Orotracheal Intubation (Direct Laryngoscopy) (≥ PL5)

Clinical Indications:

1. Inability to adequately ventilate a patient with a BVM or prolonged EMS transport.
2. An unconscious patient without a gag reflex who is apneic or is demonstrating inadequate respiratory effort.
3. Risk to benefit or orotracheal intubation to BIAD insertion favors orotracheal intubation.
4. Inability to adequately oxygenate/ventilate a patient after attempted BIAD insertion.
5. Concern for impending airway loss due to inhalation injury, anaphylaxis, expanding hematoma.

Contraindications:

1. None in the presence of the need for definitive airway management.
2. Anytime a less invasive maneuver would allow oxygenation & ventilation of the patient.

Procedure:

1. Prepare, position, and oxygenate the patient using appropriate BLS maneuvers and 100% oxygen.
2. Use High Flow Nasal Cannula at 25 LPM for Apneic Oxygenation during intubation.
3. Select proper endotracheal tube (ETT) size and have all equipment ready, including suction.
4. Using laryngoscope visualize vocal cords using cricoid pressure/BURP maneuver as needed.
5. Limit each intubation attempt to less than 30 seconds. Utilize BVM between attempts.
6. If unable to visualize the cords change patient position, or blade size/type.
7. Begin insertion of a Flex Guide ETT Introducer (Bougie). Must be used for each attempt.
8. Tactile confirmation of tracheal clicking will be felt as the distal tip of the introducer bumps against the tracheal rings.
9. If tracheal clicking cannot be felt, continue to gently advance the introducer until *hold up* is felt.
10. Tracheal *clicking* and *hold up* are positive signs that the introducer has entered the trachea
11. Lack of tracheal clicking or hold-up is indicative of esophageal placement.
12. While holding the introducer securely, and without removing laryngoscope, advance ETT over the proximal tip of the introducer.
13. As the tip of the ETT passes beyond the teeth, rotate the tube 90 degrees counterclockwise (1/4 turn to the left) so tube bevel does not catch on the arytenoid cartilage.
14. Advance ETT to the proper depth. While visualizing the ETT passing through vocal cords.
15. Holding ETT securely, remove introducer.
16. Inflate ETT cuff with 3-10 mL of air.
17. Apply $EtCO_2$ monitor. After 3 ventilations $EtCO_2$ should be > 10 or comparable to pre-intubation values. If < 10 check for adequate circulation, equipment failure and ventilatory rate. If no cause can be found remove the ETT and resume BVM ventilation.
18. Auscultate for absence of breath sounds over epigastrum and presence of bilateral breath sounds. If unilateral or unequal breath sounds adjust tube position and/or consider causes for this finding. If unsure of placement at any time remove the ETT and resume ventilations with BVM.
19. Record initial, ongoing and final $EtCO_2$ values in the PCR/ePCR.
20. Secure the ETT using commercial device whenever possible or other available method.
21. Document ETT size, depth of insertion, time of successful intubation and number of attempts. Document confirmation of the ETT by presence of breath sounds, absence of sounds over the epigastrum, end tidal CO2 and/or capnography and any/all additional methods of confirmation. Reconfirm correct placement after each patient movement.
22. Continuously monitor $EtCO_2$ to detect tube dislodgement or obstruction. Reconfirm correct placement after each patient movement.
23. Consider gastric distention and place an NG/OG tube after airway is secured with ETT.
24. Document in ePCR confirmation indications of successful intubation.