



ESOPHAGEAL INTUBATION DETECTION DEVICE (ASPIRATION TYPE)

	SKILL	Yes/No	COMMENTS	SKILL	Yes/No	COMMENTS		
<p>PERFORMANCE OBJECTIVES The examinee will demonstrate proficiency in the use of an aspiration type esophageal intubation detector device (EID) to verify endotracheal intubation.</p> <p>CONDITION The examinee will be asked to verify placement of an endotracheal tube (ETT) using either the bulb or syringe esophageal intubation detector device (EID) on a simulated patient previously intubated with an ETT. Necessary equipment will be adjacent to the patient.</p> <p>EQUIPMENT Adult intubation manikin intubated with an ETT, esophageal detector device (bulb or syringe), bag-valve-mask device, gloves, and goggles.</p> <p>PERFORMANCE CRITERIA 100% accuracy required on all items for training program skills testing Confirmation must be completed within 10 seconds Must use appropriate body substance isolation precautions—personal protective equipment (PPE)</p> <p>NAME _____ DATE ____/____/____</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>PASS</td> </tr> <tr> <td>FAIL</td> </tr> </table> <p style="text-align: center;">1st 2nd 3rd (final)</p> <p>EXAMINER(S) _____</p>	PASS	FAIL	<p>Preparation</p> <ol style="list-style-type: none"> Take body substance isolation precautions (PPE) Remove EID from packaging Test EID for air leak: <ul style="list-style-type: none"> <u>Bulb</u> - compress bulb to expel air, seal end of bulb and release — <i>if air enters bulb discard</i> <u>Syringe</u> - seal syringe tip and retract plunger — <i>if air enters syringe discard</i> Ready the EID: <ul style="list-style-type: none"> <u>Bulb</u> - compress to expel air in device <u>Syringe</u> - seat plunger toward front of syringe 			<p>Procedure</p> <ol style="list-style-type: none"> Attach EID to ETT while maintaining ETT placement by using pincer grip to stabilize tube Evaluate ETT placement: <ul style="list-style-type: none"> <u>Bulb</u> - allow bulb to self-expand; if bulb expands in ≤ 5 sec, the ETT is in the trachea →→ ventilate and clinically check placement: <ul style="list-style-type: none"> ◆ <i>Check for chest rise</i> ◆ <i>Auscultate epigastric and lung sounds</i> 		
	PASS							
FAIL								
				<p>If bulb expands slowly (>5 sec) tracheal intubation is questionable →→ clinically check placement:</p> <ul style="list-style-type: none"> ◆ <i>Check for chest rise</i> ◆ <i>Auscultate epigastric and lung sounds</i> <p>***Remove ETT if indicated</p> <p>If bulb remains collapsed or gastric contents obtained, the ETT is in the esophagus →→ remove the ETT immediately and ventilate with BVM device</p> <ul style="list-style-type: none"> • <u>Syringe</u> - retract plunger over 2-3 seconds <p>If air fills syringe completely, the ETT is in the trachea →→ ventilate and clinically check placement:</p> <ul style="list-style-type: none"> ◆ <i>Check for chest rise</i> ◆ <i>Auscultate epigastric and lung sounds</i> <p>If resistance and no air enters the syringe, or if gastric contents obtained, the ETT is in the esophagus→→ immediately remove the ETT and ventilate with BVM device</p> <ol style="list-style-type: none"> Ventilate patient with BVM device and clinically reconfirm ETT placement: <ul style="list-style-type: none"> ◆ <i>Check for chest rise</i> ◆ <i>Auscultate epigastric and lung sounds</i> Secure the ETT if tracheal placement is confirmed (need only verbalize) 				

Developed : 3/98

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VERBAL TEST ITEMS (Program Option)

Indications:

- When an aspiration type of esophageal intubation detector device is part of local protocols during ETT placement.

Contraindications

- Children under 5 years old or less than 20kg

Complications

- Hypoxia
- ETT dislodgement
- False negative from confirmation procedure

Note

- An EID takes the advantage of the fibromuscular esophagus which will collapse when negative pressure (aspiration) is applied. The tracheal is rigid and remains patent, allowing for free aspiration of air.
- If an air leak is detected during the initial preparation of the device - discard the bulb or syringe (do not use).
- Placement of ETT should be determined within 5 seconds of attaching the EID to the ETT.

8/00

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