CORRESPONDENCE

This case report emphasizes the need to check the anesthesia machine between cases, in addition to conducting a full check at the beginning of the list. It also illustrates the necessity of using an oxygen analyzer that will warn of hypoxic mixtures that can occur despite the presence of a proportioning system, if the proportioning system should fail or if a third gas is administered.

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References

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sprocket would be stopped by the flange. Having just completed a preoperative checkout procedure, this large number of turns to obtain an oxygen flow of 1 l/min should have indicated this inappropriate condition.

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Improvement of the Accuracy of References in ANESTHESIOLOGY

To the Editor.—In 1992, McLellan et al. called attention to errors in the list of references in four anesthesia journals.1 After this report, in the letter requesting a revised version of a manuscript, the editors of ANESTHESIOLOGY began to ask the contributors to confirm accuracy of references by comparing them with original sources. We examined the reference list of ANESTHESIOLOGY to determine whether accuracy has improved subsequent to this editorial change. We compared citation errors in volumes published in 1990 and 1994. Any contributor, whose paper was published in 1994, is thought to have been requested by the editors to check accuracy of citation. All 1990 issues of ANESTHESIOLOGY (from January to December) were examined. Beginning with the first reference in the January issue and ending with the last reference in the December issue, every citation was numbered sequentially (n = 11,060). Using a table of

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random numbers, we chose 100 references. References to non-journal items, such as books and book chapters, were excluded from the analysis, leaving a total of 96 references. Data fields for the cited references corresponded to six standard elements of bibliographic citation: authors (including correct number, order, initials, and spelling), article title, journal title (including proper Index Medicus abbreviation), volume number, page number, and year. Citations were verified by comparison with the original publication (primary source). Citations containing no errors were classified as correct; if an error existed in any element, the citation was classified as incorrect. Similarly, we identified 100 references from 1994 issues (from January to June, n = 5,523) of the journal, and analyzed 97 references. Data are presented as frequency or percent, overall and by element for each year (1990 and 1994). Differences in frequency and percent of errors between 1990 and 1994 were tested for statistical significance using the chi-square test. Fisher’s exact test with an r x c contingency table was used when assumptions underlying the chi-square method were not met. P < 0.05 was deemed significant.

Consistent with the previous report examining 1988 issues of the journal, many references contained an error (44%) in at least one element of citation in 1990 (table 1). In 1994, the rate of citation errors significantly decreased to 29%. There were no differences in frequency distribution of errors between 1990 and 1994 (table 2).

In the current study, we have confirmed that ANESTHESIOLOGY formerly contained many citation errors in the reference list. Furthermore, we have shown that citation errors in 1994 significantly decreased by more than 50% compared with those in 1990. This improvement of accuracy in the reference list may be due to the specific request by editors for authors to confirm reference accuracy. However, because the rate of citation errors remains as high as 29%, contributors are requested to make further efforts to verify the accuracy of the reference lists before submission of their manuscripts.

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Table 1. Number of Errors per Citation

<table>
<thead>
<tr>
<th>Erros per Citation (n)</th>
<th>1990 (January–December)</th>
<th>1994 (January–June)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>0</td>
<td>54</td>
<td>56.3</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
<td>26.0</td>
</tr>
<tr>
<td>≥2</td>
<td>17</td>
<td>17.7</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Significantly larger than in 1990 (P < 0.05).

Table 2. Frequency Distributions of Errors in Six Chosen Bibliographic Parameters

<table>
<thead>
<tr>
<th>Bibliographic Element</th>
<th>1990 (January–December)</th>
<th>1994 (January–June)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Author</td>
<td>32</td>
<td>53.3</td>
</tr>
<tr>
<td>Title</td>
<td>23</td>
<td>38.3</td>
</tr>
<tr>
<td>Page</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Journal</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Volume</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Year</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

P > 0.05 in frequency distribution of errors between 1990 and 1994.

Reference


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Editor’s Note

My thanks to Dr. Nishina and his coauthors. Although it appears that we have made some progress in reducing the error rate in bibliographic citations, there is still much to be done.