

Simulation Scenario

Simulation Case Title: Sepsis

Patient Name: Joey

Patient Age: 2 years old

Chief Complaint: Fever, Nausea/Vomiting

<p>Brief narrative description of case <i>Include the presenting patient chief complaint and overall learner goals for this case</i></p>	<p>Sepsis. Father calls because the patient has been febrile for the past several days and is now vomiting and has not improved. Arrived on scene and found patient lethargic, febrile, lying in father's arms with a trach tube in place.</p>
<p>Primary Learning Objectives <i>What should the learner gain in terms of knowledge and skill from this case?</i></p>	<p>S/S of Sepsis recognition and appropriate treatment/rapid transport. S/S of Pediatric seizures and appropriate treatment.</p>
<p>Critical Actions <i>List which steps the participants should take to successfully manage the simulated patient. Theses should be listed as concrete actions that are distinct from the overall learning objectives of the case</i></p>	<p>Assess the patient regardless of distractions (Neighbor) Question the parent, and recognize caregiver is the resident expert for the patient. Early recognition of the necessity for rapid transport (10 minutes) Successful Treatment of Sepsis Successful Treatment of Seizures (Regardless of treatment up to this point) PMH/Medications/Allergies Vascular Access/Fluid bolus correct dosage for bolus Oxygen</p>
<p>Learner Preparation <i>What information should the learners be given prior to initiation of the case</i></p>	<p>Crew is dispatched for an unknown age sick child. They are arriving at a single-story normal neighborhood. Well-kept exterior. Inside the home, the patient is found lying in the father's arms on the couch.</p>

Initial Presentation						
Initial vital signs	HR	B/P	RR	EtCo2	O2sat	Temp
	160	74/40	36	28	93%	101.7
<p>Overall appearance <i>What do learners see when they first enter the room?</i></p>	<p>Across the room, assessment reveals a flushed 2 YOM with mottled skin and general lethargy. The patient does not notice or track the provider as they walk up. The patient has an existing trach tube in place. The father holds the patient in his arms and is in no obvious distress.</p>					

HPI <i>Specify what info here and below must be asked vs what is volunteered by patient or caregiver</i>	<p>Volunteered info: Father reports that he regularly maintains the patient's trach tube and no obstructions are noted. Father further reports that the patient has been sick for the past several days with a fever.</p> <p>Must be asked: Patient age, PMH, Medications, Allergies History from father Ibuprofen half hour ago, did not break fever vomiting throughout the night</p>		
Past Medical/Surgical History	Medications	Allergies	Family History
Trach tube placement as an infant, maintained by the family.	None	NKDA	None
Physical Examination			
General	Assessment reveals a flushed 2 YOM with mottled skin and general lethargy. The patient does not notice or track the provider as they walk up. The patient has an existing trach tube in place.		
HEENT	Patient does not track provider as they walk across the room. All other findings are insignificant.		
Neck	Trach tube placement with minor localized swelling and redness noted.		
Lungs	Lungs sounds clear. Tachypneic		
Cardiovascular	Tachycardia and Hypotension. Delayed cap refill		
Abdomen	Soft, non-tender		
Neurological	Patient is generally lethargic as reported by father.		
Skin	Hot head/trunk, flushed, mottled. Cool extremities.		
GU	Nausea/Vomiting. Decreased output		
Psychiatric	Normal		
Instructor Notes – Changes and Case Branch Points			
Intervention / Time point	Change in Case		Additional Information
Oxygen	Improve SpO2 Saturation		

IV Access/Fluid Bolus	Increase in BP	
7 minute mark: Seizure	Patient begins seizure	
Treatment for seizure	Patient stops seizure	IV or IM. If no IV access, IM route 1st.
Rapid transport	Transport within 10 minutes	
Courtesy notification with SEPSIS alert	Hospital staff prepared for receiving patient.	

high-risk patient

source of infection for patient (trach tube?)

ill person for call

*Febrile

*ALOC

*Delayed Cap Refill

*Cold extremities

*Tachycardia

*Nausea/Vomiting

**Hypotension

- Seizure
 - Regardless of patient outcome, patient experiences tonic-clonic seizures
 - Hypoglycemic

History from mother

Ibuprofen half hour ago, did not break fever

vomiting throughout the night

Ideal Scenario Flow:

- Recognition for Sepsis
- Vascular Access/Fluid bolus
 - correct dosage for bolus
- Oxygen
- Verbalize need to load and go
- Recognizing vital signs out of normal range
 - Hypotension (Systolic)
 - NB (Systolic <60)
 - Age x 2 + 70 (Low normal)
 - Age x 2 + 80 (Normal)
 - Age x 2 + 90 (Above normal)
 - HR 85-140
 - Resp 20-30
 - Systolic BP 74-110
 - Febrile temperature >100.4

Anticipated Management Mistakes:

AAR:

- D50 *Tricks* divide by 5. (After scenario during AAR)
 - 5 ml/kg of D10
- Statistical data from AZDHS regarding Sepsis patients
 - Leading cause of Pediatric deaths
 - 40%? Febrile
 - Survivability decrease by 7.6% every hour with Hypotension in the Sepsis patient.