

LETTER

To the Editor:

We read with interest the paper Treatment of migraine with hyperbaric oxygen in the *Journal of Hyperbaric Medicine*, Vol. 4, No. 1, 1989. There is certainly a strong clinical impression that HBO helped these patients. The authors themselves in their discussion wrote that "double-blind studies are recognized as the most reliable experimental evidence." It is unfortunate they did not design their study in this fashion with appropriate controls. It is possible, for example, that any of the following could have stopped the migraine: spending time in a mock pressurized chamber, breathing air in a pressurized chamber, or breathing oxygen in a mock, nonpressurized chamber. A statistically significant difference between such groups could have resulted in an important study. The authors' conclusion "that in an overwhelming number of cases, HBO will quickly provide complete relief of migraine symptoms" is unfortunately not supported scientifically.

R. BRIAN SMITH, M.D.
T. JAMES GILBERT, M.D.
*The University of Texas
Health Science Center
San Antonio, Texas*

The authors respond:

We appreciate the thoughtful remarks of Drs. Smith and Gilbert concerning the need for a double-blind study in the treatment of migraine headache. Although our working hypothesis seemed to be based on a valid physiologic principle, before initiating a large-scale study we first wished to establish that there was some merit in undertaking such an investigation. If we had found the results to be equivocal, we would have been reluctant to publish data from a pilot study. However, as 96% of patients had complete resolution of pain, we felt that these preliminary data might be of clinical interest. Reporting of preliminary data is an accepted practice in all fields of medical research, as long as the conclusions reflect this.

As a result of the findings of this pilot study, a controlled, double-blind study is now in an advanced stage of planning. It will include cerebral blood flow measurements, mock treatments, and the inhalation of compressed air just as they suggested.

CAROLINE E. FIFE, M.D.
WILLIAM P. FIFE, Ph.D.