Airway: Video Laryngoscopy Intubation

Clinical Indications:

1. Inability to adequately ventilate a patient with a Bag Valve Mask (BVM) and basic airway adjunct.
2. An unconscious patient without a gag reflex who is apneic or is demonstrating inadequate respiratory effort.

Procedure:

1. Prepare, position (sniffing position, unless trauma), and oxygenate the patient with a BLS airway adjunct and BVM. Maintain in-line stabilization in trauma patients.
2. Continue chest compressions throughout the intubation attempt.
3. Clear the patient’s airway with suction.
4. Fully insert the A-390 camera onto the blade with the screen facing the opposite direction of the blade’s distal tip. The camera will automatically turn on in live video mode once it is mounted onto the blade.
5. Lubricate both the guided channel and the appropriately sized endotracheal tube (ETT) prior to loading.
6. Slide the ETT into the lateral channel of the AirTraq from the top until the distal tip of the ETT is at the end of the guided channel. The tube should not extend beyond the end of the guided channel.
7. Gently hold the AirTraq with your fingers rather than the full palm.
8. Hold the AirTraq closest to the patient’s mouth. Do not hold it from the top.
9. While looking at the patient’s face, with your free hand slightly opening the mouth, place the blade tip midline on the surface of the tongue. Do not elevate the AirTraq until the tip of the blade has reached the back of the tongue.
10. With the airway illuminated, look into the mouth and check for fluid in the airway; suction if needed.
11. Keeping it midline over the center of the tongue, advance the blade into the patient’s oropharynx while visualizing landmarks.
12. Once the epiglottis is in view, place the blade tip in the center of the vallecula to view the vocal cords.
13. View the live video image of the screen and center vocal cords in the middle of the image.
14. Once the ETT is inside the glottic opening, relax and apply upward traction before passing the ETT through the vocal cords.
15. Advance the ETT, keeping it inside the guided channel until it passes the vocal cords. If difficult to pass ETT, load straight end of the bougie device into the ETT and try again.
16. Check ETT insertion depth and inflate the ETT cuff.
17. Detach the ETT from the AirTraq channel by pulling it laterally, while holding the ETT in position.
18. Remove the AirTraq from the patient’s airway keeping it midline.
19. Confirm proper ETT placement using EtCO$_2$ and wave form capnography. Auscultate for bilaterally equal breath sounds and absence of sounds over the epigastrium. If you are unsure of placement, remove tube and ventilate patient with a BVM. After 3 ventilations, EtCO$_2$ should be >10 or comparable to pre-intubation values. If < 10, check for adequate circulation, equipment, and ventilatory rate. If EtCO$_2$ remains < 10 without physiologic explanation, remove the ETT and ventilate using an airway adjunct and BVM.

20. Secure the ETT with a commercial tube securing device.

21. Document the procedure and reassess frequently and with each patient move.

22. Consider using an i-gel Airway if intubation efforts are unsuccessful.

23. Monitor EtCO$_2$ and record readings on scene, en route to the hospital, and at the hospital.

24. Document ETT size, time, result (success) and placement location by the centimeter marks either at the patient’s teeth or lips in the EHR. Document all devices used to confirm initial tube placement. Also document positive or negative breath sounds before and after each movement of the patient.

25. It is required that the airway be monitored continuously through waveform capnography (ALS providers) and pulse oximetry.