Medical Protocol

Approved January 1, 2024

Medical Director- Dr. Tracy Schermer

INTRODUCTION

The purpose of the Trackside Medical EMS protocol is to establish guidelines between EMS administration, the EMS provider and the Medical Director for the management, treatment and transport of medical and trauma emergencies.

The patient relationship between the patient and EMS begins when EMS initiates contact to assess the extent of any illness or injury. This relationship between the EMS provider and the patient shall continue until another competent health care professional with an equal or higher level of training has taken responsibility for this patient's continuation of care.

In the situations where additional treatment or care may not be warranted or is refused by the patient or their legal representative, the EMS provider will follow the protocol in "Refusal of Treatment " guideline.

All decisions regarding patient care such a s interventions and/or transport decisions shall always be made in the best interest of the patient and documented accordingly.

RELEASE

Ther following document contains patient care guidelines, procedures, and clinical standards to be followed by Emergency Medical Services (EMS) providers acting in their course of employment with TRACKSIDE MEDICAL . The level of care administered by providers is at the EMT, AEMT, and Paramedic level, working under these written protocols and/or under the direct guidance and direction of the Medical Director. It is the responsibility of each employee to know and understand the material included in this document. Conditions not specifically addressed in these protocols will be treated using the EMS Scope of Practice, approved by the Ohio State Board of Emergency Medical, Fire, and Transportation Services Division of EMS, that is in effect at the time of the care event.

This protocol is effective 01 January 2023, and shall remain in effect until it is either updated or replaced by the Medical Director. Specific focused protocol changes, without a complete protocol revision, may be periodically required as directed by changes in medication availability, advances in medical or prehospital practices, or administrative/regulatory requirements. The Medical Director will distribute any such protocol changes as a written amendment to this protocol.

Protocol Approved by

Tracy Schermer, MD
Medical Director
01 January 2023

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Pharmacology

Pharmacology

COLOR REFERNCE

ALL LEVELS MAY PERFORM
AEMT OR ABOVE
PARAMEDIC ONLY

ADENOSINE

TRADE NAME: Adenosine
CLASSIFICATION: Antiarrhythmic
INDICATIONS: Supraventricular Tachycardia
ACTION: Slows conduction through AV node
ONSET: <10 seconds

DOSE: 6mg RAPID IVP, Repeat @ 12mg after 1-2 minutes
0.1mg/kg RAPID IVP (6mg max), Repeat @0.2mg/kg

CONTRAINDICATIONS
2nd/3rd AV block, Sick Sinus Syndrome, Hypersensitivity, A-Fib/Flutter

ADVERSE REACTIONS
Cardiovascular- Facial flushing, headache, sweating, palpitations, hypotension
Respiratory- Shortness of breath, chest pressure, hyperventilation, head pressure
CNS- Lightheadedness, dizziness, numbness & tingling to extremities, apprehension, blurred vision, burning sensation, heaviness in arms, neck, and back
GI- Nausea, metallic tatse, tightness in throat, pressure in groin

PRECAUTIONS
May be rarely associated with V-fib. Effects of adenosine antaginized by methylxanthines such as coffee and theophyline. In their presence, larger doses may be required. Adenosine typically causes arrhythmia at the time of cardioversion. Generally, these last only a few seconds, but may include transient asystole. Also, use with caution in asthma patients, as it may cause bronchospams

*NOTES
Short half-life (<10 seconds)
Administer in AC when possible
Flush with 10-20ml saline immediately

ALBUTEROL

TRADE NAME: VENTOLIN, PROVENTIL
CLASSIFICATION: Bronchodilator
INDICATIONS: Respiratory distress, Allergic reactions, Pulmonary edema
ACTION: Dilates bronchial airways
ONSET: 5 minutes

DOSE: 2.5mg in 3ml NaCl, Nebulized @ 6lpm, Repeat x 2

CONTRAINDICATIONS
Hypersensitivity

ADVERSE REACTIONS
Cardiovascular- Tachycardia, hypertension
CNS- Tremors, dizziness, nervousness, headache, anxiety
ENT- Pharyngitis, dyspepsia
Respiratory- Bronchospasm, cough, bronchitis, wheezing, cough

PRECAUTIONS
Use with caution in patients with cardiovascular disorders, especially coronary insufficiency, cardiac arrhythmia, and hypertension, or in patients with convulsive disorders, hyperthyroidism, or diabetes mellitus

AMIODORONE

TRADE NAME: Cordarone
CLASSIFICATION: Antiarrhythmic
INDICATIONS: Pulesless V-Fib/V-Tach, Refractory tachycardia with pulse
ACTIONS: Calcium channel blocker, decreases response to unwanted stimuli
ONSET: Immediate

DOSE: (ADULT) VF/VT – 300mg RAPID IVP, Repeat @ 150mg
Tachycardia – 150mg/100ml 0.9 over 10 minutes (15mg/min)
(PEDIATRIC) Refractory VF – 5mg/kg, Repeat x 2. Max single dose-300mg, Max additional dose – 150mg (5mg/kg)

CONTRAINDICATIONS
Hypersensitivity, Cardiogenic shock, Marked sinus bradycardia, 2nd/3rd AV block

ADVERSE REACTIONS
Cardiovascular- Hypotension, Cardiac arrest, Cardiogenic shock, CHF, Bradycardia, V-Tach, AV blocks
GI- Nausea/Vomiting
Global- Fever

PRECAUTIONS
Like all antiarrhythmic agents, may cause worsening of existing arrhythmias or precipitat a new arrhythmia. 2% of patients reported experiencing Acute Respiratory Distress Syndrome (ARDS)

*Do not shake vial,and use large bore needle to draw to prevent foaming

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ASPIRIN (ASA)

TRADE NAME: Aspirin
CLASSIFICATION: Antiplatelet, Non-steroidal Anti-Inflammatory Drug (NSAID)
INDICATIONS: Chest Pain, STEMI, Amputation
ACTIONS: Platelet aggregation
ONSET: 15-120 minutes

DOSE: Cardiac – 324mg PO
Amputation – 162mg PO

CONTRAINDICATIONS
Hypersensitivity, GI disorders, Bleeding disorders, Renal failure, Pregnancy, Head trauma

ADVERSE REACTIONS
GI bleeding, Nausea/Vomiting, Bronchospasm, Anaphylaxis, Tinnitus, Prolonged bleeding, Bruising

PRECAUTIONS
Anemia, Hepatic disease, Renal disease, Hogkins disease, Use of other anti-coagulant drugs

ATROPINE SULFATE

TRADE NAME: Atropine
CLASSIFICATION: Parasympatholytic, Anticholinergic
INDICATIONS: Bradycardia, Toxic poisoning
ACTIONS: Blocks effects of parasympathetic system, elevate heart rate
ONSET: Immediate

DOSE: Adult Bradycardia - 1mg IVP, Repeat in 5 minutes
Pediatric Bradycardia – 0.2mg/kg (Max single dose 0.5mg)
Toxic poisoning – 2-5mg IVP, repeat in 15 minutes

CONTRAINDICATIONS
Hypersensitivity, 2nd/3rd AV block, Glaucoma, Tachycardia, Unstable cardiac status in acute hemorrhage, Obstructive disease

ADVERSE REACTIONS
Cardiovascular- Palpitations, Tachycardia
CNS- Headache, Flushing, Nervousness, Drowsiness, Weakness, Dizziness, Blurred vision, Fever, Restlessness, Tremors
GI- Nausea/Vomiting, Indigestion

PRECAUTIONS
Elderly patients may exhibit confusion or excitement to even small doses. Use caution in patients with asthma, allergies, coronary artery disease, CHF, Cardiac arrhythmias, tachycardia, hypertension, pediatric patients, or debilitated patients with chronic lung disease or Down's Syndrome

CALCIUM GLUCONATE

TRADE NAME: Kalcinate, Cal-G
CLASSIFICATION: Clacium Salt
INDICATIONS: Magnesium Sulfate Toxicity
ACTIONS: Neutralizes effects of Magnesium Sulfate
ONSET: 5 minutes

DOSE: 1g IVP over 5-10 minutes

CONTRAINDICATIONS
Hypersensitivity, Hypercalcemia,

ADVERSE REACTIONS
Syncope, Bradycardia, Parastheseis, Tissue necrosis

PRECAUTIONS
Be cautios of extravasation, as medication is extremely necrotic to tissue

*Note- Signs/Symptoms of Magnesium Sulfate toxicity include lethargy, flushing, nausea/vomiting, stomach cramps, weakness, irregular heartbeat, hypotension, respiratory distress, cardiac arrest

DEXAMETHASONE

TRADE NAME: Decadron
CLASSIFICATION: Anti-Inflammatory
INDICATIONS: Respiratory distress, Allergic reaction, Anaphylaxis
ACTIONS: Reduces bronchial swelling
ONSET: 60 minutes

DOSE: Adult – 10mg IV, IM, IO
Pediatric – 0.6mg/kg IV, IM, IO (Max-10mg)

CONTRAINDICATIONS
Hypersensitivity, AIDS, TB

ADVERSE REACTIONS
Cardiovascular- Myocardial rupture following recent MI
Fluid & Electrolyte- Fluid retention, CHF, Potassium loss, Hypokalemic alkalosis, Hypertension
GI- Peptic ulcer, Bowel perforation, Pancreatitis, Nausea
CNS- Convulsions, Verigo, Headache
Musculoskeletal- Muscle weakness

PRECAUTIONS
Psychic derangement may appear when used. Avoid injection into an infected site. The slower rate of absorpion via IM administration should be recognized. Possible aggravation of diabetes mellitus

DEXTROSE 10%

TRADE NAME: D10
CLASSIFICATION: Hypertonic Crystalloid
INDICATIONS: Hypoglycemia
ACTIONS: Increase blood glucose level
ONSET: Immediate

DOSE: Adult – 100ml boluses until BLG >60mg/dl
Pediatric – 5ml/kg bolus until BGL >60mg/dl (Max 100ml)

CONTRAINDICATIONS
SQ & IM injection, Intracerebral hemorrhage, Hemorrhagic CVA, Cerebral edema, Delirium tremors

ADVERSE REACTIONS
Fever, Irritation at IV site, Tissue necrosis, Venous thrombosis, Phlebitis, Extravasation, Hypovolemia, Dehydration, Confusion.

PRECAUTIONS
May produse allergic reaction in corn-sensitive patients. Use largest available vein. Rapid infusion may cause flushing. Inject slowly to avoid extravasation. If thrombosis occurs, discontinue infusion immediately

DIAZEPAM

TRADE NAME: Valium
CLASSIFICATION: Benzodiazepine Anti-convulsant
INDICATIONS: Seizure refractory to Midazolam
ACTIONS: CNS Depressant
ONSET: 1-2 Minutes IV, 3-5 minutes IM

DOSE: Adult: 2-5mg (IV) 5mg (IM)
Pediatric: 0.1mg/kg - Max 8mg

CONTRAINDICATIONS
Hypersensitivity, Glaucoma, Hypotension, Bradycardia, Respiratory depression, Pregnancy

ADVERSE REACTIONS
Bradycardia, Hypotension, Respiratory depression, Confusion, Unresponsiveness, Blurred vision, Hiccups

PRECAUTIONS
Use with caution in elderly, pediatric, and debilitated patients.

DIPHENHYDRAMINE

TRADE NAME: Benadryl
CLASSIFICATION: Antihistamine
INDICATIONS: Allergic reaction, Anaphylaxis
ACTIONS: Blocks histamine response
ONSET: 15-60 minutes

DOSE: Adult – 50mg IM, IO, IV (Over 1-2 minutes)
Pediatric – 1mg/kg IM, IO, IV (Over 1-2 minutes) Max-25mg

CONTRAINDICATIONS
Hypersensitivity, Nursing mothers

ADVERSE REACTIONS
Cardiovascular- Hypotension, Headache, Palpitations, Tachycardia,
CNS- Sedation, Sleepiness, Dizziness, fatigue, Confusion, Restlessness, Anxiety, Tremors, Irritability, Blurred vision, Vertigo, Tinnitus, Convulsions
GI- Nausea/Vomiting, Diarrhea
Respiratory- Bronchial secretions, Chest tightness, Wheezing, Nasal congestion

PRECAUTIONS
Has Atropine-like action and should be used with caution in patients with history of bronchial asthma, increased intraocular pressure, cardiovascular disease or hypertension. Use caution in patients with lower respiratory disease, including asthma

EPINEPHRINE 1:1000

TRADE NAME: Epinephrine, Adrenaline
CLASSIFICATION: Sympathomimetic
INDICATIONS: Allergic reaction/Anaphylaxis, Pediatric Respiratory, Pediatric Arrest
ACTIONS: Bronchodilation, Vasoconstriction
ONSET: < 3 minutes

DOSE: Adult – 0.3-0.5mg IM, Repeat in 20 minutes as needed
Infusion – 1mg/100ml 0.9 NS, Infuse @ 2-10 mcg/min
Pediatric Allergic Reaction – 0.01 mg/kg IM (Max – 0.3mg)
Pediatric Respiratory Distress – 1mg/2ml 0.9 NS Nebulized
Pediatric Cardiac – 0.01mg/kg every 3-5 minutes

CONTRAINDICATIONS
Hypersensitivity, Glaucoma

ADVERSE REACTIONS
Anxiety, Headache, Fear of impending doom, Palpitations, Tachycardia, Chest tightness, Dizziness, Tremors

PRECAUTIONS
Protect from exposure to light. Use with caution in patients who have used an aerosol bronchodilator within 4 hours. Use caution in patients with known history of hypertension, thyroid disease, or angina

EPINEPHRINE 1:10,000

TRADE NAME: Epinephrine
CLASSIFICATION: Sympathomimetic
INDICATIONS: Cardiac Arrest
ACTIONS: Increase contractility, Increase defibrillation threshold
ONSET: < 3 minutes

DOSE: Adult - 1mg IV, IO every 3-5 minutes
Pediatric – 0.01mg/kg every 3-5 minutes

CONTRAINDICATIONS
None

ADVERSE REACTIONS
Cardiac arrhythmia, Hypertension, Cerebral hemorrhage, Hemiplegia

PRECAUTIONS
Protect from light

GLUCAGON

TRADE NAME: Glucogen
CLASSIFICATION: Anti-hypoglycemic
INDICATIONS: Hypoglycemia
ACTIONS: Increases BGL by bonding with glycogen to produce glucose
ONSET: 15 minutes

DOSE: Adult – 1mg IM, IN (Repeat in 10 minutes if BGL <60mg/dl)
Pediatric – 25mcg/kg IM, IN, IN (Max 1mg)

PRECAUTIONS
Hypersensitivity, Known allergies to beef or porcine proteins, insulinoma

ADVERSE REACTIONS
Cardiovascular- Hypertension, Tachycardia
GI- Nausea/Vomiting

PRECAUTIONS
Use caution with known diabetics or elderly patients with known cardiac disease to inhibit gastrointestinal motility

IPRATROPIUM

TRADE NAMES: Atrovent
CLASSIFICATION: Bronchodilator
INDICATIONS: Respiratory distress
ONSET: 1-3 minutes

DOSE: Adult/Pediatric- 0.5mg/2.5ml NS Nebulized @ 6lpm
Duo-Neb – Mix with 2.5mg Albuterol, Nebulize @ 6lpm

CONTRAINDICATIONS
Hypersensitivity, allergy to Atropine

ADVERSE EFFECTS
Cardiovascular- Palpitations
CNS- Nervousness, Dizziness, Headache
GI- Nausea/Vomiting, Abdominal pain
Musculoskeletal- Tremors
Neuro- Blurred vision
Respiratory- Cough
Other- Dry mouth

PRECAUTIONS
Glaucoma

KETAMINE

TRADE NAMES: Ketalar
CLASSIFICATION: Anesthetic non-barbiturate sedative
INDICATIONS: Behavioral emergency, Pain management
ACTIONS: Anesthetic and sedative effects
ONSET: 1 minute

DOSE: Pain management – 0.2mg/kg IV, IO
Behavioral – 1mg/kg IV, IO or 3mg/kg IM

CONTRAINDICATIONS
Hypersensitivity, Hypertension

ADVERSE REACTIONS
Cardiovascular- Hypertension, Tachycardia, Arrhythmia
Gastrointestinal- Nausea/Vomiting, Increased salivation
Neurological- Tonic- clonic movement
Respiratory- Respiratory depression, Apnea, Laryngospasm

PRECAUTIONS
Resuscitative equipment should be ready. IV dose given over 1 minute. Rapid administration may result in respiratory depression or arrest. Use with caution for alcoholic or intoxicated patients

KETOROLAC

TRADE NAMES: Toradol
CLASSIFICATION: Non-steroidal anti-inflammatory analgesic
INDICATIONS: Pain management
ACTIONS: Pain reliever
ONSET: 5-10 minutes

DOSE: IV/IO – 15-30mg over 15 seconds
IM- 30-60mg

CONTRAINDICATIONS
Hypersensitivity, Bleeding or clotting disorders, head trauma, GI bleeding, pregnancy, renal patients

ADVERSE REACTIONS
Bleeding, Nausea/Vomiting

PRECAUTIONS
GI irritation or hemorrhage, allergy to ASA or other NSAIDS

LABETELOL

TRADE NAMES: Trandate
CLASSIFICATION: Beta Blocker
INDICATIONS: Hypertensive crisis (> 150mmHg systolic)
ACTIONS: Blocks Beta-1 receptors, Decreases cardiac output
ONSET: Immediate

DOSE: 20mg IV over 2 minute, Repeat @ 40mg every 10 minutes (Max- 100mg)

CONTRAINDICATIONS
Hypersensitivity, Asthma, Advanced heart block, Cardiogenic shock, Severe bradycardia, Liver failure

ADVERSE EFFECTS
Cardiovascular- Arrhythmia, Hypotension
CNS- Dizziness, Numbness, Verigo
GI- Nausea

*Note- Maintain systolic B/P < 150mm

LIDOCAINE 2%

TRADE NAMES
CLASSIFICATION: Antiarrhythmic / Anesthesia
INDICATION: Cardiac Arrest / Ventricular Arrhythmia / Intraosseous
ACTIONS: Cardiac Arrest: Increases refractory period, Increases fibrillatory threshold
Intraosseous: Anesthesia prior to fluid administration
ONSET: 30-60 seconds

DOSE: Cardiac Arrest: 1.0-1.5mg/kg IV, IO Max 3mg/kg
Ventricular Arrhytmia: 0.5-0.75mg/kg
Intraosseous Insertion: 40mg SLOW, may repeat @ 20mg

CONTRAINDICATIONS
Hypersensitivity, Stokes-Adams Syndrome, Wolff-Parkinson-White Syndrome, severe heart block in the absense of an artificial pacemaker

ADVERSE REACTIONS
Cardiovascular- Bradycardia, Hypotension, Cardiovascular collapse (May lead to cardiac arrest)
CNS- Lightheadedness, Nervousness, Apprehension, Euphoria, Confusion, Dizziness, Drowsiness, Tinnitis, Blurred vision, Vomiting, Twitching, Tremors/Convusions, Unconsciousness, Respiratory depression or arrest

PRECAUTIONS- Use caution in patients with severe liver or kidney disease, hypovolemia, severe CHF, shock, or heart block. Elimination of ectopic beats without prior acceleration may promote more frequent ventricular arrhythmia or complete heart block

*Note – Observe for signs of toxicity, including dizziness, confusion, delirium, and seizures

MAGNESIUM SULFATE

TRADE NAME: MAG SULFATE
CLASSIFICATION: Antiarrhthmic
INDICATIONS: Torsades De Pointes, Eclampsia, Respiratory distress
ACTIONS: Electrolyte-replenished anticonvulsant
ONSET: Immediate (Duration- 30 minutes)

DOSE: Cardiac- 1-2g in 10ml IV, IO
Asthma- 2g/100ml NS over 20 minutes
Elcampsia- 4g/100ml over 20 minutes

CONTRAINDICATIONS
Heart block or myocardial damage, Hypersensitivity, Renal patient

ADVERSE REACTIONS
Flushing, Sweating, Decreased BP, Hypothermia, Stupor, Respiratory depression. Hypocalcemia, Circulatory collapse, CNS depression

PRECAUTIONS
If given in the presence of barbiturates, narcotics, or other hypnotics, their dosage should be adjusted because of the addititional central depressive effects

*Note- Not compatible with Sodium Bicarbonate. When given for eclampsia, closely monitor respiratory status

METOPROLOL

TRADE NAME: Lopressor, Toprol
CLASSIFICATION: Beta Blocker
INDICATIONS: STEMI, Hypertensive crisis
ACTIONS: Blocks Beta-1 receptors, decreases cardiac output
ONSET: Immediate

DOSE: 5mg IVP over 1-2 minutes, repeat every 5 minutes, Max-15mg

CONTRAINDICATIONS
Pulse Bradycardia, Hypotension, Heart block > 1st degree, Cardiogenic shock, Hypersensitivity, Sick Sinus Syndrome, Patients with bronchospasmatic disease

ADVERSE REACTIONS
CNS- Fatigue, Vertigo, Hallucinations, Headache, Dizziness, Confusion
Cardiovascular- Hypertension, Bradycardia, 2nd/3rd degree heart block, Heart failure
Respiratory- Dyspnea
GI- Nausea, Abdominal pain
Miscellaneous- Unstable diabetes

* Note- Closely monitor blood pressure, Heart rate, and ECG during administration

MIDAZOLAM

TRADE NAME: Versed
CLASSIFICATION: Benzodiazepine, Anticonvulsant, Sedative
INDICATIONS: Seizures, Pain management, Sedation, Eclampsia, Behavioral
ACTIONS: CNS depressant
ONSET: 1-5 minutes

DOSE: Seizures: 1-5mg
Pain management: 1mg increments with Morphine
Sedation: 2mg
Eclampsia: 2mg
Behavioral: 1-5mg

*Note- Routes: IV, IM, IO, IN (Double dose)

CONTRAINDICATIONS
Hypersensitivity, Glaucoma

ADVERSE REACTIONS
Altered vital signs, Decreased tidal volume, Respiratory depression or apnea, B/P changes

PRECAUTIONS
Doses should be decreased for elderly and debilitated patients. Midazolam does not protect against increased ICP, heart rate, or blood pressure associated with endotracheal intubation

MORPHINE SULFATE

TRADE NAME: MORPHINE
CLASSIFICATION: NARCOTIC ANALGESIC
INDICATIONS: Pain management, Chest pain (Medic only)
ACTIONS: Analgesic
ONSET: 1-3 minutes

DOSE: 1-2mg IV(Over 1 minute), IM, IO

CONTRAINDICATIONS
Hypersensitivity, Hypotension, Acute abdominal pain, Multisystem trauma, Head injury, Convulsive disorders, Hypovolemia, Asthma, Pregnancy, Exacerbated COPD

ADVERSE REACTIONS
Respiratory depression, Orthostatic hytpotension, Bradycardia, Nausea/Vomiting, Syncope, Abdominal cramping, Blurred vision

PRECAUTIONS
IV access should be obtained prior to administering. Maintain systolic B/P of >90mmHg prior to administering. Watch for respiratory depression. Use with caution in patients with addiction history. Narcan should be available. Use with caution in elderly patients

NALOXONE

TRADE NAME: Narcan
CLASSIFICATION: Opioid antagonist
INDICATIONS: Opioid overdose
ACTIONS: Blocks opioid receptors
ONSET: 1-2 minutes

DOSE: Adult: 1-2mg IV, IM, IO, IN (Repeat every 3-5 minutes)
Pediatric: 0.1mg/kg IV,IO 0.2mg/kg IN

CONTRAINDICATIONS
Hypersensitivity

ADVERSE REACTIONS
Increased B/P, Tachycardia, Vomiting, Tremors, Seizures, Dysrhythmia, Cardiac arrest

PRECAUTIONS
Effects last 1-4 hours. Narcotic effects may outlast Narcan. Use with caution in patients with known dependency, as it could cause withdrawal symptoms

*Note- ASll patient should be encouraged to be seen in the ED due to possible relapse

NITROGLYCERIN

TRADE NAMES: Nitrostat, Nitrolingual
CLASSIFICATION: Coronary vasoldilator, Antianginal
INDICATIONS: Chest pain, Hypertensive crisis
ACTIONS: Coronary vasodilation
ONSET: 2 minutes

DOSE: 0.4mg SL , Repeat every 3-5 minutes (Max -3)

CONTRAINDICATIONS
Hypersensitivity, Hypotension, Increased ICP, Glaucoma, Possible CVA, Head trauma, Recent use of eredctile dysfunction medication (Viagra/Levitra= <24hrs, Cialis= <48hrs)

ADVERSE REACTIONS
Headache, Hypotension, Dizziness, Weakness, Palpitations, Nausea/Vomiting

PRECAUTIONS
Use with caution with intoxicated patients. EMTs may assist patient in taking their own

Note- Blood pressure must be closely monitored prior to each administration. IV access should be obtained prior to administration. Maintain systolic B/P of >90mmHg

NORMAL SALINE (0.9% NaCl)

TRADE NAME: Saline
CLASSIFICATION: Crystalloid electrolyte
INDICATIONS: Venous access
ACTIONS: Medication route, Fluid replacement
ONSET: N/A

DOSE: KVO (Keep Vein Open)
Bolus: 20ml/kg to maintain systolic B/P of >90mmHg

CONTRAINDICATIONS:
None

ADVERSE REACTIONS:
Pulmonary edema, Extravasation, Fever, Local swelling, Venous thrombosis, Hypervolemia

PRECAUTIONS:
Use with caution in elderly patients, or patients with renal problems, CHF. Closely monitor lung sounds for presence of pulmonary edema.

ONDANSETRON

TRADE NAMES: Zofran
CLASSIFICATION: Antiemetic
INDICATIONS: Nausea/Vomiting
ACTIONS: Decreases nausea/Vomiting
ONSET: Immediate

DOSE: Oral: 4mg PO, Repeat in 10 minutes
IV: 2-4mg
Pediatric Dose: 4mg (Oral), 0.1mg/kg IV (Max-4mg)

CONTRAINDICATIONS
Hypersensitivty

ADVERSE REACTIONS
Cardiovascular- Angina, Abnormal ECG, Hypotension, Tachycardia, Syncope, Palpitations
Neurological- Seizure, Dizziness, Lightheadedness
General- Flushed skin, Hiccups

PRECAUTIONS
Monitor airway in presence of vomiting

ORAL GLUCOSE

TRADE NAMES: Insta-Glucose, Glutose
CLASSIFICATION: Antihypoglycemic
INDICATIONS: Hypoglycemia
ACTIONS: Increase blood glucose
ONSET: 1-2 minutes

DOSE: 15-25g PO, Repeat after 5 minutes as needed

CONTRAINDICATIONS
Unconscious, Unable to swallow

AVDERSE REACTIONS
None

PRECAUTIONS
None

OXYGEN

TRADE NAMES: Oxygen
CLASSIFICATION: Gas
INDICATIONS: Dyspnea, Hypoxia, General patient care
ACTIONS: Increase oxygen levels
ONSET: Immediate

DOSE: 1-15lpm NC, NRB, BVM (Maintain SaO2 > 94%)

CONTRAINDICATIONS
None

ADVERSE REACTIONS
Oxygen toxicity

PRECAUTIONS
Use with caution in patients with COPD as to not depress hypoxic drive

SODIUM BICARBONATE

TRADE NAMES: None
CLASSIFICATION: Alkalinizing agent
INDICATIONS: Cardiac Arrest, Overdose, Crush Syndrome
ACTIONS: Reverse metabolic acidosis
ONSET: Immediate

DOSE: Cardiac Arrest: 1mEq/kg IV, IO (Repeat in 10 minutes @ 0.5mEq/kg)
Overdose: 1mEq/kg IV, IO
Crush Syndrome: 50mEq/1000ml over 30 minutes

CONTRAINDICATIONS
Metabolic or respiratory alkalosis

ADVERSE REACTIONS
Alkalosis and/or hypokalemia, Tissue necrosis

PRECAUTIONS
Over dosage and alkalosis should be avoided, May cause irritation if extravasicularly. Avoid scalp vein use. Use caution in patients with CHF or other edemalous or sodium-retaining states

*Note- Flush IV before and after use

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Adult Assessment

Adult Assessment

INTRODUCTION

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