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● *Letter to the Editor*

CRITIQUE OF ARTICLE BY HARWOOD AND SIMPSON

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The study by Simpson and Harwood[1] in the November–December 1977 issue of the Journal was a useful paper, but the abstract gives distinctly the wrong impression on the relative effectiveness of the 300 times 10 vs 1000 rad times one approaches for palliation of whole brain metastatic disease. Survival is a poor criterion to determine the effectiveness of whole brain palliation since these patients usually have widespread disease anyway. Even so, Fig. 1 and especially Fig. 2 show many patients surviving longer with 3000 rad than with 1000 rad even though there is no statistically significant difference between the median survival of patients treated with these two regimens.

I do not mean to imply that there is no usefulness for single large doses of treatment for palliation of cerebral metastases, and I have treated quite a few patients this way myself. I only find it hard to draw the conclusion from this paper that the 1000 times 1 patients did as well as those treated with 3000 rad in 10 increments, and believe with better data analysis that the differences between these groups could have been expressed more accurately. Those readers who read only the abstract of this paper without looking at the graphs and results in more detail could get a wrong impression.

REFERENCES

1. Harwood, A.R., Simpson, W.J.: Radiation therapy of cerebral metastases: A randomized prospective clinical trial. *Int. J. Radiat. Oncol. Biol. Phys.* **2**: 1091–1094, 1977.

● *Author's Reply*

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Dr. Allen is quite right in emphasizing that survival is not a good indicator of successful palliation, as survival depends on other factors as well, especially the extent of metastases elsewhere. However, 70% of these patients died of their cerebral metastases, indicating that local control is important in their survival. There was no statistical difference in the frequency of local control between the two treatment groups. Of equal importance in assessing palliative treatment is the frequency of improvement, which was similar in the two groups.

The minor difference in survival to which Dr. Allen refers is present only between 6 and 18 months, when the number of surviving patients is small, not "many" as Dr. Allen suggests. In Fig. 2, only 12 patients were still alive at 1 year. Three separate analyses (50%, 25% and median survival) failed to demonstrate any statistically significant difference between the two treatment groups. Moreover, the apparently better survival of the fractionated treatment group in Fig. 2 is confounded by the longest survivor being in the single treatment group. We do not know of better methods of data analysis to show minor differences between small numbers of patients, particularly when all patients studied are dead; a much larger group would have to be studied.

The purpose of an abstract is to cover the main factual points in the article. We would assume that no radiation oncologist would act on the basis of reading an abstract without analysing the whole paper in detail.