Correspondence

Stroke Risk and Risk Factors in Patients With Central Retinal Artery Occlusion

EDITOR:

I READ WITH CONCERN THE ARTICLE BY LAVIN AND ASSOCIates,[1] which recommends urgent inpatient assessment of patients with acute central retinal artery occlusion (CRAO). The authors retrospectively analyzed the findings in patients with CRAO who presented within 7 days of vision loss and were immediately admitted for a stroke work-up. They concluded that CRAO is a stroke equivalent and patients should undergo risk factor evaluation in an expedited fashion.

In the Abstract and again in the Discussion the authors state that in a cohort of 103 patients, 37.3% had coincident acute stroke and 20% had myocardial infarction or critical structural cardiac disease. However, the careful reader learns from Table 2 that only 67 patients underwent brain MRI (25 positive for stroke) and only 86 had an echocardiogram (17 abnormal). The article as written misleads readers to believe that the reported frequencies apply to the entire cohort of 103 patients, an error that should have been detected by the reviewers. This imprecision raises a concern for reporting bias and thus reduces the article's contribution to the current vigorous debate[2,3] on the ophthalmologist's response to a patient with CRAO.

The article reports that 1 in 4 patients underwent an "acute" surgical procedure, mostly carotid artery revascularization, heart valve replacement, or coronary artery intervention. The authors do not define "acute" or describe the surgeries as emergent, but the implication is that the patient would suffer additional morbidity or death if an outpatient evaluation for carotid or cardiac disease was performed. It may be the custom at a highly resourced facility such as Vanderbilt University to perform surgery during the initial hospitalization, but it does not follow that this is necessary or even in the patient's best interest. Delaying carotid surgery for at least 8 days following stroke reduces the risk of repeat stroke, death, and postoperative complications.[4] No reasonable patient wants to spend those 8 days in a hospital. Without more detail as to the procedures and the definition of and indications for "acute" surgery, readers should remain skeptical of this alarming statistic.

Most importantly, Lavin and associates do not state how many patients were taking aspirin or another antiplatelet agent at presentation. Aspirin decreases the risk of recurrent stroke, and aspirin combined with short-term clopidogrel appears slightly more efficacious, with similar risks.[5] Initiating aspirin therapy is the cheapest, easiest, and fastest measure available to reduce the risk of subsequent stroke or myocardial infarction. Of the 92% of patients who had a change in medication, how many were placed on an antiplatelet agent for the first time?

Ophthalmologists should be capable of checking blood pressure, auscultating the heart and the carotid arteries, calling the primary care doctor, and advising patients with CRAO to start aspirin unless absolutely contraindicated. Lavin and associates have not persuaded me that this approach is always wrong.

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