Date: 01/01/03

MEDICAL PROCEDURES

COMBITUBE

POLICY #7300

INDICATIONS:

- Cardiac arrest.
- Respiratory arrest:
  - Unconscious.
  - No gag reflex.
  - Apnea or respiratory rate < 6/minute.

[Appears at least 4 feet tall (for SA size) 5 feet tall (for regular size)]

EQUIPMENT:

- Combitube, regular size (required), SA (small adult) size recommended.
- Right angle emesis deflector.
- 140 mL syringe.
- 20 mL syringe.
- Suction catheter.
- Toomey syringe.

PREPARATION OF EQUIPMENT:

- Assemble all equipment.
- Inflate cuffs on the Combitube to test for leaks.
- Attach emesis deflector.
- Lubricate distal tip of Combitube.

PROCEDURE:

- Ventilate the patient with 100% oxygen prior to Combitube insertion.
- Place the head in a neutral position.
- Grasp the lower jaw with the thumb and index finger and lift. Hold the Combitube in the other hand (with its curvature in the same direction as the natural curvature of the pharynx).
- Blindly insert the tube gently into the mouth and advance into the throat until the front teeth are between the two black rings on the tube.
- Do not force the tube. If the tube does not advance easily, redirect it or withdraw and reinsert.
- Inflate cuff #1 with 100 mL of air (85 mL for SA size).
- Inflate cuff #2 with 15 mL of air (12 mL for SA size).
- Ventilate via tube #1.
- Check for chest rise, auscultate the epigastric area for absence of abdominal sounds, and the lungs bilaterally for breath sounds.
- Attach Toomey to tube #2 and aspirate. If chest rise and bilateral breath sounds are present, no abdominal sounds noted, and there is resistance when aspirating with Toomey syringe, the tube is in the esophagus.
- Continue to ventilate through tube #1 and secure tube in place.
- If there is no chest rise, breath sounds, or abdominal sounds, and you are able to pull back freely on the Toomey syringe without resistance, the tube may be in the trachea.
- Ventilate via tube #2 and reassess for chest rise, breath sounds and abdominal sounds.
- If assessment confirms that tube is in trachea, continue to ventilate through tube #2 and secure tube in place.
- If unable to confirm tube placement, remove tube and ventilate with BVM attached to 100% oxygen.
- May reattempt Combitube placement twice, ventilating patient for 30 seconds between attempts.
- If unable to successfully place Combitube after three attempts, continue ventilations with BVM.

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PROBLEM SOLVING:

- Air leaking from mouth/nose
  - Add 20mL air to cuff #1.
  - If still leaking add additional 20 mL of air to cuff #1.
  - If still leaking assume cuff leak and remove tube.
- Insertion too far into esophagus.
  - No chest rise or breath sounds, when ventilating via tube #1.
  - Unable to pull back on Toomey syringe.
  - Gurgling over abdomen , no chest rise, or breath sounds when ventilating via tube #2.
  - Deflate cuff #1, then cuff #2, pull back 3 cm, re–inflate cuff #1, then cuff #2.
- Possible asthma, COPD or drowning:
  - Poor chest rise while ventilating via tube #1.
  - Distant breath sounds.
  - Can't pull back on Toomey syringe.
  - No chest rise or breath sounds, gurgling over abdomen when ventilating via tube #2.
  - Toomey syringe and abdominal sounds may be most reliable assessments.
  - If no breath sounds or gurgling and can't aspirate with Toomey syringe–**Pull the tube**.
- Cardiac arrest:
  - May be able to continue CPR during attempts.
  - Maximum 30 seconds per attempt.
  - Only one attempt per one-minute cycle of CPR.
- Unusual circumstances:
  - Patient position (entrapment, arthritis of spine, patient cannot lie flat (supine).
  - Insertion may be attempted as long as ventilation & assessment can be completed.
- In rare situations, Toomey syringe can be relied upon solely.
  - Unilateral breath sounds with absent gastric sounds (unlikely to be right mainstemmed with Combitube):
  - Pneumothorax.
  - Hemothorax.
  - Pneumonectomy.
  - Leave Combitube in place and continue ventilation if Toomey syringe confirms location.
- Facial trauma:
  - If unable to visualize cords for ET insertion or unable to get mask seal with BVM, insert Combitube.
  - Suction prior to insertion.
  - Avoid broken teeth, bone fragments.
  - Maintain spinal stabilization.

INDICATIONS FOR EXTUBATION:

- Unable to confirm placement when ventilating via tube #1 or tube #2.
- Mechanical failure of tube.
- Patient actively resists tube.

EXTUBATION PROCEDURE:

- Consider decompressing stomach if tube in esophagus, using 12 fr catheter included in kit.
- Suction mouth if necessary.
- Deflate cuff #1 (100 cc)
- Deflate cuff #2 (15 cc)
- Turn patient on side.
- Remove tube with suction readily available.

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COMBITUBE

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CONTRAINDICATIONS:

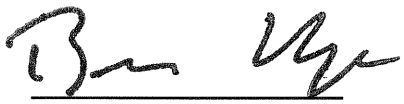
- Obvious signs of death.
- Do-Not-Resuscitate.
- Gag reflex.
- Won't advance due to resistance.
- Known esophageal disease (cancer, varices, surgery).
- Known ingestion of caustic substance.
- Known narcotic OD (prior to Narcan administration).
- Laryngectomy patient with stoma.

DOCUMENTATION:

Documentation shall include:

- Presence of bilateral breath sounds.
- Verification that the esophageal detector device (Toomey syringe) indicated tracheal or esophageal placement.
- Which tube is being used to ventilate the patient, #1 or #2.
- Number of attempts required.
- Any procedural problems or complications.

APPROVAL



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