Letters to the Editor

Letters to the Editor will be published, if suitable, as space permits. They should not exceed 1,000 words (typed double-spaced) in length and may be subject to editing or abridgment.

Proposed Method for Analyzing Carotid Endarterectomy Results

To the Editor:

The recent series of letters to the Editor published in *Stroke* regarding the proposals by Jonas et al. 1,2 included a suggestion that caused Dr. Jonas to refer in his response3 to an article of mine.4 In reviewing this article, Dr. Jonas states that ""The assumption least favorable for surgery would be that 10 operative strokes occurred in the 146 relevant carotid endarterectomy patients, a 6.8% operative stroke plus death (S + D) rate."

In reviewing our article, I do not know how Dr. Jonas could have obtained these figures since data for the mortality and morbidity in patients with transient ischemic attacks (TIAs) was not included. However, our data do indicate that for the 152 patients operated on for anterior hemispheric TIAs (including amaurosis fugax), there were no deaths and there was a permanent neurologic deficit rate of 2.6%. Thus, the late stroke-free survival rate for this group of patients is significantly better than that calculated by Jonas using his method of intact months of patient survival (IMPS).

I believe that our results are typical of those obtained by many other surgeons in good centers. In addition, Dr. Jonas has not dealt with our data objectively but must have made some assumptions highly prejudicial against surgery in obtaining a presumed morbidity and mortality rate that was three times our actual experience. Thus, I would caution Dr. Jonas and your readers to use extreme care in evaluating the available data before coming to such important and damaging conclusions regarding the results of carotid surgery.

Rather than argue that the average results of carotid surgeons in this country do not demonstrate a significant advantage over the natural history of the disease for patients with TIA, it may well be that we should determine the boundary line of acceptable morbidity and mortality, below which surgery would be inappropriate. Statistics for both the surgeon and the institution could define those institutions in which surgery is safe and beneficial.

I do hope that the forthcoming randomized prospective studies will address this issue with sufficient power to permit arriving at such a conclusion.

Eugene F. Bernstein, MD, PhD, FACS
Division of Vascular and Thoracic Surgery
Scripps Clinic Medical Group, Inc.
La Jolla, California

The following is in reply:

To the Editor:

Dr. Bernstein’s concern that I misconstrued his data resulted from the fact that he was unable to provide exact figures in his article for the TIA patients. Since I could not find these figures, I used the worst-case scenario and indicated that the worst-case assumption still gave a result favorable for surgery.

Thus, I was not attempting to make an assumption "highly prejudicial against surgery." Quite the contrary, I was trying to show that even with a highly prejudicial assumption, Dr. Bernstein’s figures showed that surgery might have been beneficial. I would not have had to make any assumption at all had I been able to extract the exact data from the original article.

Saran Jonas, MD
Department of Neurology
New York University Medical Center
New York, New York

Significance of Age-Related White Matter Lesions

To the Editor:

Our studies of Alzheimer’s disease have recently linked the presence of periventricular white matter lesions (PWMLs) with both an increased prevalence of motor and gait deficits on neurologic examination1 and altered patterns of glucose utilization as measured by positron emission tomography.2 Several reports, including our own, have also confirmed the association of PWMLs on computed tomograms (CTs) demonstrating small vessel disease in the brain.3 The hyalinosis and white matter rarefaction are consistent with hypertensive encephalopathy.4 In recent years, numerous CT and magnetic resonance imaging reports have indicated that PWMLs affect as many as 10–30% of cognitively normal elderly study subjects. The prognostic and clinical significance of these lesions is largely unknown in otherwise normal individuals. There has been a failure to find differences in the prevalence of gait impairments in elderly normal subjects as assessed on comprehensive and standardized neurologic examination.5 We now report that PWMLs in normal subjects are associated with subtle deficits in motor control.

We analyzed the performance of 17 cognitively normal elderly subjects (six with CT evidence for PWMLs in their frontal lobes and 11 without such lesions) on cognitive and motor tests. All subjects were research controls falling within accepted ranges of normality based on extensive medical, neurologic, psychiatric, and cognitive examinations (e.g., Global Deterioration Scale6 scores of 1 or 2). Details of our clinical evaluations can be found elsewhere.4,7 The group with frontal PWMLs was equivalent to the group without such lesions in age (range 52–80 years) and performance on nonmotor, cognitive evaluations of immediate memory (digit span), recent memory (paragraph recall), and language function (vocabulary).

Our results show that the group with frontal PWMLs had significant (p<0.05) deficits on psychometric motor tests, including digit symbol substitution and choice reaction time, and on a computerized motor tracking task. The motor tracking task required the execution of a head-tilt maneuver to reach and fix onto a stationary visual target. The scores from the head-tracking test were the most accurate indexes of group member-
Proposed method for analyzing carotid endarterectomy results.

E F Bernstein

*Stroke*. 1988;19:1054
doi: 10.1161/01.STR.19.8.1054.a

*Stroke* is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 1988 American Heart Association, Inc. All rights reserved.
Print ISSN: 0039-2499. Online ISSN: 1524-4628

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://stroke.ahajournals.org/content/19/8/1054.1.citation

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Stroke* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to *Stroke* is online at:
http://stroke.ahajournals.org//subscriptions/