

# Syncope



## History

- Cardiac history, stroke, seizure
- Occult blood loss (GI, ectopic)
- Females: LMP, vaginal bleeding
- Fluid loss: nausea, vomiting, diarrhea
- Past medical history
- Medications

## Signs and Symptoms

- Loss of consciousness with recovery
- Lightheadedness, dizziness
- Palpitations, slow or rapid pulse
- Pulse irregularity
- Decreased blood pressure

## Differential



- Vasovagal
- Orthostatic hypotension
- Cardiac syncope
- Micturition / Defecation syncope
- Psychiatric
- Stroke
- Hypoglycemia
- Seizure
- Shock (see Shock Protocol)
- Toxicological (Alcohol)
- Medication effect (hypertension)
- PE
- AAA

Age Appropriate Airway Protocol(s) AR 1, 2, 3, 5, 6 <b>if indicated</b>	
	Blood Glucose Analysis Procedure
<b>B</b>	12 Lead ECG Procedure
<b>I</b>	IV / IO Procedure
<b>P</b>	Cardiac Monitor
Altered Mental Status Protocol UP 4 <b>if indicated</b>	
Age Appropriate Cardiac Protocol(s) <b>if indicated</b>	
Age Appropriate Hypotension / Shock Protocol AM 5 / PM 3 <b>if indicated</b>	
Multiple Trauma Protocol TB 6 Spinal Motion Restriction Procedure / Protocol TB 8 <b>if indicated</b>	

Serious Signs / Symptoms  
Hypotension, poor  
perfusion, shock

YES →

NO

 **Notify Destination or  
Contact Medical Control** 

<b>A</b>	IV / IO Procedure Consider 2 Large Bore sites
	<b>Normal Saline</b> <b>Adult: 500 mL Bolus</b> Repeat as needed Titrate SPB $\geq$ 90 mmHg <b>(Maximum 2 L)</b> <b>Pediatric: 10 - 20 mL/kg IV / IO</b> Repeat as needed Titrate to Age Appropriate SBP $\geq$ 70 + 2 x Age <b>(Maximum 60 mL/kg)</b>

Exit to  
Age Appropriate  
Condition Appropriate  
Protocol(s)

# Syncope



## Pearls

- **Recommended Exam: Mental Status, Skin, HEENT, Heart, Lungs, Abdomen, Back, Extremities, Neuro**
- **Syncope is both loss of consciousness and loss of postural tone. Symptoms preceding the event are important in determining etiology.**
- **Syncope often is due to a benign process but can be an indication of serious underlying disease in both the adult and pediatric patient.**
- **Often patients with syncope are found normal on EMS evaluation. In general patients experiencing syncope require cardiac monitoring and emergency department evaluation.**
- **Differential should remain wide and include:**

<b>Cardiac arrhythmia</b>	<b>Neurological problem</b>	<b>Choking</b>	<b>Pulmonary embolism</b>
<b>Hemorrhage</b>	<b>Stroke</b>	<b>Respiratory</b>	<b>Hypo or Hyperglycemia</b>
<b>GI Hemorrhage</b>	<b>Seizure</b>	<b>Sepsis</b>	
- **High-risk patients:**

<b>Age <math>\geq</math> 60</b>	<b>Syncope with exertion</b>
<b>History of CHF</b>	<b>Syncope with chest pain</b>
<b>Abnormal ECG</b>	<b>Syncope with dyspnea</b>
- **Age specific blood pressure 0 – 28 days  $>$  60 mmHg, 1 month - 1 year  $>$  70 mmHg, 1 - 10 years  $>$  70 + (2 x age) mmHg and 11 years and older  $>$  90 mmHg.**
- **Abdominal / back pain in women of childbearing age should be treated as pregnancy related until proven otherwise.**
- **The diagnosis of abdominal aneurysm should be considered with abdominal pain, with or without back and / or lower extremity pain or diminished pulses, especially in patients over 50 and / or patients with shock/ poor perfusion. Notify receiving facility early with suspected abdominal aneurysm.**
- **Consider cardiac etiology in patients  $>$  50, diabetics and / or women especially with upper abdominal complaints.**
- **Heart Rate: One of the first clinical signs of dehydration, almost always increased heart rate, tachycardia increases as dehydration becomes more severe, very unlikely to be significantly dehydrated if heart rate is close to normal.**
- **Syncope with no preceding symptoms or event may be associated with arrhythmia.**
- **Assess for signs and symptoms of trauma if associated or questionable fall with syncope.**
- **Consider dysrhythmias, GI bleed, ectopic pregnancy, and seizure as possible causes of syncope.**
- **These patients should be transported. Patients who experience syncope associated with headache, neck pain, chest pain, abdominal pain, back pain, dyspnea, or dyspnea on exertion need prompt medical evaluation.**
- **More than 25% of geriatric syncope is cardiac dysrhythmia based.**