

# DIFFICULT AIRWAY DEVICES

The Difficult Airway Algorithm has been recently updated and attached. **Awake intubation is the cornerstone on which the Difficult Airway Algorithm is based.** Awake intubation should be planned when a difficult intubation is anticipated and the patient is cooperative. *Instances where an awake intubation is warranted include anticipated difficult airway, unstable neck fractures, halo traction/devices, small/limited oral openings, and intubation of awake patients in the critical care setting.*

Anxiolysis and antisialogogue administration are warranted to aid in viewing structures.

The most common technique for anesthetizing the airway is lidocaine in various forms and concentrations. Lidocaine levels peak highest at 30 minutes after instillation. *There are a variety of airway blocks as well, including superior laryngeal nerve block, transtracheal block, and glossopharyngeal block.*

With proper patient preparation and sufficiently anesthetized airway, an awake intubation can be accomplished quickly and with minimal discomfort to the patient. The following are tools CRNAs can use to aid in difficult airway scenarios.

## Fiberoptic bronchoscope

- A thin, flexible tube with an articulating tip that has a light, suction port, and camera
- Commonly used in awake intubations and checking double-lumen tube placement

## Eschmann stylet AKA bougie

- 15 French intubation tool with a Coude tip that is passed through the vocal cords into the trachea
- ETT is passed over the device and then bougie is removed
- Typically blue or orange

## Fastrach LMA

- Supraglottic airway that facilitates blind intubation
- Has a handle to allow optimal positioning and a bar to elevate the epiglottis to facilitate intubation

## Glidescope

- Video laryngoscope that offers an indirect view of the vocal cords with minimal (or no) head manipulation
- Uses a rigid stylet for intubation

### **Laryngoscope**

- Most common are the rigid blades- Miller and Macintosh

### **Lighted stylet**

- A stylet with a lighted tip used in patients with limited cervical spine movement, excessive bleeding, etc.
- Passed blindly

### **Intubating stylet**

- Malleable wire encased in a plastic sheath that allows the ETT to be formed specifically for the intended airway

### **Laryngeal mask airway**

- Supraglottic airway
- Noninvasive airway for procedures/patients that don't require intubation
- Also used for cannot intubate situations

### **McGrath**

- Video laryngoscope that is mobile and lightweight
- Can be used in routine or difficult intubations

### **Retrograde wire**

- A wire is inserted through a 14-gauge IV catheter from cricothyroid insertion and directed cephalad
- ETT is advanced using this wire (or suture) as a guide

### **Tracheostomy**

- Surgical intervention
- Cannot intubate/cannot ventilate situation

### **Transtracheal jet ventilation via cricothyrotomy**

- Provides oxygen in a cannot intubate/cannot ventilate situation
- 14-gauge IV catheter is inserted through the cricothyroid membrane
- High-flow oxygen is delivered
- Complications include barotrauma and subcutaneous emphysema