## CORRESPONDENCE

Anesthesiology 78:614, 1993 © 1993 American Society of Anesthesiologists, Inc. J. B. Lippincott Company, Philadelphia

## A Better Citation System

To the Editor:—A recent article reported that more than half of the references cited in four anesthesia journals contain an error in at least one element of citation. One reason for the high error rate is that bibliographies are frequently generated by manual transcription of the citation. Even if a contributor submits an error-free bibliography to the publisher, mistakes can occur during typesetting of the galley proof. Electronically generated citations are less prone to error, though these systems are not universally compatible; thus, contributors would have to become familiar with the particular software used by the publisher.

An alternative system could be developed analogous to the method used to program a videotape recorder using a device called VCR Plus+®, which uses a code number to identify each television show. In our proposed bibliographic system, publishers could encourage authors to submit the eight-digit unique identifier number provided by the National Library of Medicine for each journal article cited in their bibliography. Publishers could then retrieve the complete bibliographic information from the unique identifier by using a modemor compact disc-based MEDLINE search (e.g., Grateful Med, Compact Cambridge), which could then be stored as a bibliographic data base. A variety of software currently exists that can electronically translate these data bases to a customized bibliography using the publisher's designated format. Typographic errors in entering the unique identifier number would be easy to detect by an author or editor as it would generate an inappropriate citation. This system would cover

most citations, as MEDLINE assigns a unique identifier number to almost all medical articles and letters.

This system would require publishers to become familiar with computerized bibliographic searches. To make this system accessible to authors who do not use MEDLINE searches, journals would have to publish the unique identifier number (either in the article itself or as a supplement). However, this system would be worth the effort as it would result in more efficient typesetting of bibliographies and in more accurate reference citations.

Alan S. Rosman, M.D. Alcohol Research Center

Judith R. Schachner, M.D. Department of Anesthesiology

Mount Sinai School of Medicine New York, New York 10029

## Reference

1. McLellan MF, Case LD, Barnett MC: Trust, but verify: The accuracy of references in four anesthesia journals. Anesthesiology 77: 185–188, 1992

(Accepted for publication December 3, 1992.)

Anesthesiology 78:614, 1993 © 1993 American Society of Anesthesiologists, Inc. J. B. Lippincott Company, Philadelphia

In Reply:—It is in the best interest of all parties involved in scientific publishing that information appearing in journal articles be accurate and reliable. This maxim certainly applies to reference citations within articles, and we fully support any technology that would raise the level of accuracy within such citations. We applied Rosman and Schachner for their suggestion that authors, editors, and publishers work together to formulate a new system to ensure reference accuracy.

We do believe, however, that authors need to be made aware of the importance of correct journal citations and must work to provide reference lists that are accurate. After all, it is the citations that form an article's intellectual foundations. In their letter, Rosman and Schachner look at publishers and typesetters as the likely breeding ground of the "publishing gremlins" that place errors in references. However, an informal study reported recently in the medical literature has shown that more often than not errors in citations are caused by authors who have not taken the time to review references. The editor and publisher can only assume that, by virtue of committing these citations to paper, the author has verified their accuracy.

This is not to say that a bibliographic data base would not be useful, and we would certainly encourage further examination of this technology. However, bear in mind that computer technology still requires human interaction and is exposed to human error. We do not believe that computer-driven reference lists will serve to remedy all the ills associated with bibliographies, but we do believe that, with increased attention on the part of the author, they are a step in the right direction.

Joseph W. Lippincott III Vice President, Journals and Looseleaf J. B. Lippincott Company 227 East Washington Square Philadelphia, Pennsylvania 19106-3780

## Reference

1. Lichter PR: Checking citations. Ophthalmology 96:1131–1132, 1989

(Accepted for publication December 3, 1992.)