

■ REVIEW OF WEB SITE

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ANESTHESIOLOGY: Journal of the American Society of Anesthesiologists

URL: <http://www.anesthesiology.org>

Publisher: American Society of Anesthesiologists, in collaboration with Lippincott Williams & Wilkins, Inc.

Webmaster: Thomas Smith

An outstanding medical journal Web site is extremely valuable for researchers and clinicians alike, but many journal sites have numerous shortcomings. In mid January 2000, we evaluated the comprehensiveness and ease of use of the Web site of the journal ANESTHESIOLOGY.

Organization of the Site

The Web site is well-organized, esthetically appealing, and easy to use. The Journal's banner is at the top of every page, which gives the entire site a consistent look and feel. The home page is uncluttered and contains clearly labeled links to the main parts of the site. The Help pages include detailed information about searching for, viewing, and printing articles. Technical support is available with a toll-free call, by electronic mail, or by fax from 9:00 AM to 5:00 PM EST Monday through Friday. A useful feature not found in the print version of the Journal is a table of contents for the upcoming issue of ANESTHESIOLOGY that includes a summary of the articles.

Although anesthesia products are prominently advertised at the top of nearly all the pages, the site has less of a commercial flavor than many other medical Web sites. The site provides comprehensive services for the Journal's readers. For example, ANESTHESIOLOGY can be ordered on-line, and detailed information is available for reviewers, advertisers, and authors. A popular feature provides information about the status of author submissions. The only links are to the Web sites of the three societies that publish the journal and to abstracts on MEDLINE. This element has the benefit of avoiding clutter; extensive links to other anesthesia Web sites are readily available at many other sites. A number of additions to the site would help some users, including a site map, a site-search facility, and a list of frequently asked questions.

Journal Articles

January 1998 to Current Issue

Many outstanding features are offered. The full text of all of the articles that appear in the print issues of the Journal can be accessed, including Editorial Views, Review Articles, and Correspondence. However, as of March 2000, only subscribers to the Journal and affiliated society members can access the full-text version. Articles can be accessed from an issue's table of contents or by using the powerful search engine. The search engine offers several convenient ways to search for articles (*e.g.*, by any author; by key words listed in the title, abstract, or

article; and by year and month of publication). Boolean searches can also be conducted.

Our searches were performed quickly and accurately. The articles that were retrieved were in the form of hypertext markup language (HTML) files, and can be read on-line or printed out. Printing can take some time because it is necessary to click on each table and figure to print it out. The printed copies were easy to read and were well-formatted. Most references can be listed in several orders: by order cited in the text or by alphabetical order of author, title, or journal. There are occasional errors; certain articles are listed twice, or the order slightly deviates from the chronologic order. A particularly useful feature is a link from each of these references to the PubMed (MEDLINE) entry for the article, from which the article can be ordered and related articles can be retrieved. There is also a link to any other article in that issue of the Journal that references the article. It would be helpful to be able to retrieve other ANESTHESIOLOGY articles that have one or more of the same authors or key words by clicking on the names and key words in the articles. A small number of articles are linked to an ArticlePlus index that offers an additional feature, such as a table in joint photographic experts group (JPEG) file format, a picture in portable document format (PDF), or a brief video segment.

The articles retrieved from a search are ordered by "relative relevance and ranking" using a complex set of criteria. Unless the search criteria are loosely specified, all articles are assigned the same rank and are listed in chronologic order. It would be helpful to be able to specify other ordering criteria, such as author names in alphabetical order. Because the user may be unsure of the appropriate key word or the spelling of an author's name, a browsable subject and author index would be a useful additional feature.

From the September 1999 issue of ANESTHESIOLOGY to the current issue, PDF and HTML files of the articles are available, but only when the article is retrieved using the table of contents rather than by using a search. This is a welcome enhancement; some users prefer PDF files, and the quality of a PDF file printout is substantially higher than that of an HTML file.

The classified advertisements in the last three issues of the journal can be viewed by clicking on a button on the home page. There is no search engine for the advertisements. It would be convenient to be able to search for positions by type and region. The nonclassified advertisements, calls for papers, and other announcements are not available. Their inclusion

would be helpful to some users of the Web site and may generate revenue for the Journal.

There is limited availability of material from supplementary issues of the Journal. The abstracts of all of the posters presented at the most recent Annual Meeting of the American Society of Anesthesiologists can be viewed, and there are comprehensive search options; however, no information about previous Annual Meetings of the American Society of Anesthesiologists is available. The abstracts of the annual meetings of the Society for Obstetrical Anesthesia and Perinatology and the American Society of Critical Care Anesthesiologists are not available on the Web site.

Journal Issues before 1998

Considerably less information is available for articles that were published in ANESTHESIOLOGY before 1998. There is no information about articles published in the Journal before 1965. Approximately one fifth of the ANESTHESIOLOGY articles published in 1965 are referenced, whereas all articles published in the Journal from 1966 to 1997 are referenced, including Editorial Views and Correspondence. No abstracts appear for articles published in ANESTHESIOLOGY before 1975. From 1975 to 1997, the proportion of articles with abstracts steadily increases; only 1 of 30 randomly selected ANESTHESIOLOGY articles published in 1997 did not have an abstract. The small number of abstracts that exceed the 250-word limit are truncated at 250 words.

The search features are somewhat less comprehensive for pre-1998 ANESTHESIOLOGY issues than for the 1998-2000 issues. Articles can be searched by the names of any of the authors or their institutional affiliations, words in the title, key words, and year. Boolean searches and browsable subject and author indexes would be useful additions. Articles retrieved are listed in chronologic order. The option of listing them in other ways, such as by author name and type of article, would be helpful. The search engine is fast and easy to use but failed to retrieve all relevant records when we searched for key words and for authors' institutional affiliations. It would be desirable for the abstracts of all the articles to be available (*e.g.*, by providing a link to the abstracts on MEDLINE).

Technical Review

A technical review of the site's home page for compatibility, HTML design, speed, and dead links was done with the Web site utility (www.WebSiteGarage.com, AtWeb Inc., Sunnyvale,

CA). The site has excellent compatibility with recent versions of Microsoft Explorer (Microsoft Corp., Redmond, WA), Netscape Navigator (Netscape Communications Corp., Mountain View, CA), and America Online (American Online, Inc., Dulles, VA), but also older browsers and WebTV (Microsoft Corp.). The HTML code was rated as good, with most recommendations concerning improving the efficiency of the page loading. Load times were rated as poor, with a slower 28.8 k modem taking 45 s. No dead links were identified. A check of 10 other frequently loaded pages revealed broadly similar findings. Five of these pages were rated as having poor load times, taking an average of 53 s (range, 37-57 s) to load using a 28.8 k modem, 37 s (range, 25-44 s) using a standard 56 k modem, and 15 s (range, 11-19 s) using a 128 k integrated services digital network (ISDN) line.

Summary

The Web site of the journal ANESTHESIOLOGY is a very valuable resource for researchers and clinicians alike, although users with a modem connection may find it uncomfortably slow. The site is easy to use and has many useful features. It is considerably more comprehensive for the volumes published from 1998 onward than for the 1965-1997 volumes, and no information is available for volumes published before 1965. Significant improvements have been made to the Web site, and further improvements, including a more powerful and sophisticated search engine, are planned for the near future. Thus, its value to the medical community is likely to become even greater in the coming months and years.

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