



Perspective Study

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Difficult Airway Management

Vision-medt and Vision Medical Endoscope

Zhuhai, Guangdong, China

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Management of the difficult airway is one of the most relevant issues for practicing emergency physicians, intensivists, and anesthesiologists, since airway loss in an unconscious patient can lead to brain damage or even death. Despite revolutionary innovations in airway management, such as the laryngeal mask airway and video laryngoscopy, and despite major efforts in monitoring, education, and training, it is still unclear whether safety in airway management has improved during the past decade.

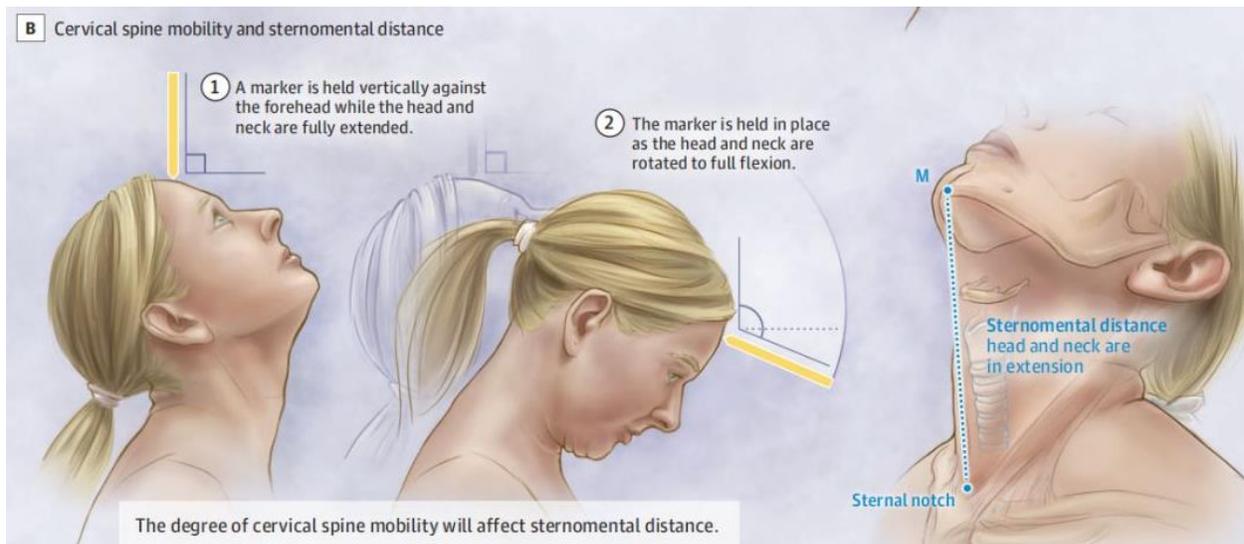


The Fourth National Audit Project (NAP4) of the Royal College of Anaesthetists and the Difficult Airway Society in the United Kingdom showed that 1 of 22,000 cases of tracheal intubation was associated with severe adverse airway management events in the operating room, such as death, brain damage, need for an emergency surgical airway, or unplanned intensive care unit (ICU) admission.¹ However, the number of cases may have been underreported, and the true incidence of severe events might actually have been 4 times as high (1 of 5500 cases).^{1,2} Thus, vigilance in airway management remains essential.

Considering that more than 320 million surgical procedures annually would be needed to address the burden of disease for a population of around 7 billion (data from 2010),⁷ and further considering that 20 to 40% of the more than 5 million patients who are admitted annually to ICUs in the United States require mechanical ventilation, it is evident that even small changes in the practice of airway management are highly relevant to outcomes.

There are many methods of managing a difficult airway. They include many supraglottic devices and invasive procedures like retrograde intubation and cricothyroidotomy. But awake tracheal intubation (ATI) has a high success rate and a low-risk profile and has been cited as the gold standard in airway management for a predicted difficult airway.

Using flexible intubation scope in airway assessment and examination can quickly and visually identify the cause of airway obstruction (e.g., tonsillar hypertrophy, laryngeal softening, acute epiglottitis, vocal cord polyps or granulomas, subglottic stenosis, etc.) through the airway assessment and examination, and does not cause distortion of the airway or aggravate the original airway injury;



Or during emergency tracheostomy, using flexible intubation scope and jet oxygen can be performed through the suction channel to avoid the risk of complete airway occlusion and the occurrence of hypoxia.

During intubation under normal airway management, the flexible intubation scope is also superior to the general laryngoscope, which has a high success rate of transoratory intubation and fewer intubation complications.

With the development of electronic technology, Chinese video endoscope have more advantages than fiberoptic endoscope because of price, portable and convenient operation, good image quality, and gradually replace fiber bronchoscopes to guide intubation, and are increasingly used in clinical practice.



It has been reported in the literature that Chinese video endoscope are as safe and reliable as fiberoptic endoscope in the use of nasal intubation, fast and effective, with high success rate of intubation and fewer complications of endotracheal intubation.



Vision medical (Zhuhai, China) specialized in the development, innovation and manufacture of flexible video endoscopes, and provides the society with visualized medical equipment that can alleviate the pain of patients.

Vision BF series: is the safe and cost-effective choice for video intubation in the OR and ER. Whether you need a bronchoscope for intubation, placement of a DLT or suctioning of heavy secretion, Vision Bronchoscope covers your needs.

wide range of procedures in the OR:

- Intubation
- Airway inspection
- Placing and checking of Double Lumen Tubes
- Placement of Bronchial Blockers

wide range of bedside procedures in the ICU:

- Airway inspection
- Difficult intubation
- Management of retained secretion
- Bronchial Aveolar Lavage
- Percutaneous Dilatational Tracheostomy



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