STATE OF MAINE
BOARD OF DENTAL PRACTICE

143 State House Station, Augusta, ME 04333-0143

CERTIFICATION FORM
SEDATION AND/OR GENERAL ANESTHESIA (Updated 1/2022)

This certification form is required pursuant to Board Rule, Chapter 14 for qualifying dentists seeking a permit from the Board to administer sedation and/or general anesthesia. Complete this form and submit it to the Board along with the application and payment of the required fee.

IMPORTANT REMINDERS:

NOTIFICATIONS REQUIRED:

1) 10 day notification law pursuant to 32 MRS §18352:
    a. Change of name or address;
    b. Criminal Conviction;
    c. Revocation, suspension or other disciplinary action taken in this State or any other jurisdiction against any occupational or professional license held by the licensee or applicant; or
    d. Any material change in the conditions or qualifications set forth in the original application for licensure submitted to the board.
2) 14 day notification pursuant to Board Rule, Chapter 14:
    a. If providing sedation and/or general anesthesia services in agreement with an operating dentist, a 14 Day Notification Form must be submitted and approved by the Board prior to providing services.
3) 72 hour notification pursuant to Board Rule, Chapter 12 (I)(E) “Dental Adverse Occurrence Report”:
    a. Death of a patient within 48 hours after the administration of a dental practice procedure.
    b. Activation of an emergency response of a patient or emergent transport of a patient to another facility.

PERMITS ARE NON-TRANSFERABLE

All moderate level permits and deep sedation/general anesthesia permits are non-transferable. Permits issued are dentist specific and dental practice location specific.

SAMPLE FORMS

Attached to the certification form are the following anesthesia related documents:

1) Anesthesia Record and Modified Aldrete Scoring System
2) Common Dental Practice Emergency cases

DENTIST RESPONSIBILITIES

1) Levels of Anesthesia. The permit holder must be prepared to manage deeper than intended levels of sedation and/or anesthesia. If a patient enters a deeper level of sedation than the provider is qualified to provide, then the dental procedure must stop until the patient returns to the intended level of sedation.

2) Completeness/Accuracy. The dentist applying for a permit is responsible for completing the certification form. Failure to complete the form may result in a preliminary denial of the permit application, and failure to accurately complete the form may result in disciplinary action.

SECTION 1 – All Permit Applicants

Dentist Name:_____ **License #:**_____

Dental Practice Name:_____ **Address:**_____

Email:_____ **Telephone #:**_____

SECTION 2 – All Permit Applicants

Type of Sedation Permit (Check only one):

- ☐ Moderate Sedation Level I (Enteral)
- ☐ Moderate Sedation Level II (Parenteral)
- ☐ Deep Sedation / General Anesthesia

SECTION 3 – All Permit Applicants

Attach a copy of current BLS Certification

Proof of BLS certification Expiration Date:_____

Attach a copy of current ACLS or PALS Certification

Proof of ACLS Certification Expiration Date:_____

OR

Proof of PALS Certification* Expiration Date:_____

(*PALS required for dentists providing pediatric services)

SECTION 4 – All Permit Applicants

List personnel and verification of credentials and/or certifications – use additional page if needed.

Name	Profession / Job Title	License #	BLS Certification Expiration Date	Trained in Emergency Procedures? (Check Yes or No)
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐

Name	Profession	License #	BLS Certification Expiration Date	Trained in Emergency Procedures? (Check Yes or No)
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐
				Yes ☐ No ☐

SECTION 5 – Moderate Sedation Permit Applicant Only

A. Equipment Requirements – Moderate Level I (Enteral) and Moderate Level II (Parenteral) Permits.

Applicant must initial each of the following boxes to indicate compliance.

1. EMERGENCY EQUIPMENT	INITIAL
a) Bag-valve-mask apparatus (appropriate size) or equivalent with an oxygen hook up	
b) Oral and nasopharyngeal airway device	
c) External defibrillator – manual or automatic	
d) ACLS algorithms card	
e) Broselow pediatric measuring tape	
f) Emergency medications	
2. EQUIPMENT TO MONITOR VITAL SIGNS AND OXYGENATION/VENTILATION	
a) Continuous pulse oximeter	
b) Blood pressure cuff (appropriate size) and stethoscope, or equivalent blood pressure monitoring device	
3. RECOVERY – Must be immediately available during recovery period	
a) Oxygen	
b) Suction	
c) Pulse oximeter	
4. BACK UP EQUIPMENT	
a) Back up suction equipment	
b) Back up lighting system	
5. ACCESS EQUIPMENT (at least one is needed)	
a) Equipment to establish intravenous (IV) access	
b) Equipment to establish intraosseous (IO) access	
c) Equipment to establish sublingual (SL) access	
6. OTHER	
a) Electrocardiograph (only if patients with classification of ASA III or higher)	
b) Ventilation monitoring system – capnography required by 7/1/2018	

B. Drugs – Moderate Level I (Enteral) and Moderate Level II (Parenteral) Permits.

Applicant must identify expiration date of drug and initial each of the following boxes to indicate compliance.

1. CARDIAC DRUGS	EXPIRATION DATE	INITIAL
Moderate Level I and Moderate Level II		
a) Vasopressor (e.g. Epinephrine)		
b) Nitroglycerin (spray or tablets)		
c) Anticoagulant (aspirin)		
d) Glucose (D50 or liquid glucose)		
Moderate Level II only		
e) Lidocaine		

f) Atropine		
g) Adenosine		
h) Diltiazem		
i) Beta Blocker (e.g. Labetalol, Esmolol)		
2. REVERSAL AGENTS – AS APPLICABLE (Required only for the administration of benzodiazepines or narcotics)		
Moderate Level I and Moderate Level II		
a) Flumazenil (benzodiazepine reversal agent)		
b) Narcan (narcotic reversal agent)		
Moderate Level II only		
c) Dantrolene, Ryanodex (volatile gas reversal agent)		
3. OTHER		
Moderate Level I and Moderate Level II		
a) Antihistamine (e.g. Benadryl IV or PO)		
b) Bronchodilator (e.g. Albuterol inhaler)		
Moderate Level II only		
c) Corticosteriod (e.g. Solu-Medrol)		
d) Muscle Relaxant (e.g. Succinylchholine)		
e) Narcotics (e.g. morphine, fentanyl)		
f) Antihypertensive drugs (e.g. Propranolol, Verapamil)		

SECTION 6 – Deep Sedation / General Anesthesia Permit Applicant Only

A. Equipment Requirements – Deep Sedation / General Anesthesia Permit

Applicant must initial each of the following boxes to indicate compliance.

1. EMERGENCY EQUIPMENT	**INITIAL**
a) Bag-valve-mask apparatus (appropriate size) or equivalent with an oxygen hook up	
b) Oral and nasopharyngeal airway device	
c) External defibrillator – manual or automatic	
d) ACLS algorithms card	
e) Broselow pediatric measuring tape	
f) Emergency medications	
2. EQUIPMENT TO MONITOR VITAL SIGNS AND OXYGENATION/VENTILATION	
a) Continuous pulse oximeter	
b) Blood pressure cuff (appropriate size) and stethoscope, or equivalent blood pressure monitoring device	
3. RECOVERY – Must be immediately available during recovery period	
a) Oxygen	
b) Suction	
c) Pulse oximeter	
4. BACK UP EQUIPMENT	
a) Back up suction equipment	
b) Back up lighting system	

5. ACCESS EQUIPMENT (at least one is needed)	
a) Equipment to establish intravenous (IV) access	
b) Equipment to establish intraosseous (IO) access	
c) Equipment to establish sublingual (SL) access	
6. EMERGENCY EQUIPMENT TO MANAGE DIFFICULT AIRWAYS	
a) Laryngeal mask airway; and/or endotracheal tubes; and/or LMA suitable for patients	
b) Laryngoscope with reserve batteries and bulbs	
c) Endotracheal tube forceps (e.g. Magill)	
d) One additional airway management device	
e) Equipment to establish surgical airway	
7. OTHER	
a) Electrocardiograph	
b) Ventilation monitoring system – capnography required by 7/1/2018	

B. Drugs – Deep Sedation / General Anesthesia Permit.

Applicant must identify expiration date of drug and initial each of the following boxes to indicate compliance.

1. CARDIAC DRUGS	**EXPIRATION DATE**	**INITIAL**
a) Vasopressor (e.g. Epinephrine)		
b) Nitroglycerin (spray or tablets)		
c) Anticoagulant (aspirin)		
d) Glucose (D50 or liquid glucose)		
e) Lidocaine		
f) Atropine		
g) Adenosine		
h) Diltiazem		
i) Beta Blocker (e.g. Labetalol, Esmolol)		
2. REVERSAL AGENTS – AS APPLICABLE (Required only for the administration of benzodiazepines, narcotics, or triggering agents of malignant hypothermia)		
a) Flumazenil (benzodiazepine reversal agent)		
b) Narcan (narcotic reversal agent)		
c) Dantrolene, Ryanodex (volatile gas reversal agent)		
3. OTHER		
a) Antihistamine (e.g. Benadryl IV or PO)		
b) Bronchodilator (e.g. Albuterol inhaler)		
c) Corticosteriod (e.g. Solu-Meddrol)		
d) Muscle Relaxant (e.g. Succinylcholine)		
e) Narcotics (e.g. morphine, fentanyl)		
f) Antihypertensive drugs (e.g. Propranolol, Verapamil)		

SECTION 7 – All Permit Applicants

A. Anesthesia Gas Delivery Systems –

Applicant must initial each of the following boxes to indicate compliance.

1. Anesthesia Gas Delivery Systems	INITIAL
a) Deliver oxygen under positive pressure, including a back-up oxygen system	
b) Gas outlets that meet safety standards; prevent accidental administration of inappropriate gases or gas mixture	
c) Fail-safe mechanism for inhalation of nitrous oxide analgesia	
d) Inhalation equipment with appropriate scavenging system	
e) Gas storage facilities that meet safety standards	
f) Engineering controls and maintenance procedures to ensure safety of inhalation equipment	

B. Emergency Protocols –

Applicant must initial each of the following boxes to indicate compliance.

1. Emergency Protocols – Must have written emergency protocols for the following clinical emergencies. Annual training to personnel required.	INITIAL
a) Laryngospasm	
b) Bronchospasm	
c) Emesis and aspiration	
d) Airway blockage by foreign body	
e) Angina pectoris	
f) Myocardial infarction	
g) Hypertension/Hypotension	

C. Patient Documentation –

Applicant must initial each of the following boxes to indicate compliance.

1. PATIENT DOCUMENTATION	INITIAL
a) Medical history – current and comprehensive	
b) Height and Weight	
c) ASA Classification	
d) Dental Procedure(s)	
e) Informed Consent	
f) Physical examination i. Airway assessment ii. Baseline heart rate, blood pressure, respiratory rate, oxygen saturation	
g) Time oriented anesthesia record, which includes i. Time anesthesia commenced and ended ii. 5 minute intervals of recording blood pressure, heart rate, oxygen saturation, and respiratory rate iii. Continuous ECG and documentation of changes in rhythm if clinically indicated iv. Parenteral access site and method, if utilized v. Medications administered – including oxygen, dosage, route, and time given	

vi. Vital signs before and after anesthesia is utilized vii. Intravenous fluids, if utilized viii. Response to anesthesia – including complications	
h) Condition of patient at discharge charted with objective data (Modified Aldrete scoring system)	

D. PATIENT MONITORING

Applicant must initial each of the following boxes to indicate compliance.

1. PATIENT MONITORING -	**INITIAL**
Moderate Level I and Moderate Level II Permit Applicant	
a) Continuous heart rate, respiratory status, and oxygen saturation	
b) Intermittent blood pressure taken at least every 5 minutes	
c) Continuous electrocardiograph of patients with significant cardiovascular disease	
d) End-tidal carbon dioxide monitoring (capnography required by 7/1/2018)	
e) Continuous monitoring of level of consciousness	
Deep Sedation / General Anesthesia Permit Applicant	
f) Continuous heart rate, respiratory status, and oxygen saturation	
g) Intermittent blood pressure taken at least every 5 minutes	
h) Continuous electrocardiograph	
i) End-tidal carbon dioxide monitoring (capnography required by 7/1/2018)	
j) Continuous monitoring of level of consciousness	

E. MISCELLANEOUS/PERSONNEL

Applicant must initial each of the following boxes to indicate compliance.

1. MISCELLANEOUS/PERSONNEL-	**INITIAL**
a) Life Support – all dental personnel must successfully complete BLS certification to monitor minimal, moderate, and deep sedation/general anesthesia	
b) Moderate Sedation – When providing moderate sedation at a dental practice location, the dentist and at least one other individual who is experienced in patient monitoring and documentation, and trained to handle emergency situations must be present.	
c) Deep Sedation / General Anesthesia - During the administration of deep sedation or general anesthesia, the operating dentist and at least two other individuals, one of whom is experienced in patient monitoring and documentation, and trained to handle emergency situations, must be present.	

F. SIGNATURE/ATTESTATION

By my signature, I hereby attest to adhering to the requirements of Board Rule, Chapter 14 and that the information provided on this certification form is true and accurate to the best of my knowledge and belief. By submitting this application, I affirm that the Maine Board of Dental Practice will rely upon this information for issuance of my permit and that this information is truthful and factual. I also understand that sanctions may be imposed including denial, fines, suspension or revocation of my license if this information is found to be false.

Date **Signature of Applicant**

ANESTHESIA RECORD

Patient's Name DOB Date

Escort Present: o Yes o No Name:_____ NPO: NA Y N

Weight_____lbs Height_____ Airway Class I II III IV
Consent form reviewed and signed:

Past Medical History:

ASA (circle) I II III IV

Medications:

Allergies: □NKDA

Pregnant: NA Y N

Times

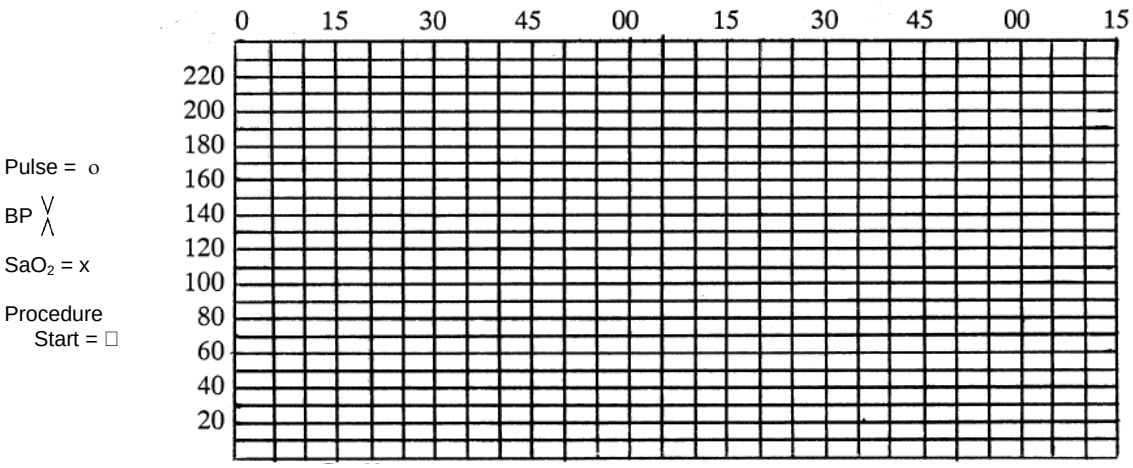
Pt arrived in office ____:____ Procedure Start ____:____ Procedure Finish ____:____

Oral Premedication: Medication:_____ Dose:_____ Time:_____:_____

Pre-op vitals: P _ BP__/_ SaO_2% _____

Monitors: o Pulse Oxim. o BP o ECG (cardiac issues) o Capnography

Staff: Assistant #1:_____ Assistant #2: _____



Medications

□ Oxygen L/min
□ Nitrous Oxide L/min

LIST OTHER MEDICATIONS GIVEN

□
□
□
□

Sedation Complications:

□None_____

Modified Aldrete Score for Discharge to Home

Aldrete scoring system

Respiration
Able to take deep breath and cough = 2
Dyspnea/shallow breathing = 1
Apnea = 0
Oxygen saturation
S_aO_2 >95 percent on room air = 2
S_aO_2 = 90-95 percent on room air = 1
S_aO_2 <90 percent even with supplemental O_2 = 0
Consciousness
Fully awake = 2
Arousable on calling = 1
Not responding = 0
Circulation
BP ± 20 mm Hg baseline = 2
BP ± 20-50 mm Hg baseline = 1
BP ± 50 mm Hg baseline = 0
Activity
Able to move 4 extremities = 2
Able to move 2 extremities = 1
Able to move 0 extremities = 0

Monitoring may be discontinued and patient discharged to home or appropriate unit when Aldrete score is 9 or greater.

Reproduced with permission from: Aldrete JA, Kroulik D. A postanesthetic recovery score. Anesth Analg 1970; 49:924. Copyright © 1970 Lippincott Williams & Wilkins.

UpToDate

Time Pt discharged home_____ Doctor's Signature_____

Common Dental Emergency Cases

HYPOVENTILATION / AIRWAY OBSTRUCTION

Ask patient to take deep breath at the same time check your pulse oximeter to ensure it is properly placed.

Turn off the nitrous oxide of it is being used, and increase the oxygen flow rate to 10L/min

If the patient does not respond to the request to take a deep breath, apply a painful stimulus (i.e. local anesthesia in the palate if they have not had local anesthesia applied in that area or pinch their ear lobe.

Change the mask to a full face mask with an oxygen flow rate of 10L/min

Is there spontaneous breathing? If the patient is breathing, and the oxygen saturation continues to be low reposition the patients jaw with a jaw thrust. Allow patient to lighten enough to be able to follow commands

If there is NO spontaneous breathing turn off the nitrous oxide, ensure the oxygen tanks are full and delivering oxygen (especially if the tanks are portable).

Recycle vital signs at this point.

If oxygen is flowing and the patient is not breathing perform jaw thrust or chin head lift. Assess for chest rise and airflow.

Get your positive pressure oxygen bag mask ready to use and hooked up to oxygen if not already attached.

If there is no chest rise or you cannot feel breath on the back of your hand perform positive ventilation until the oxygen saturation returns to normal. Once normal reassess the patient and ensure that you now have spontaneous ventilation. If you do not have spontaneous ventilation, continue ventilating the patient.

If you need to continue to perform positive ventilation then consider reversal agents naloxone or flumazenil to correct over sedation. Be aware flumazenil is contraindicated in a patient with seizure disorder since it may precipitate grand mal seizures.

It may take a minute or two for the reversal agent to work before patient is spontaneously breathing. Be prepared to continue to ventilate the patient. If you are not seeing chest rise, reposition the patient and reattempt the positive pressure ventilation.

If you are needing to ventilate this patient beyond 5 minutes or if the oxygen saturation is persistently low after trying repositioning or 2 person mask ventilation. CALL 911.

Sources: www.uptodate.com
Office Anesthesia Manual. American Association of Oral and Maxillofacial Surgeons. 2006. Rosemont, Il.

ALLERGIC REACTION

These reactions are rare. It could be from the antibiotic premedication, latex rubber if your office is not latex free, or possibly the local anesthetic.

The mild form with only a skin reaction can be treated with benadryl and albuterol.

ANAPHYLAXIS is a true medical emergency do not hesitate to call 911 or give epinephrine. Delay in recognition or treatment can lead to cardiac arrest.

Signs and Symptoms

1. Cutaneous symptoms, which occur in up to 90 percent of episodes, including flushing, itching, urticaria, and angioedema (including periorbital edema and conjunctival swelling)
2. Respiratory symptoms, which occur in up to 70 percent of episodes, including nasal discharge, nasal congestion, change in voice quality, sensation of throat closure or choking, cough, wheeze, and dyspnea
3. Gastrointestinal symptoms, which occur in up to 40 percent of episodes, including nausea, vomiting, diarrhea, and cramping abdominal pain

Cardiovascular symptoms, which occur in up to 35 percent of episodes, including dizziness, tachycardia, hypotension, and collapse.

Treatment

Give the patient full oxygen:

Dosing and administration — There is persistent confusion among clinicians regarding the optimal epinephrine dose and route of administration for the treatment of anaphylaxis.

Intramuscular injection— Intramuscular injection is recommended over subcutaneous injection because it provides a more rapid increase in the plasma and tissue concentrations of epinephrine. Epinephrine is commercially available in several dilutions, and great care must be taken to use the correct dilution. The epinephrine dilution for intramuscular injection contains 1 mg per mL and may also be labeled as 1:1000 or 0.1 percent. For adults, the recommended dose of epinephrine (1 mg per mL) is 0.3 to 0.5 mg per single dose, injected intramuscularly into the mid-anterolateral thigh (vastus lateralis muscle). This treatment may be repeated at 5 to 15 minute intervals, based upon clinical experience and consensus opinion. For infants and children, the recommended dose of epinephrine (1 mg per mL) is 0.01 mg per kilogram (up to 0.5 mg per dose), injected intramuscularly into the mid-anterolateral thigh (vastus lateralis muscle). The dose should be drawn up using a 1 mL syringe. This treatment may be repeated at 5 to 15 minute intervals. Epinephrine can also be administered into the mid-anterolateral thigh using an auto-injector. These are available in 0.15 mg and 0.3 mg doses. Children weighing less than 25 to 30 kilograms should receive the 0.15 mg dose EpiPen® 0.3 mg or EpiPen Jr® 0.15 mg (pediatric dose).

Benadryl - For adults: diphenhydramine 25 to 50 mg intravenously; may be repeated up to a maximum daily dose of 400 mg per 24 hours. For children: 1 mg per kg (maximum 50 mg) intravenously, which may be repeated up to a maximum daily dose of 5 mg per kg or 300 mg per 24 hours

Bronchodilators — For the treatment of bronchospasm not responsive to epinephrine, inhaled bronchodilators, such as albuterol should be administered by nebulizer/compressor as needed. They are adjunctive treatment to epinephrine because they do not prevent or relieve mucosal edema in the upper airway or shock, for which the alpha-1 adrenergic effects of epinephrine are required.

Glucocorticoids — The onset of action of glucocorticoids takes hours; therefore, these medications do not relieve the initial symptoms and signs of anaphylaxis. They are given on an empirical basis with the rationale that they may help to prevent the biphasic or protracted reactions that occur in up to 23 percent of individuals, although there is no satisfactory published evidence that they actually have this effect.

If given, a dose of methylprednisolone of 1 to 2 mg per kilogram per day is sufficient. If glucocorticoid treatment is instituted, it can be stopped after three or four days without a taper.

Hypoglycemia

In the general dental office this patient is usually being treated for diabetes by their physician. I would ask the patient to bring their glucometer to the office and document the blood sugar prior to starting the case. The blood sugar could be low (less than 100 mg/dl) if they took their full AM does of insulin or oral agent.

Signs and Symptoms

Confusion, agitation, anxiety, diaphoresis, cold clammy skin

Mildly elevated blood pressure or heart rate, changes in mental status

May progress to loss of consciousness or seizures.

Treatment

Recognize early so patient can cooperate to take oral concentrated glucose or drink orange juice. Recheck blood glucose when the patient reports they feel better. Consider consultation with the patient's physician for decision if they need to be referred on for care. Consider ending treatment at this point.

If patient uncooperative call 911.

If unable to cooperate start IV if available and give 50% dextrose.

Be prepared to treat seizures if the patient remains unconscious.

Myocardial infarction

This is due to blockage of one of coronary arteries. Once this happens the heart muscle is deprived of oxygen and the patient starts to complain of chest pain. Remember many advanced diabetic patients might not complain of chest pain.

Signs and Symptoms

Pallor, ashen look, nausea vomiting, diaphoretic

Weak pulse (you might not feel a radial pulse), irregular beats.

Chest pain, arm, back or jaw pain.

Treatment

911 to be called first then:

100% oxygen by full face mask rebreather if available. Make sure the flow is at least 10L/min.

Nitroglycerin tablet under the tongue 1-2 tablets every 5 minutes. Until chest pain gone. Warn patient that they will have a terrible headache. Make sure you take regular blood pressures while giving nitroglycerin since the patient can drop their pressure.

Make sure the nitro tablets are not expired. If the patient's personal tablets are being used ensure that they have not been open for more than a couple of months. Once the tablets are exposed to air they degrade, and loose potency and efficacy.

Have the patient chew a full 4 chewable baby aspirin tablets if they are not allergic to it.

If you have morphine give it by IM injection or IV if available monitor for respirator depression especially if the patient is elderly.

The patient might pull off the oxygen mask saying they can't catch their breath reassure them that they are getting oxygen with the mask and to keep it on.

Bring your AED/defibrillator to the area since this patient could go into cardiac arrest awaiting EMS.

If you have considered an EKG and have one available apply it. Capture rhythm strips; this is helpful for cardiologists or ER treating providers.

Seizure

Seizures may result from underlying systemic disease, occur in reaction to various anesthetic agents, or be in reaction to a combination of factors. The most common seizure in the dental office is related to syncope. Patients often have seizure like activity after full vasovagal episode. Epilepsy is the next most common cause. The other causes can be tumor, prior head trauma, hypoglycemia, or intravascular injection of local anesthesia.

If this is related to vasovagal the trendelenburg position and oxygen will quickly resolve this.

Treatment

CALL 911 if not short and syncope related

Ensure the patient is safe by clearing the area.

Give 100% oxygen by mask

Start IV

Give Diazepam

Once the patient is post-ictal they may need airway support with ventilation have a bag mask available.

Syncope

Occurs as a result of a strong emotional stimulus. The vagus nerve over corrects slowing the body down, hence the term vasovagal. The patients often become bradycardic.

Signs and Symptoms

Rapid deep breathing, Dizzy light headed or nauseated

Loss of color pallor

Loss of consciousness possible seizure like activity.

Treatment

Place the patient supine and elevate the legs

Give 100% oxygen by mask.

Reassure patient and remove stressful stimulus.