Handling of Anger and Ischemic Stroke in Women

Adler reports that difficulties in the handling of anger occurred significantly more often in women with ischemic stroke.¹ This finding is supported by the stronger relationship of hostility traits with myocardial ischemia in women.² The neurobiology is suggested by studies linking disruption of brain stem cardiovascular control, cardiovascular reactivity in challenging tasks, vasospasm, and disordered mood and affect to dopamine abnormalities laterized to the right hemisphere, in which the metabolic rate is higher in women. These findings prompt the assessment of dopaminergic neurotransmission in interventions designed to modify response to personally relevant, emotionally arousing situations leading to ischemia.³ ⁷

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References


Apolipoprotein E Polymorphism and Ischemic Cerebrovascular Disease

We have read a letter to the editor and response that appeared recently in Stroke² ³ concerning apolipoprotein E genetic polymorphism in patients with ischemic cerebrovascular disease (ICVD) and Alzheimer's disease.¹ The allele frequencies given by Saunders and Roses¹ question our conclusion that the apo E4 allele probably could be a predisposing genetic marker for ICVD.¹ In this respect, we have calculated the allele frequencies by the gene counting method and compared the groups by the χ² contingency test. Allele frequencies in control group were as follows: apo E2, 0.075; apo E3, 0.105; and apo E4, 0.198, respectively (P<.05). Therefore, we propose that a high apo E4 allele frequency in patients with ICVD, as has also been described in patients with coronary heart disease,⁴ could be a genetic marker for atherosclerosis.

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References


Controversies in Stroke: Past and Present

Publication of the 1993 Willis Lecture¹ by Dr M. Dyken acknowledges his important contributions to the treatment of stroke as well as his observations during a distinguished 40-year career in academic medicine. Although we have benefited from his insightful analyses, we were concerned about his review of the trial on efficacy of carotid endarterectomy in asymptomatic carotid stenosis conducted within the Veterans Administration.² ³ This was the first prospective and randomized clinical trial to demonstrate a reduction in ipsilateral neurological events in adult male patients with asymptomatic high-grade carotid stenosis treated by carotid endarterectomy. Transient ischemic attack (TIA) and nondisabling stroke were considered part of a clinical continuum.⁴ In this trial, efficacy was defined in terms of preventing initial neurological events, and a significant reduction was documented. One half of all neurological events were strokes that were not accompanied by an antecedent or warning TIA. Furthermore, the 2:1 trend toward reduction in stroke alone for patients in the surgical group was not mentioned. Consequently, the current implied clinical recommendation of waiting for occurrence of TIA before intervening surgically may not constitute an optimal program of management for a substantial number of patients.

One of the entry criteria for patients in this trial was the presence of a high-grade stenosis (arteriographic diameter reduction of 50% or a calculated area reduction of 75%). However, the degree of stenosis may be only one of several factors that determine the incidence of stroke. Indeed, only about one fifth of the patients in the medical group experienced neurological events preventing initial neurological events, and a significant reduction was documented. One half of all neurological events were strokes that were not accompanied by an antecedent or warning TIA. Furthermore, the 2:1 trend toward reduction in stroke alone for patients in the surgical group was not mentioned. Consequently, the current implied clinical recommendation of waiting for occurrence of TIA before intervening surgically may not constitute an optimal program of management for a substantial number of patients.

Our goal is to be selective in the identification of patients who undoubtedly benefit from carotid endarterectomy. Because many of us are participants in the ACAS trial,⁶ we support its clinical
follow-up. However, for those patients unwilling or unable to participate, carotid endarterectomy offers important advantages in selected individuals whose surgeons have demonstrated low complication rates.

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References

Response

I believe the comments by Drs Hobson and Weiss are pertinent and factual, and I hope their conclusions will be supported by the ACAS study. At present, however, their study does not solve the controversy.

Their comments do not change what was stated in the Willis Lecture: 1 "Unfortunately, in a study in which the treatment cannot be blinded, these [end points] were primarily transient events and quite likely could have been influenced by bias. The primary, hard, nonsubjective end points of stroke and death were not significantly different."

This was true in their paper in the New England Journal of Medicine, 2 where the hard, nonsubjective end points of stroke and death were summarized in Table 5 and were not significantly different for the surgical group (87 of 211) than for the medical group (103 of 233). I would not argue with their conclusion that they should support the clinical follow-up of the ACAS trial. Nor would I argue that it would be wrong for surgeons with demonstrated low complication rates to perform endarterectomy on patients who are unwilling or unable to participate in the ACAS trial. But it would also not be wrong to treat them medically.

If Drs Hobson and Weiss truly believe that carotid endarterectomy offers proven advantages over medical therapy, it would be unethical to continue the ACAS study. Continuing participation must mean that they, as conscientious physicians and clinical scientists, have agreed with my conclusions that the issue still hasn't been put to rest.

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Controversies in stroke: past and present.
R W Hobson, 2nd and D G Weiss

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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/25/2/521.3.citation