives

- Identify high-risk patients and clinical scenarios
- Discuss case encounters with high-risk elderly, pediatric, and immunocompromised patients
- Discuss strategies to improve risk management
- Describe methods to effectively communicate critical information to improve patient care
Medical Emergencies in the Dental Office

- Surveys show in a 10-year period, 90 percent of dentists have encountered at least one medical emergency
- Basic equipment, training and a plan to respond to medical emergencies is essential
- Requirements/recommendations for medications
- In Minnesota, adverse anesthesia reaction reporting is required
- Medical emergencies are not necessarily linked to anesthesia
- Know the patient history and current health/medications

Identifying High-Risk Patients

**Elderly**
- Polypharmacy situations
- Co-morbidities
- Life span and quality of life
- Anesthesia risks
- Infection risk

**Immune-compromised**
- Level of management of systemic disease
- Delayed healing/Infection risk
- Co-occurring dental manifestations

**Pediatric**
- Weight/BMI
- Anesthesia risks
- Airway

Case Example 1: Elderly Polypharmacy/Systemic Disease

- 80 year old patient presents for a new patient examination and x-rays
- Caregiver is his son, authorized with healthcare making decisions
- History of diabetes, onset 65 y/o
- Multiple medications for conditions
- Medication not well controlling his high blood pressure
- Has had history of delayed healing and infection
- Needs full dentures and extraction of all remaining teeth
- What should we consider?
Case Example 2: Immunocompromised Patient

- Patient presents for emergency examination and x-rays
- Patient is in pain in UR and initial examination reveals several periodontal abscesses
- Patient is on multiple medications-including immunosuppressant
- Patient is in waiting for a kidney transplant
- What should be considered with this case?

Case Example 3: Pediatric Patient

- New patient presents to clinic for examination, x-rays
- Has mild carious disease
- 10 years old
- Medical history reveals severe asthma-more common in children
- Patient is wheezing and coughing during initial examination
- What steps should be taken?

Case Example 4: Pediatric Anesthesia Patient

- New patient presents to clinic for examination, x-rays and treatment plan for anesthesia
- Has extensive carious disease
- Patient is 4-years-old
- Very low weight for age
- Behavioral considerations and special needs
- Conscious sedation being considered
- What steps should be taken?
Case Example 5: Patient with Liver Disease

- Patient presents for emergency examination and x-ray
- Severe pain in UL area, previous RCT treatment
- History of HCV and severe liver cirrhosis
- Will need extraction of the tooth
- What should be considered?

Managing Risk: Two Important Pieces of Information

Health History
- Does the patient have systemic disease?
- Does the patient take medications?
- Has the patient had a history of complications?
- ASA Classification system
- Initial and Updated Routinely
- Drug Interactions

Informed Consent
- "PARQ" indicating that the provider has explained the procedures (P), alternatives (A), risks (R), if any, and has asked if the patient has any questions (Q)- Example Model
- Provider must document that the patient has consented to the treatment

Managing Risk: Commonly Reported Medical Emergencies in Dental Practice

- Syncope- most common
- Angina Pectoris
- Seizures
- Hyperventilation
- Insulin shock (hypoglycemia)
- Anaphylactic Reaction
- Local Anesthesia overdose
Communicating

Patients
- Understand health and oral health literacy
- Ask clarifying questions
- Do not allow patient to dictate treatment
- Get the answers you need to perform safe and effective care

Caregivers
- Work collaboratively
- Get permission/consent
- Know what type of follow-up care is available

Other HealthCare Providers
- Get answers
- Communicate with integrated team
- Get pre-op physical when high risk patient or condition
- Medical clearance and tests may be needed
- Understand drug-drug interactions and work with MD/Pharmacy team with any concerns
- Implications to the dental treatment—oral surgery, anesthesia, peri surgery etc.

In the event of an EMERGENCY:
- Have all pertinent patient information, including medications administered, ready for EMS

Recordkeeping

- If it is not written down, it did not happen
- Document every aspect of the pre-op procedures, including any medical consultation and tests or communication with other HCP’s

In the event of an EMERGENCY:
- Have all pertinent patient information, including medications administered, ready for EMS

Medical Emergency Training

- Mock Scenarios
- Medication Management
- Involve Dr’s and Staff
- Assign Roles
- Annually
- Update protocols and procedures
- Facility changes
- Where are your meds?
- BLS Requirements
Why is this Important?

- Preserve and protect patient health and safety
- Mitigate practitioner risk
- Reduce adverse reactions/events
- Improve medical emergency response and procedures

Patient Death

- Provider experiences a medical emergency in office
- Failed to appropriately manage emergency
- Failed to use correct monitoring equipment
- Medications
- Staff does not hold anesthesia certification requirement
- Patient dies
- What could have been done differently?

State Dental Board

- State Dental Board requires Adverse Reaction Reporting
- Evaluated by sedation committee and complaint committee
- Patient death considered for complaint and investigation
- Disciplinary process
- We do not require report of medical emergencies unless related to anesthesia
• Litigation may or may not be pursued by plaintiff (patient) or family member at the conclusion of a medical emergency situation or patient death.
• Medical emergencies can be handled in an appropriate manner- not always preventable, but manageable.
• Response, training, equipment, and medication- standard of care.
• RESPOND RIGHT AWAY- Brain death can begin occurring with lack of oxygen.

The Beginning... Better Practices

• Learn to identify clues that may indicate a high risk patient.
• Take the appropriate steps to locate useful information that will help you deliver care or identify when referral is needed.
• Comprehensive medical history and informed consent are CRITICAL.
• Utilize partners in care.
• Make sure that the patient understands risks and benefits.
• Employ safety mechanisms in the clinic that enhance safe care.
• Utilize and train staff.