

Web report

GASNet.org: Management of the difficult airway

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Website Management of the difficult airway

URL <http://www.gasnet.org/airway/airway.htm>

Cost Free

Keywords airway, intratracheal intubation, laryngeal masks

GASNet.org first went online in 1993; it was among the first 500 websites on the internet and was the first that was dedicated to anesthesia and critical care. GASNET.org is housed at Yale University, but it is a collaborative effort by several American anesthesiologists. Although it is primarily of interest to anesthesiologists, GASNet.org is a huge web site with much to offer from an educational perspective. Among many other resources, it features tutorials on acid–base, transesophageal echocardiography, hemodynamics, a clip art library, a multiplatform library of downloadable freeware and shareware calculators, as well as a database of key articles relevant to anesthesia. The subject of this web report is a multimedia airway tutorial, which provides an excellent and up-to-date review of both basic and advanced airway techniques. The best way to access the tutorial is to go directly to the URL (<http://www.gasnet.org/airway/airway.htm>).

The tutorial is divided into 15 sections. It begins with a summary of pathological conditions that may complicate airway management – a feature seldom included in most airway tutorials. Other sections review airway anatomy and examination, the American Society of Anesthesiologists Difficult Airway Algorithm, and setting up a difficult airway cart for the operating room or the intensive care unit. A section on airway adjuncts such as lighted stylets, gum bougies and laryngeal masks instructs on the advantages and disadvantages of each alternative, should conventional direct laryngoscopy be unsuccessful. The tutorial finishes with a step-by-step illustration of rarer techniques such as retrograde intubation, cricothyrotomy and use of airway exchangers. Each of these sections finishes with a video demonstrating the technique.

The tutorial's layout is clean and well referenced (with direct links to abstracts on PubMed.com) and it has an excellent navigation system. Many pages feature only a single paragraph, which is an approach that is designed to hold users' attention, rather than requiring them to scroll through line after line of text.

The airway tutorial takes advantage of the latest web browser technology to provide a sophisticated navigation panel and streaming video. The authors recommend viewing the site with Internet Explorer 5.0 or Netscape 4.0, or later versions, and the Apple QuickTime 4.0 plug-in is required to view the videos.

Best feature

The two features of the tutorial that make it stand out from other airway-related sites are the completeness of its approach and its abundant use of pictures and videos to illustrate airway anatomy and techniques. These would be useful in their own right as teaching tools for medical students and residents.

Worst feature

Some of the illustrations are small and the details are difficult to make out. The site is also due for an update because many references are somewhat dated and newer technologies such as the Glidescope and the intubating laryngeal mask airway (LMA; Fast-Track) are not included.

Wish list

Larger illustrations that dominate the page where they are presented would enhance a visitor's experience. An introduction to medicating patients before intubation would also be valuable.

Other links

UCSD Virtual Difficult Airway Cart –
<http://anes-som.ucsd.edu/Airway/index.html>

This site allows visitors to explore a difficult airway cart as they are prepared at the University of California at San Diego. It is useful for intensivists planning on stocking a difficult airway kit for their intensive care unit.

ASA Practice Guidelines for the Management of the Difficult Airway – <http://www.asahq.org/publicationsAndServices/Difficult%20Airway.pdf>

Updated in 2002, this is the consensus statement from the American Society of Anesthesiologists presenting the evidence (or lack thereof) and recommendations for different airway management options.

Sponsors

The GASNet airway tutorial was sponsored by a grant from Cook Critical Care, who manufacture many products for use in the patient with a difficult airway. GASNet.org has many industry sponsors. The complete list is available online (<http://www.gasnet.org/about/partners.php>).

Competing interests

The author(s) declare that they have no competing interests.