Letters to the Editor

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Should Carotid Artery Stenosis Be Examined as a Cause of Dizziness?

Original Article: Dizziness: A Diagnostic Approach

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TO THE EDITOR: Drs. Post and Dickerson provide a useful review of the causes and treatments of dizziness and are appropriately conservative in their recommendations for diagnostic testing. However, in listing carotid artery stenosis as a cause of presyncopal dizziness, they perpetuate the belief that this entity is an important consideration in the evaluation of patients with presyncope (and by extension, syncope). This can lead to inappropriate diagnostic studies with consequential cost, anxiety, and false-positive and incidental findings.

The study cited by the authors in support of this statement does not mention carotid artery stenosis and instead uses the general term cerebrovascular disease, which includes conditions more likely to cause dizziness, such as stroke (nonspecific dizziness) and vertebrobasilar transient ischemic attack (vertigo).[1] The study also lists transient ischemic attack as a "dangerous" cause of dizziness, but the likelihood of a transient ischemic attack presenting as isolated presyncopal dizziness is quite low.

Two reviews omit dizziness as a symptom of carotid artery disease and include vertigo as a symptom of vertebrobasilar disease only.[2,3] Dizziness is specifically excluded as an acceptable symptom for evidence of a transient ischemic attack.[3] Rarely, syncope may be a symptom of bilateral carotid artery stenosis[4] or as a consequence of orthostasis and stenosis.[5] The European Society of Cardiology states unambiguously that "no studies suggest that Doppler ultrasonography is valuable in patients with typical syncope."[6]

Given the demographics of the population with presyncopal dizziness, many patients with dizziness have coexisting carotid artery disease. However, pursuing carotid artery stenosis as the cause of the dizziness will lead to delay, distraction, and increased cost before the true cause of the dizziness is determined.

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IN REPLY: We appreciate Dr. Gillett's thoughtful comments and interest in our article. His points further emphasize that the practice of medicine requires making decisions based on the individual patient. His concerns about unnecessary testing are not unfounded,

especially with the increasing costs of health care in the United States.

Dr. Gillett is concerned with our mentioning of carotid artery stenosis as a possible cause of dizziness. Although it is rare for carotid artery stenosis requiring intervention to cause presyncope or syncope,[1] there have been some case reports of dizziness and/or syncope with various associated symptoms as a result of carotid artery occlusion.[2-4] However, as we stated in our article, tests such as carotid Doppler should be performed only if an underlying cardiac cause is suspected based on other findings or known cardiac disease.

We agree that carotid Doppler testing should be reserved for patients in whom clinical suspicion is high, such as those with a history of smoking, peripheral vascular disease, or known carotid artery disease—all of which are shown to be associated with abnormal carotid ultrasound results.[5] Using a high threshold for ordering these tests can minimize unnecessary testing that may lead to false positives and increased patient anxiety.

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