General Medical

Behavioral

General Medical

Chemical restraint is preferred over physical restraint.

Scene Safety

Treat suspected medical or trauma problems per appropriate protocol

- Diabetic Emergencies
- Unconscious/Unknown
- Overdose
- Neurological Trauma (Head)

General

If patient is sedated, use Capnography

Adult Routine Transport Orders

Causes of Excited Delirium
Drug related, Stimulant drugs:
Cocaine
Amphetamines
Club Drugs

Hallucinogens, Adverse Drug Reaction, Drug Withdrawal, Hypoglycemia, Head Trauma, Hypoxia, Hypoventilation, Shock, Psychiatric, New drug, Off Drugs, Other Medical Delirium, Infection, Dementia

Attempt to remove patient from stressful environment

EMT

Verbal techniques (reassurance, calm, establish rapport)

AEMT

Explain all movements and procedures.

Look for a possible cause.

Paramedic

Agitated & Combative

Agitated

Patient Restraint

Patient Restraint (if necessary)

Do not attempt to subdue or restrain unless adequate personnel are present and law enforcement is on the scene. Evacuate if they are not.

Only try to restrain the patient if they are threatening the safety of themselves, the crew or others.

Ketamine (Ketalar)
1 mg/kg IVP, IO
3 mg/kg IM

Midazolam **Must be** co-administered when Ketamine is given

Midazolam (Versed) 2 mg IVP, IO,
5 mg IN or 2 mg IM

An alternative to **Ketamine** is: **Midazolam. Midazolam** should be used in patients in which Ketamine is contraindicated or ineffective or if there is suspicion that the agitation may be related to **underlying seizure activity.**

Diabetic Emergencies

In DKA patients, Kussmaul respiration helps correct acidosis. Patients with an EtCO2 of less than 29 were found to be in acidosis 95% of the time, whereas no patients with EtCO2 of 36 or higher were in acidosis.

Adult Routine Transport Orders

Spinal Injury Assessment

Adult IV/IO

Cardiac Monitor

Blood Glucose

Signs & Symptoms:
***Hypoglycemia*:** Altered level of consciousness, dizziness, irritability, diaphoresis, convulsions, hunger, confusion
***Hyperglycemia*:** Altered level of consciousness coma, abdominal pain, nausea/vomiting, dehydration, frequent thirst and urination, general weakness-malaise, hypovolemic shock, hyperventilation, deep/rapid respirations.

General

EMT

AEMT

Paramedic

No

Glucose < 60 mg/dl

Dextrose 10% (D10)

100 ml boluses IVP, IO
Until patient awake &/or follow up blood sugar > 60 mg/dl

Glucagon

1 mg IM, IN (if no IV access)

If patient conscious consider
Oral Glucose 15 gm PO

Return to baseline?

Yes

Reassess and monitor

No

Repeat **Dextrose 10%** may be given up to a total dose of 100 ml per bolus
Offer transportation to hospital.

Glucose 60 - 240 mg/dl

See:
Unconscious/Unknown

Hypoglycemic patients who are receiving oral hypoglycemics should be STRONGLY urged to be transported to the hospital. The half-life of such oral medications is long and these patients will need closely monitored for recurrent hypoglycemia.

Glucose > 240 mg/dl signs of dehydration

Normal Saline bolus
500 ml Bolus

May be repeated x 2 with no signs of CHF, Pulmonary Edema

If Patient refuses transport
See: **Safe Discharge of Diabetic Patients**

Epistaxis

General Medical

An acute hemorrhage from the nostril, nasal cavity, or nasopharynx.

Adult Routine Transport Orders

Place patient in either a standing or upright seated position. If patient is recumbent in bed and unable to sit up, have patient turn head to the side.

Have the patient tilt their head forward (chin to chest) and have the patient hold firm pressure on the nares.
The patient should hold pressure for five (5) minutes.

Consider if the cause is medical or traumatic then go to the appropriate protocol

Controlling significant bleeding or hemodynamic instability should take precedence over obtaining a lengthy history.
Note the duration, severity of the hemorrhage, and the side of initial bleeding.
Inquire about previous epistaxis, hypertension, hepatic or other systemic disease, family history, easy bruising, or prolonged bleeding after minor surgical procedures. Recurrent episodes of epistaxis, even if self-limited, should raise suspicion for significant nasal pathology.
www.emedicine.medscape.com

Non-Traumatic Shock/Dehydration

Dehydration is an abnormal decrease in the total body water. It is accompanied by a disturbance in the balance of essential electrolytes.

Dehydration may follow prolonged fever, diarrhea, vomiting, acidosis, and any condition which there is rapid depletion of body fluids.

Adult Routine Transport Orders

For heart rate less than 60 and BP less than 90 mmHg systolic with patient symptomatic, follow

Bradycardia Protocol

Adult IV/IO

In any patient without rales or dyspnea who has a systolic BP less than 90 mmHg or less than 90 mmHg with signs of shock

0.9 NS Fluid Bolus

20 ml/kg

May repeat x 2

Titrate to effect

Auscultate lungs frequently for rales. If rales or dyspnea increase, terminate fluid bolus.

Systolic BP is less than 90 mmHg or less than 90 mmHg with signs of shock:

Epinephrine Drip

2 - 10 mcg/min

General

EMT

AEMT

Paramedic

Pain Management

Information to Record
1. Time of arrival
2. Heart Rate and Blood Pressure and Respiratory Rate
3. Glasgow Coma Scale
4. Time of each dose of analgesia
5. Dosage of each administration of analgesia
6. Time and results of pain assessments 1-10 scale

Adult Routine Transport Orders

Patient care according to **Protocol** based on **Specific Complaint**

Indication for Medication

Adult IV/IO

Assess Pain Severity:
1-3 mild pain,
4-7 moderate pain,
8-10 severe pain. Document description of pain, examples: sharp, dull, stabbing, constant, intermittent, alleviating factors.

General

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Paramedic

Indications for Use:
Chest pain, especially in acute M.I., pain associated with trauma, burns, known history of kidney stones, and abdominal pain, Acute (not chronic) musculoskeletal pain, etc.

No → Monitor and reassess

Yes → Continuous **Pulse Oximetry**

Ketorolac (Toradol) 15 - 30 mg IV, IO

over 15 seconds or 30 – 60 mg IM

For patients less than 65 years old.

Uses: Non-specific Abdominal Pain, Strains, Kidney Stones small Crush injuries (Finger-Toes), Headache etc. May be used in patients with known narcotic sensitivity or chemical dependencies.

or

Morphine 1 – 2 mg Slowly IVP, IO

Titrate to pain relief if blood pressure greater than 90 mmHg

Maximum 10 – 15 mg

Generalized Pain, Cardiac Pain, Burns, Fractures, Dislocations etc. May be reversed with Narcan

For severe / excruciating / painful discomfort caused from a fracture / dislocation / subluxation
Consider, if **Morphine** is not sufficient or ineffective:
Anticipate use for major burns and major trauma.

Ketamine (Ketalar) 0.2 mg/kg IVP, IO

Monitor and reassess

Midazolam (Versed) Doses of 1 mg or less with Morphine Uses: to provide Sedation and Pain relief together. However, patient should be observed for increased side effects.

Sepsis

Are there signs and symptoms of acute infection/sepsis?
Suspect sepsis if any of the following are present.
Sepsis > Age 16

1. Pneumonia
2. Urinary Tract Infection
3. Abdominal pain or distension
4. Meningitis
5. Indwelling medical device or intravenous line
6. Cellulitis, septic arthritis, infected wound
7. Recent chemotherapy
8. Organ transplant (kidney, heart, lung etc)
9. Age > 65 years

Adult Routine Transport Orders

Oxygen should be administered to maintain SpO2 >94%

Modified Trendelenburg Position (feet up), if tolerated.

Initiate treatment for sepsis if all 3 criteria met:

1. Infection suspected
2. Two or more of the following:
   a. Temperature > 100.4 F (38 C) or < 96.8 F (36 C)
   b. Heart rate > 90 bpm
   c. Respiratory rate > 20
3. $ETCO_2$ < 25 mmHg

If not in **Acute Pulmonary Edema/CHF**

Initiate 30 ml/kg Normal Saline rapid IV bolus

Auscultate the lungs frequently for rales. If rales appear or dyspnea increases at any time, terminate the fluid bolus.

Request receiving facility initiate a **"Sepsis Alert"** as part of radio report.

If the systolic blood pressure remains < 90 mmHg after Normal Saline bolus

Consider **Epinephrine Drip** 2 - 10 mcg/min

Titrate to a systolic blood pressure or > 90 mmHg

General

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AEMT

Paramedic