

3.4 L/min. During the whole course, the CCO catheter never failed to give relevant data; in intervals of 4 hours, CCO data were checked by the conventional thermodilution technique. Every 72 hours, the CCO catheter was changed.

Closure of the chest was performed on the sixth postoperative day. Further recovery of left ventricular systolic function led to a reduction of dobutamine. Subsequent weaning from the intra-aortic balloon pump was possible, and the latter was removed on the ninth postoperative day. Unfortunately, a week later the patient developed a multiorgan dysfunction syndrome with refractory respiratory failure and succumbed 4 weeks postoperatively.

The disadvantages of volume overloading, timing of injection, limited number of measurements, and operator variability that were related to the conventional thermodilution method are avoided. The system provides on-line and bedside cardiac output measurements without intervention of the nurse. Theoretically CCO measurement may add valuable on-line and bedside information in order to determine more adequately how to wean a patient from an LVAD.

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Duplicate Publications

To the Editor:

In 1991, a joint editorial by the editors of *Anesthesiology*, *Anesthesia and Analgesia*, *British Journal of Anaesthesia*, and *Anaesthesia* expressed concern over the unethical practice of duplicate publications.¹ A recent editorial in the *Journal of Cardiothoracic and Vascular Anesthesia* (JCVA) expressed concern over the same issue.² There is evidence that this practice is on the increase.³ This communication reports a redundant publication that appeared in this journal some time ago. Although recognized earlier, the recent editorial² prompted me to report it at this time.

A study comparing four anesthetic techniques (halothane, isoflurane, droperidol, or flunitrazepam) on renal function during infrarenal aortic surgery were published in the April 1992 issue of *Anesthesia and Analgesia* (*A & A*).⁴ The data for halothane and isoflurane was separated and published in the June 1992 issue of *JCVA*.⁵ The only additional information that could be gathered in the *JCVA* article was the data on fractional excretion of sodium. Otherwise, there was a clear reproduction of the data for halothane and isoflurane from the *A & A* article. The redundancy could have missed the attention of the editorial board and reviewers of *JCVA* because the *A & A* article⁴ would not have been published during the editorial process.

Producing duplicate or multiple publications is one of the manifestations of what is termed as "operator" syndrome.⁶ The syndrome also includes some other forms of scientific misconduct such as false claims of originality, capitalization on research conducted by junior colleagues, falsification or fabrication of research data, and plagiarism of ideas. Refer to *Journal of Vascular Surgery* 1994, Vol 19, pp 179-180, and 1994, Vol 20, p 158 for reactions and actions following recognition of an act of plagiarism. Even submission of various aspects of one single study to different journals is not acceptable because it detracts from the interpretation of single manuscripts.¹ Duplicate publication is time wasting because it results in unnecessary work for editors and reviewers. It also results in economic wastage as the space in peer-reviewed journals is precious. It clogs up the already congested scientific literature without adding new information. For research workers, it complicates the process of retrieving information and wastes time and money. For example, research workers rely on computer-assisted literature searches to access abstracts of different publications of their interest. However, research workers would be disappointed to find almost similar data in different journals when they refer to the original articles. Yet another problem of duplicate and multiple publications is related to meta-analytic research.⁷ It complicates the issue of choosing the appropriate article for inclusion in meta-analysis. In fact, redundant publications especially in studies related

to risk stratification with dipyridamole thallium scintigraphy before vascular surgery posed a great problem in our recent meta-analytic research work.⁸

Although editors of various journals have been expressing concern again and again over duplicate/multiple publications, this practice has not stopped. In fact there is a tendency for its increase.³ The main reason for its increase could be to impress appointments and grants committees. Present day research works are essentially multidisciplinary. In these cases, data from the same study is published in different journals with the first author interchanged. The first author tries to project his or her area of interest while deliberately omitting other aspects of the study. Few suggestions have been proposed to limit the duplicate publications. Guidelines have been proposed for the authorship.^{9,10} It is also suggested that applicants for posts or grants should be required to submit about six of their most important papers, which the committee can evaluate.³ This is intended to lay emphasis on quality rather than quantity, thereby eliminating one of the driving forces responsible for duplicate publication.⁶ Finally, it is suggested that journal editors must take a firm stand against attempts at duplicate publication.⁶ Because editors of different journals rely on the integrity and honesty of research workers, ultimately, it is the authors' responsibility to reciprocate the trust and limit the occurrence of redundant publications in the future.

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In Reply

To the Editor:

In response to the *Letter to Editor* regarding our publications (references 4 and 5 of previous letter), I would like to make some comments:

First, one article analyzes the precise effects of the most common volatile anesthetics used, halothane and isoflurane, on hemodynamics and renal function including effective renal plasma flow, glomerular filtration rate, and some aspect of renal tubular function (FE_{Na}) during abdominal aortic surgery and was submitted to *Journal of Cardiothoracic and Vascular Anesthesia* (reference 5).

Second, the study was then completed with the analysis of other less common anesthetic techniques (flunitrazepam-fentanyl and droperidol-fentanyl). The results of the effects of the four anesthetics on hemodynamics and renal function including effective renal plasma flow and glomerular filtration rate, but without renal tubular function during abdominal aortic surgery, then were submitted to *Anesthesia and Analgesia* (see reference 4).

Third, we do agree the articles share some results, but comparison between halothane and isoflurane was more precise with regard to hemodynamic and renal function data (SVO_2 , FE_{Na}) (see reference 5) during clamping, and results of the second article go far beyond transient renal dysfunction associated with aortic cross-clamping (see reference 4).

In conclusion, we do not think that the articles could be considered as duplicate.

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