

The Airway Carnival: Flexible Fiberoptic Intubation

Description:

The fiberoptic bronchoscope is constructed of fiberoptic bundles and cables encased in a slender, waterproof sheath from the handle to the tip. The cable system permits manipulation of the tip of the bronchoscope by adjustments at the handle, the operating end of the device.

Indications:

- Routine intubation, difficult intubation, abnormal airway, compromised airway
- Neck extension not desirable
- Assessment of tube placement
- Risk of dental damage
- Removal of secretions and mucus plugs

Contraindications:

- Lack of skill
- Lack of functioning equipment
- Inability to oxygenate patient
- Major bleeding in the airway

Advantages:

- Excellent visualization of the airway
- Minimal hemodynamic stress when properly performed
- Oral or nasal intubation is possible in the adequately prepared patient
- Ability to apply topical anesthesia and insufflate oxygen during intubation

Disadvantages:

- Expensive
- Requires careful maintenance
- Presence of blood/secretions impairs visualization
- Requires practiced expertise for use in acute situations

Special Features:

- Allows visual evaluation of all airway passages
- Applicable to all age groups
- Adaptable with other airway devices/techniques

Tips for Success:

- Proper topicalization of the awake/sedated patient
- "Jawthrust" or use of oral/nasal airways or introducers
- Practice, practice, practice!

Currently, devices are available from:

- Olympus America, Inc.
- Pentax, Inc.
- Karl Storz, Inc.

References:

1. Benumof JL. "Management of the Difficult Adult Airway, With Special Emphasis on Awake Tracheal Intubation." Anesthesiology 75:1086, 1991.
2. Ovassapian A. Fiberoptic Endoscopy and the Difficult Airway. 2nd edition, Lippincott-Raven, Philadelphia, 1996.
3. Global Anesthesiology Server Network - www.gasnet.org