



OLD DOMINION EMERGENCY MEDICAL SERVICES ALLIANCE

Adult General Medical Emergencies - BLS

SERVING THE CITIZENS, EMS AGENCIES, ACUTE CARE HOSPITALS AND LOCAL GOVERNMENTS IN VIRGINIA PLANNING DISTRICTS 13,14,15 AND 19

7818 E. Parham Road, Suite 911 • Richmond, VA 23294
PHONE: 804-560-3300 • FAX: 804-560-0909 • www.odemsa.vaems.org



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General – Universal Patient Care/Initial Patient Contact (Medical Patient Assessment)

OVERVIEW:

The ability to perform an accurate assessment is one of the most important skills in EMS.

The information gained during the assessment is used to make decisions regarding emergency interventions, such as the need for immediate airway management and ventilation; to formulate a differential field diagnosis; and to provide continued and advanced pre-hospital care enroute to a receiving facility.

Since this information is used in clinical decision-making, it is important that the assessment findings are interpreted correctly and efficiently.



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1. Demonstrates proper assessment techniques / Physical skills.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Life Threat Bleeding
 - i. Assessment
 - ii. Correction
 - h. Airway
 - i. Assessment
 - ii. Correction
 - i. Breathing
 - i. Assessment
 - ii. Correction
 - j. Circulation
 - i. Assessment
 - ii. Correction
 - k. Disability
 - i. Assessment
 - ii. Correction
 - l. Exposure
 - i. Assessment
 - ii. Correction
2. Demonstrates the following skills.
 - a. Proper Physical Exam
 - i. Head to toe format
 - ii. All major body parts/systems
 - iii. Vital Signs / Documentation
3. Demonstrates the selection of the proper protocol based on the above assessment.

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Medical – **Abdominal Pain** - BLS

OVERVIEW:

Abdominal pain is one of the most common presenting complaints in emergency medicine. In nearly half the patients, the etiology remains obscure. Recalling the differences between generalized types of pain can be helpful diagnostically.

Visceral abdominal pain results from stretching of the autonomic nerve fibers. The pain may be described as cramp-like, colicky, or gaseous and is often intermittent. Obstruction can be a serious cause of visceral pain.

Somatic pain occurs when pain fibers located in the parietal peritoneum are irritated by chemical or bacterial inflammation. The pain is described as sharp, more constant, and more precisely located. Referred pain is any pain felt at a distance from a diseased organ.

Referred pain generally follows certain classic patterns, for example, diaphragmatic irritation often radiates to the supra-clavicular area.



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Student Can demonstrate the following competencies without prompting and can explain the clinical reasoning for each listed below:

1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Position of comfort
 - j. Obtain 12 lead EKG.
 - k. If Shock is Noted
 - i. Refer to Shock Protocol.
2. Demonstrates the following skills.
 - a. Proper 12 lead placement.
 - b. Obtaining 12 lead EKG in 10 minutes or less of patient side.
 - c. Demonstrates knowledge of ACUTE MI message on 12 Lead.
 - i. Request ALS.
 - ii. Proper Admin of ASA.
 - iii. Proper Admin of NTG
 - d. Anti-Emetic – based on Assessment.
 - e. Demonstrates the appropriate transport mode and destination.
 - f. Transport as soon as safe to do so to the proper destination.

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Medical – **Allergic Reaction and Anaphylaxis** - BLS

OVERVIEW:

Anaphylaxis allergic reactions are serious and potentially life-threatening medical emergencies. It is the body's adverse reaction to a foreign protein, (i.e., food medicine, pollen, insect sting, or any ingested, inhaled, or injected substance). Patients with allergic reactions frequently present only with local or generalized swelling; in contrast, anaphylaxis is characterized by wheezing, significant airway compromise, and/or systolic BP < 90 mmHg.

Common to both disorders are urticaria and Angioedema, which when isolated are best treated with simple antihistamine therapy.

It is when respiratory symptoms, such as upper airway edema, dyspnea, and wheezing are present EMS personnel should attribute these findings to anaphylaxis, and subsequently move to more aggressive therapy. Cardiovascular collapse may occur abruptly, without the prior development of skin or respiratory symptoms.

Constant monitoring of the patient's airway and breathing is mandatory.



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 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Pulse Ox
 - i. Determine Relevant Differentials based on Assessment.
 - i. **Allergic Reaction** – one body system is involved.
 - ii. **Anaphylaxis** – Respiratory problems – more than one body system involved.
 1. **Administer Epi**
 2. **Request ALS**
 - j. Administer Oxygen based on Assessment.
 - k. Wheezing Noted
 - i. Refer to the Respiratory Distress Protocol
2. Demonstrates the following skills.
 - a. Pulse Ox
 - b. Proper Admin of Epi Auto Injector.
 - i. Request ALS.



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- c. Demonstrates the appropriate transport mode and destination.
- d. Transport as soon as safe to do so to the proper destination.

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General – Behavioral/Patient Restraint - BLS

OVERVIEW:

Psychiatric patients may have an illness that presents with symptoms such as delusions, hallucinations, depression, or significant trauma.

The patient's symptoms demand immediate response as they may appear intense, raise the anxiety levels of those around the patient to an intolerable level, or create problems in the immediate environment.

The patient may perceive their life to be at immediate risk, either from suicide or their current inability to make logical decisions.

Remember that **personal safety takes priority over patient intervention.**

Patient care should be focused on preventing/ mitigating hyperthermia, agitated delirium, positional asphyxia, hypoxia, and physical harm.



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1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Non-Violent/Non-Aggressive
 - i. Police if needed.
 - ii. Mental health if needed.
 - iii. Remove stimuli if possible.
 - iv. Transport
 - j. Violent/Aggressive
 - i. Police if needed.
 - ii. Mental health if needed.
 - iii. Remove stimuli if possible.
 - iv. Assess for Trauma if able
 - v. AMS
 1. Obtain Blood glucose
 2. Is Patient Able to make Treatment decisions?
 - vi. Use De-escalation techniques /Avoid Confrontation.
 - vii. If the patient needs to be restrained
 1. Sufficient Manpower/Equipment
 2. Refer to the Patient Restraint Procedure
2. Demonstrates the following skills.
 - a. Reduce/Remove Stimulus / Persons
 - b. If Violent, and or Aggressive



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- i. Crew safety and Patient Safety
- ii. Determine/Maintain Escape route(s)
- iii. De-escalation techniques
- iv. Request Police
- v. Request Mental health responders
- c. Proper Safe Patient restraint techniques
 - i. ALS.
- d. Demonstrates the appropriate transport mode and destination.
- e. Transport as soon as safe to do so to the proper destination.

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Medical – **Stroke/TIA** - BLS

OVERVIEW:

Stroke is a major cause of disability and a leading cause of death in the U.S.

There are two main mechanisms of stroke:

1. Blood vessel occlusion - **Ischemic strokes**
2. Blood vessel rupture - **Hemorrhagic strokes**

Ischemic strokes - are most often caused by large-vessel thrombosis, although embolism or hypoperfusion can cause them. Causes of thrombosis include atherosclerosis, vessel dissection, and some infectious diseases.

Hemorrhagic strokes - are divided into intracerebral (ICH) and subarachnoid (SAH) hemorrhages. Risk factors for ICH include heart disease, hypertension, smoking, diabetes, elevated cholesterol, older age, prior stroke, family history, and cocaine use.

Stroke symptoms will present according to which area of the brain is being inadequately perfused.



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 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Glucose level
 - j. Last Known Well time
 - k. Friend/Family to Hospital with Patient to answer questions/Contact Information.
 - l. Stroke Scale
 - i. Determine VAN
 - m. ALS
 - n. Consider Helicopter if Ground Transport time greater than 30 minutes.
2. Demonstrates the following skills.
 - a. Pulse Ox
 - i. Oxygen per Assessment findings
 - b. Proper 12 lead placement.
 - c. Stroke Scale
 - i. VAN Assessment



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- d. Last known well time
- e. If positive Stroke Scale
 - i. ALS.
 - ii. Notify Facility of Acute Stroke
- f. Demonstrates the appropriate transport mode and destination.
- g. Transport as soon as safe to do so to the proper destination.

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Medical – Dystonic/Extrapyramidal Reaction – BLS

OVERVIEW:

Dystonic or extrapyramidal reactions are characterized by an unusual posture, change in muscle tone, drooling, and/or uncontrolled movements.

Although dystonic reactions are occasionally dose-related these reactions are more often idiosyncratic and not predictable.

Dystonia results from drug-induced alteration of the dopaminergic-cholinergic balance in the basal ganglia.

Risk factors include, but are not limited to, family history of dystonia, a recent history of cocaine or alcohol use, or treatment with a potent dopamine D2 receptor antagonist such as fluphenazine and almost every anti-psychotic medication.

Diphenhydramine, when administered, usually causes marked improvement, if not a total resolution of symptoms.



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 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Glucose level
 - i. Refer to the Proper Hypoglycemia Protocol
 - ii. Refer to the Proper Hyperglycemia Protocol
 - j. Obtain 12 Lead EKG
2. Demonstrates the following skills.
 - a. Pulse Ox
 - i. Oxygen per Assessment findings
 - b. Proper 12 lead placement.
 - c. Stroke Scale
 - d. Last known well time
 - i. ALS.
 - e. Demonstrates the appropriate transport mode and destination.
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Student's and FTO'S signatures below signify that the student has demonstrated sufficient working knowledge and can perform such competency and has had the opportunity to ask and has had all questions and answers provided to their level of comfort.

Competency – ODEMSA – Regional Protocols – **General –Medical –
Dystonic/Extrapyramidal Reaction - BLS**

Student's Name and Signature – date below:

_____ Date _____
Printed Name Signature

FTO's Name and Signature – date below:

_____ Date _____
Printed Name Signature



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Medical – Diabetic – **Hyperglycemia – BLS**

OVERVIEW:

Symptomatic hyperglycemia can be described as an elevated blood glucose level with signs of severe dehydration, altered mental status, and/or shock.

For the purpose of these protocols, the glucose level for symptomatic hyperglycemia is **300 mg / dL and above**.

Hyperglycemia is usually the result of an inadequate supply of insulin to meet the body's needs.

Most pre-hospital care should be focused on the treatment of severe dehydration and support of vital functions.



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 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Glucose level
 - j. If signs of Shock Refer to the Shock Protocol
 - k. Obtain 12 Lead EKG
2. Demonstrates the following skills.
 - a. Pulse Ox
 - i. Oxygen per Assessment findings
 - b. Proper 12 lead placement.
 - c. Stroke Scale
 - d. Last known well time
 - i. ALS.
 - e. Demonstrates the appropriate transport mode and destination.
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Medical – Diabetic – **Hypoglycemia** – BLS

OVERVIEW:

Symptomatic hypoglycemia is defined as a **blood glucose level < 60 mg / dL with signs of altered mental status and/or unconsciousness.**

The many signs and symptoms that are associated with hypoglycemia can be divided into two broad categories: adrenergic and neurologic.

Adrenergic - stimulation is due to the increased epinephrine levels,

Neurologic - is due to central nervous system dysfunction from the decreased glucose levels.



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 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Glucose level
 - ii. If Low
 1. ALS
 - iii. If patient able to manage Airway -Awake and can follow directions
 1. Oral glucose – 15G
 - a. Repeat Q 15 minutes
 2. Glucagon 1 mg
 - i. If Shock noted – Refer to the Shock Protocol.
2. Demonstrates the following skills.
 - a. Pulse Ox
 - i. Oxygen per Assessment findings
 - b. Administration of the following
 - i. Oral Glucose
 - ii. Glucagon
 - c. Stroke Scale
 - d. Last known well time
 - i. ALS.
 - e. Demonstrates the appropriate transport mode and destination.
 - f. Transport as soon as safe to do so to the proper destination.

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Competency – ODEMSA – Regional Protocols – **General – Medical – Diabetic – Hypoglycemia – BLS**

Student's Name and Signature – date below:

_____ Date _____
Printed Name Signature

FTO's Name and Signature – date below:

_____ Date _____
Printed Name Signature



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Medical – Nausea/Vomiting – BLS

OVERVIEW:

The pre-hospital provider should be very careful to ensure that patients who present with vague complaints such as nausea and vomiting are thoroughly assessed.

All patients presenting with nausea and vomiting should be screened for potential life threats initially.

Anti-emetic treatment should be considered a treatment of a symptom of an underlying illness or injury.

The patient's symptoms and recent history must determine the most appropriate care.

Frequently, treatment of an underlying cause and limiting movement may resolve or greatly reduce these complaints.

However, persistent nausea and vomiting of unknown etiology may respond well to pharmaceutical therapy.

Do not overlook the possibility of cardiac origin complaints, with atypical presentation of nausea/vomiting (i.e., diabetic, and female patients)



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 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Obtain 12 Lead EKG
 - j. Pulse Ox
2. Demonstrates the following skills.
 - a. Pulse Ox
 - i. Oxygen per Assessment findings
 - b. Stroke Scale
 - i. Last known well time VAN Assessment
 - ii. Last known well time
 - iii. If positive Stroke Scale
 1. ALS.
 2. Notify Facility of Acute Stroke
 - c. Proper 12 lead placement.
 - d. Obtaining 12 lead EKG in 10 minutes or less of patient side.
 - e. Demonstrates knowledge of ACUTE MI message on 12 Lead.
 - i. Request ALS.
 - ii. Proper Admin of ASA.
 - iii. Proper Admin of NTG
 - f. Anti-Emetic – based on Assessment.
 - g. Demonstrates the appropriate transport mode and destination.
 - h. Transport as soon as safe to do so to the proper destination.



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General – Pain Control – BLS

OVERVIEW:

The practice of pre-hospital emergency medicine requires expertise in a wide variety of pharmacological and non-pharmacological techniques to treat acute pain resulting from a myriad of injuries and illnesses.

One of the most essential missions for all healthcare providers should be the relief and/or prevention of pain and suffering.

Approaches to pain relief must be designed to be safe and effective in the organized chaos of the pre-hospital environment.

The degree of pain and the hemodynamic status of the patient will determine the rapidity of care.



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1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
2. Demonstrates the following skills.
 - a. Age-Appropriate Pain Score
 - b. Last known well time
 - i. Acute
 - ii. Chronic
 - c. Proper 12 lead placement.
 - d. Obtaining 12 lead in 10 minutes or less of patient side.
 - e. Demonstrates knowledge of ACUTE MI message on 12 Lead.
 - i. Request ALS.
 - ii. Proper Admin of ASA.
 - iii. Proper Admin of NTG
 - f. Pain management per Agency/OMD local protocol/procedures
 - g. Anti-Emetic – based on Assessment.
 - h. Demonstrates the appropriate transport mode and destination.
 - i. Transport as soon as safe to do so to the proper destination.

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Medical - Respiratory Distress/Asthma/COPD/Croup/Reactive Airway

(Respiratory Distress – Asthma / COPD) – BLS

OVERVIEW:

Respiratory distress, or dyspnea, is one of the most common medical complaints witnessed in pre-hospital medicine. Most patients describe it as a sensation of shortness of breath or a feeling of “air hunger” accompanied by labored breathing. Dyspnea may be caused by pulmonary or cardiac disease or by any mechanism that causes hypoxia. It may be mild, manifesting only on exertion, or severe, occurring at rest.

The most common causes of non-cardiac dyspnea in the pre-hospital environment involve asthma, chronic obstructive pulmonary disease (COPD), pneumonia, and bronchitis. The wheezing patient may present in different ways, some may not even complain of wheezing, but rather just of shortness of breath, cough, or chest tightness.

Wheezing patients are often apprehensive and distressed, at times, so severe that they may not be able to speak in complete sentences. Oxygenation may be compromised to the point that there is a decrease in the patient’s level of consciousness. These signs are clues that the patient needs immediate and aggressive therapy.

Treatment is aimed at maintaining the patient’s SpO₂ to > 90%.

Remember, not all wheezing is from asthma.



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1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Position Patient Sitting up / Position of Comfort.
 - j. Pulse Ox
 - k. End Tidal CO₂
 - l. Assists the patient with their Prescribed Bronchodilator.
 - m. CPAP 5-10 cm H₂O PEEP
 - n. If Respiratory Distress
 - i. Albuterol and Ipratropium via Nebulizer
 1. Repeat Albuterol **only** in 10 minutes to a total of 4 treatments
 - ii. Consider BVM Assistance
 - o. Obtain 12 Lead EKG
2. Demonstrates the following skills.
 - a. Age-Appropriate Pain Score
 - b. Last known well time
 - i. Acute
 - ii. Chronic
 - c. Pulse Ox Measurement
 - d. Capnography Measurement
 - e. Oxygen/Ventilation based on Assessment.
 - f. Bronchodilator Administration
 - g. Request ALS



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- h. CPAP
- i. Proper 12 lead placement.
- j. Obtaining 12 lead EKG in 10 minutes or less of patient side.
- k. Demonstrates knowledge of ACUTE MI message on 12 Lead.
 - i. Request ALS.
 - ii. Proper Admin of ASA.
 - iii. Proper Admin of NTG
- l. Demonstrates the appropriate transport mode and destination.
- m. Transport as soon as safe to do so to the proper destination.

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Competency – ODEMSA – Regional Protocols – **General –Medical –Respiratory Distress/Asthma/COPD/Croup/Reactive Airway (Respiratory Distress – Asthma / COPD) – BLS**

Student's Name and Signature – date below:

_____ Date _____
Printed Name Signature

FTO's Name and Signature – date below:

_____ Date _____
Printed Name Signature



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Medical – Seizure – BLS

OVERVIEW:

A seizure is a period of altered neurologic function caused by abnormal neuronal electrical discharges. Generalized seizures begin with an abrupt loss of consciousness. If motor activity is present, it frequently symmetrically involves all four extremities.

Episodes that develop over minutes to hours are less likely to be seizures; generally, seizures only last one to two minutes.

Patients with seizure disorders tend to have stereotype, or similar, seizures with each episode and are less likely to have inconsistent or highly variable attacks.

True seizures are usually not provoked by emotional stress.

Most seizures are followed by a postictal state of lethargy and confusion.



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 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. Blood Glucose Level
 - i. Follow proper Hypo/Hyper Glycemia Protocol
 - j. Pulse Ox
 - k. Position Patient in Recovery Position
2. Demonstrates the following skills.
 - a. Airway Management
 - i. Suction
 - ii. Airway
 - b. Oxygen/Ventilation based on Assessment.
 - c. Last known well time
 - i. Acute
 - ii. Chronic
 - d. Pulse Ox Measurement
 - e. Glucose Check
 - f. Request ALS
 - g. Demonstrates the appropriate transport mode and destination.
 - h. Transport as soon as safe to do so to the proper destination.

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Medical – Hypotension/Shock (Non-trauma) – BLS

OVERVIEW:

Shock - is defined as a state of inadequate tissue perfusion.

This may result in acidosis, derangements of cellular metabolism, potential end-organ damage, and death. Early in the shock process, patients are able to compensate for decreased perfusion by increased stimulation of the sympathetic nervous system, leading to tachycardia and tachypnea. Later, compensatory mechanisms fail, causing a decreased mental status, hypotension, and death. Early cellular injury may be reversible if definitive therapy is delivered promptly.



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 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Need for ALS.
 - g. Pulse Ox
 - h. Determine Relevant Differentials based on Assessment.
 - i. XABCDE Survey
 - ii. Address all identified Life Threats.
 - iii. Breathing
 1. Assessment
 - a. If Respiratory Distress Noted
 - i. Pediatric Respiratory Protocol
 - ii. ALS
 - iii. Transport as Soon as Possible
 2. Correction
 - a. Administer Oxygen per Assessment
 - b. Pulse Ox at least 94%
- i. If Hypoperfusion/Shock is suspected
 - i. Signs and symptoms of Shock
 1. Restless
 2. AMS
 3. Cool/Pale/Moist Skin
 4. Delayed Capillary Refill
 5. Rapid/Weak/ pulse
 6. Tachypnea
 7. Hypotension
 8. Thirst



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9. Nausea
 - j. Positioning the patient Supine Position.
 - k. Keep Patient warm
 - l. Frequent Reassessment
2. Demonstrates the following skills.
 - a. Airway Management
 - i. Suction
 - ii. Airway
 - b. Oxygen/Ventilation based on Assessment.
 - c. Supine
 - d. Keep Warm
 - e. Rapid Transport
 - f. Pulse Ox Measurement
 - g. Glucose Check
 - h. Request ALS
 - i. Demonstrates the appropriate transport mode and destination.
 - j. Transport as soon as safe to do so to the proper destination.

The above is a very abbreviated summary of the Protocol.

For the complete Protocol, please review the appropriate Protocol as published by ODEMSA.



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Medical – Sickle Cell Anemia/Crisis – BLS

OVERVIEW:

Sickle cell anemia is a recessive genetic illness that primarily affects African-Americans, but also people with African, Arab, the country of India, Greek, Italian, and Latin American heritage.

Although rare, Caucasians can also have sickle cell disease or sickle cell trait.

In patients with sickle cell anemia, the beta hemoglobin chain of red blood cells are produced abnormally, *hemoglobin S*, which has an inferior oxygen-carrying ability.

These mutated molecules do not have the smooth motion needed for oxygenation and deoxygenation. When these hemoglobin S cells are exposed to low-oxygen states, they crystallize, distorting the RBC into a fragile, stiff, and rigid crescent (sickle) shape, stopping the smooth passage of the cell through the narrow blood vessels. As a result, blood vessels can sometimes become clogged causing occlusions within the vessels.

As fewer RBCs pass through congested vessels, tissues and joints receive less oxygen, causing excruciating pain from the buildup of waste products in the hypoxic areas. Pain may range from mild transient attacks with a duration of minutes to severe pain lasting days to weeks and requiring hospitalization.



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Student Can demonstrate the following competencies without prompting and can explain the clinical reasoning for each listed below:

1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
2. Demonstrates the following skills.
 - a. Age-Appropriate Pain Score
 - b. Last known well time
 - c. Pulse Ox Measurement
 - d. Oxygen/Ventilation based on Assessment.
 - e. Request ALS based on Assessment.
 - f. Proper 12 lead placement if the complaint involves Chest Pain.
 - g. Obtaining 12 lead EKG in 10 minutes or less of patient side.
 - h. Demonstrates knowledge of ACUTE MI message on 12 Lead.
 - i. Request ALS.
 - ii. Proper Admin of ASA.
 - iii. Proper Admin of NTG
 - i. Demonstrates the appropriate transport mode and destination.
 - j. Transport as soon as safe to do so to the proper destination.

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Medical - Altered Mental Status (AMS) – BLS

OVERVIEW:

The unconscious patient can be a difficult patient to manage.

There are many potential causes for a change in mentation or syncope. These causes range from benign problems to potentially life-threatening cardiopulmonary or central nervous system disorders.

When approaching the patient that has experienced a change in mental status, or syncope, be alert for clues that may indicate the potential cause – diligently obtain a thorough patient history and perform a complete physical exam.

Obtaining an adequate physical assessment and assessing for the presence of common causes of the episode can quickly aid you in determining the proper sequence of care to provide to the patient.

Focus on managing any life-threatening conditions that may have led to the episode and correcting any found.



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Student Can demonstrate the following competencies without prompting and can explain the clinical reasoning for each listed below:

1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. XABCDE Survey
 - ii. Address all identified Life Threats.
 - i. If the cause of AMS is not able to be determined
 - i. Refer to the Stroke/TIA Protocol
 - j. If the patient is greater than 25 yrs.
 - i. Obtain 12 Lead EKG.
 1. If Acute MI Noted
 2. Refer to the Acute MI Protocol
 3. ALS
2. Demonstrates the following skills.
 - a. Airway Management
 - i. Suction
 - ii. Airway
 - b. Pulse Ox Measurement
 - c. Oxygen/Ventilation based on Assessment.
 - d. ALS.
 - e. Glucose Check
 - f. Request ALS
 - g. Proper 12 lead placement.
 - h. Obtaining 12 lead EKG in 10 minutes or less of patient side.



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- i. Demonstrates knowledge of ACUTE MI message on 12 Lead.
- j. Supine
- k. Keep Warm
- l. Rapid Transport
- m. Demonstrates the appropriate transport mode and destination.
- n. Transport as soon as safe to do so to the proper destination.

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Airway – Failed – BLS

OVERVIEW:

The purpose of these guidelines is to facilitate the management of the difficult airway and to reduce the likelihood of adverse outcomes.

The principal adverse outcomes associated with the difficult airway include, but are not limited to, death, brain injury, myocardial injury, and airway trauma.

Treatment Goal – Obtain/Manage Airway



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Student Can demonstrate the following competencies without prompting and can explain the clinical reasoning for each listed below:

1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. XABCDE Survey
 - ii. Address all identified Life Threats.
2. Request ALS
3. Request Manpower if needed.
4. Demonstrates the following skills.
 - a. Airway Management
 - i. Suction
 - ii. Airway
 - iii. Airway placement
 1. Nasal
 2. Oral
 3. Laryngeal
 - iv. Ventilation
 1. BVM
 2. 2 Person BVM
 - b. Pulse Ox Measurement
 - c. Oxygen/Ventilation based on Assessment.
 - i. Maintain Pulse Ox 94-99%
 - d. Head Tilt / Chin Lift
 - e. Jaw Thrust



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- f. Nasal Airway if no Head Injury noted
- g. Supraglottic Airway
- h. ALS.
- i. Glucose Check
- j. Proper 12 lead placement if Time/Staffing permit
- k. Demonstrates knowledge of ACUTE MI message on 12 Lead.
- l. Supine
- m. Keep Warm
- n. Rapid Transport
- o. Demonstrates the appropriate transport mode and destination.
- p. Transport as soon as safe to do so to the proper destination.

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General Medical - **Sepsis** – BLS

OVERVIEW:

Sepsis is an illness that affects all parts of the body that can happen in response to an infection and can quickly become life-threatening.

Sepsis - is a **Systemic Inflammatory Response Syndrome** or (SIRS) caused by severe infection. In severe cases of sepsis, one or more organs fail.

In the worst cases, sepsis causes the blood pressure to drop and the heart to weaken, leading to septic shock. Once this happens, multiple organs may quickly fail, and the patient can die.

Sepsis is a serious illness that is very difficult to predict, diagnose, and treat. Patients who develop sepsis have an increased risk of complications and death and face higher healthcare costs and longer treatment.

The mortality rate can range from 10% to 60%. Early recognition combined with aggressive fluid resuscitation and finding the source of infection are the keys to greatly reducing the mortality rate.



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Student Can demonstrate the following competencies without prompting and can explain the clinical reasoning for each listed below:

1. Demonstrates proper assessment techniques.
 - a. HPI – Complete
 - b. Signs and Symptoms
 - c. SAMPLE
 - d. OPQRST
 - e. MOI – NOI
 - f. Primary Assessment
 - i. XABCDE Format
 - g. Need for ALS.
 - h. Determine Relevant Differentials based on Assessment.
 - i. XABCDE Survey
 - ii. Address all identified Life Threats.
2. Request ALS
3. Obtain 12 Lead EKG
4. Pulse Ox
5. Obtain Blood Glucose
6. Demonstrates the following skills.
 - a. SIRS Assessment / Alert Process to receiving facility.
 - b. Airway Management
 - i. Suction
 - ii. Airway
 - iii. Airway placement
 1. Nasal
 2. Oral
 3. Laryngeal
 - iv. Ventilation
 1. BVM
 2. 2 Person BVM
 - c. Pulse Ox Measurement
 - d. Oxygen/Ventilation based on Assessment.

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- e. ALS
- f. Glucose Check
- g. Temperature Measurement
- h. Proper 12 lead placement if Time/Staffing permit
- i. Demonstrates knowledge of ACUTE MI message on 12 Lead.
- j. Supine
- k. Keep Warm
- l. Rapid Transport
- m. Demonstrates the appropriate transport mode and destination.
- n. Transport as soon as safe to do so to the proper destination.

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