

Simulation Scenario

Simulation Case Title: Advanced airway management

Patient Name: Teddy

Patient Age: 4 year old, 20 kg

Chief Complaint: near drowning

<p>Brief narrative description of case <i>Include the presenting patient chief complaint and overall learner goals for this case</i></p>	<p>Family is on camping trip along Beaver Creek. Child wandered off while mom went to get a snack. When mom turned back around she saw pt in the creek, facedown. Mom runs to pull pt out while calling for help. EMS is called by the older sibling who is in the camper. When pt is pulled out, he is found to have a pulse but is not responsive, occasional gasping breaths, GCS 3.</p> <p>The overall learner goals for this case is to discuss airway options and establish advanced airway management in the pediatric patient</p>
<p>Primary Learning Objectives <i>What should the learner gain in terms of knowledge and skill from this case?</i></p>	<ul style="list-style-type: none"> -Identify need for respiratory support and airway management with PEEP -Knowledge of when to use BVM, i-gel, ETT -Demonstrate proper use of BVM, i-gel, ETT -Assess for proper placement, management, and troubleshooting of advanced airways.
<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>	<ul style="list-style-type: none"> -Identify impending respiratory failure and need for advanced airway. -Position patient for effective oxygenation, ventilation, and ultimately intubation. -Prepare with preoxygenation, appropriately sized equipment, and backups. -Intubate and/or place LMA. -Appropriate BVM or ventilator setting discussion, including use of PEEP -Transport patient -OGT placement
<p>Learner Preparation <i>What information should the learners be given prior to initiation of the case</i></p>	<p>Pt is a 4-year-old male who was found face down in a creek, he is unresponsive, GCS 3 with pulse and occasional gasping respirations. Family has been attempting to stimulate patient.</p>

Initial Presentation						
Initial vital signs	HR 145	B/P 64/47	RR 7	O2sat 81	Temp 33.0	
Show deterioration	HR 180	B/P 58/35.	RR 0	O2sat 74	Temp 32	
Inappropriate tx	HR 60	B/P 48/29	RR 0	O2 sat 55	Temp 30	
Appropriate tx	HR 125.	B/P 87/52.	RR 20-28 (assisted)	O2 sat 88	Temp 36	
	115	90/60	RR 20-28 (assisted)	O2 sat 90	Temp 36.5	
Overall appearance <i>What do learners see when they first enter the room?</i>	Pt is wet, held by mother who is attempting to stimulate patient. Patient has occasional gasping respirations. Family is frantically running around.					
HPI <i>Specify what info here and below must be asked vs what is volunteered by patient or caregiver</i>	Mom reports she ran to the camper to get a snack for the children. When she came back in "minutes", she saw pt was not with other siblings and saw him down in the shallow creek, face down, she pulled him out and yelled for help and another sibling called 911. She brought him up to where it was dry and started to dry him.					
Past Medical/Surgical History	Medications	Allergies		Family History		

No medical hx.	No medications	No allergies	No hx.
Physical Examination			
General	Pt is lying on the ground on his back with mostly dry blanket on him. Barely breathing at this point, cold to touch		
HEENT	Pupils are 4mm, sluggish but reactive		
Neck	Midline		
Lungs	No audible breath sounds		
Cardiovascular	Weak and thready		
Abdomen	Round, soft		
Neurological	Unresponsive, no gag present		
Skin	Cool to touch		
GU	normal		
Psychiatric	deferred		
Instructor Notes – Changes and Case Branch Points			
Intervention / Time point	Change in Case	Additional Information	
Arrival and assessment	-note need for breathing, BVM, ID need for advanced airway		
Position patient for optimal oxygenation/ventilation/intubation	-Minimal to no spontaneous respirations		
Non invasive oxygenation/Ventilation	-Start with BVM with open airway -If NC also present, initiated for preoxygenation/prep	(use OPA, NPA, position with towels, etc) -OPA size 1 -NPA size 24f	
Prepare equipment			
Airway attempt with I gel	-Only size 1 and 1.5 are present -If I-gel placement is attempted, unable to get good seal after 1 minute of bagging. -If I gel is not attempted, on to ETT		
ETT placement	-If properly placed, coarse lung sounds present throughout	-cuffed tube 5, depth around 15 -blade, size 2 -PEEP valve for ventilation	
Confirm placement	-ETC02 -Slow rise in SpO2		
ID hypotension	-Treat 20ml/kg -May need vasopressors en route		
ID hypothermia	-Remove wet material -Attempt rewarming		
Check blood glucose	60		
