from Drs Swanson and Sharp points out, our equation (Leach et al) will provide a better correction if edema occurs outside the infarcted region. Data calculated using both equations and either area-by-area correction or total volume figures still demonstrate the efficacy of BW619C89 in this rat model of focal ischemia.

Michael J. Leach, PhD
Jeannette H. Swan, PhD
Department of Pharmacology
Wellcome Research Laboratories
Ken, UK

References

Risk Factors for Cervical Atherosclerosis in Patients With Transient Ischemic Attack or Minor Ischemic Stroke

Palomaki et al\(^1\) report a relationship between symptomatic carotid stenosis and traditional vascular risk factors. Age, smoking, hypertension, serum triglycerides, regular light alcohol consumption (inverse association), and body mass index (marginal inverse association) were independent determinants of the presence of atherosclerosis. On the other hand, age and the ratio of high-density lipoprotein to total cholesterol (inverse association) were associated with the severity of extracranial carotid stenosis. Current smoking and female sex were predictors only of the percent stenosis and the length of the lesions, whereas hypertension showed a significant association only with the length of lesions. Such a risk-factor profile discrepancy between the presence and the severity of extracranial carotid stenosis has been observed previously in the literature.\(^2\)\(^-\)\(^5\) The inconsistent association of traditional risk factors to the severity of extracranial carotid stenosis may indicate the presence of additional factors (eg, hemodynamic factors) that could contribute to the severity of carotid stenosis. In the North American Symptomatic Carotid Endarterectomy Trial (NASCET), 387 of 1360 patients (28.5%) had severe (70% to 99%) angiographically defined extracranial carotid stenosis on one side with none-to-mild (\(<\)30%) on the contralateral side. If traditional risk factors are associated with atherosclerosis at the carotid bifurcation, how can one explain the asymmetric nature of carotid disease?

Andrew P. Gasecki, MD
Michael Eliasziw, PhD
Henry J.M. Barnett, OC, MD, FRCP(C)
Robarts Research Institute
University of Western Ontario
London, Ontario, Canada

References

Response

To find out the potential determinants of atherosclerosis in our study, extracranial parts of all 11 major cervical arteries were evaluated. Among those who had atherosclerosis (180 of 294 patients), the severity of the disease was assessed by using three indexes. These were computed separately for the total length, total thickness, and percent stenosis of the plaques, accounting for all visible atherosclerotic lesions in all 11 arteries, and we did not analyze the plaques at or near carotid bifurcations separately. However, five traditional risk factors showed a significant association with the total length of the plaques, and percent stenosis and the thickness of the plaques were explained by four and two risk factors, respectively. According to this variability, traditional risk factors seemed to predict in particular the overall dissemination of atherosclerotic disease instead of being strong determinants of the grade of stenotic plaques. Among other factors, hemodynamic forces could have a role, and platelets may have an influence on the development of atherosclerotic lesions.\(^1\) In early atherosclerosis, the sites of predilection are vessel orifices and bifurcations; here the flow patterns may be complicated, possibly augmenting platelet adhesion to the vascular endothelium at these sites. Platelets, in turn, could contribute to the development of stenotic lesions in at least two ways: by stimulating the migration and proliferation of vascular smooth muscle cells and by formation of thrombi that become consolidated and incorporated into the vessel wall.\(^1\) In general, the presence of relatively few (and partly inconsistent) associations between traditional risk factors and the severity of atherosclerosis in our study suggests that other factors not included (and perhaps not identified at all) may also be involved.

Heikki Palomäki, MD
Markku Kaste, MD
Department of Neurology
University of Helsinki
Helsinki, Finland

Reference

Denial of Illness and Depression in Stroke

The extensive review on denial of illness in stroke by Ellis and Small\(^1\) highlighted phenomenological and etiologic aspects of denial of illness pertaining to physical disability in stroke patients. However, authors have failed to discuss the relationship between poststroke depression and denial of illness. This letter is intended to focus on the prevalence of denial of depression in poststroke depression and its correlation to lesion location; in addition, the relationship between denial of illness concerning physical disability and poststroke depression will be discussed.

Gainotti\(^2\) suggested that the depression in patients with right hemispheric lesions may be underdiagnosed due to their tendency to deny depression and also by their failure to express the affect. Fedoroff et al,\(^3\) in their study of acute stroke patients, found that 5% of poststroke patients deny depressed mood although they fulfill the criteria for depression. Among patients with depression, approximately 10% presented with denial of depressed mood. Of patients with denial of depression, 60% had right hemispheric
Risk factors for cervical atherosclerosis in patients with transient ischemic attack or minor ischemic stroke.
A P Gasecki, M Eliasziw and H J Barnett

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