Correspondence

Carotid Artery Occlusion

Sir,
I read the article by Lubezky et al.1 concerning duplex scanning and CT angiography (CTA) in the diagnosis of carotid artery occlusion. This study has serious methodological flaws and comes to incorrect recommendations.

The results of the evaluated tests (duplex and CTA) influenced the decision to perform the reference standard (angiography or operation) and in the majority of patients no control angiography was made. The 44 patients who had angiography were not studied in a consecutive way. Furthermore, the authors do not state if the different diagnostic modalities were judged in a blinded fashion, which I doubt. Therefore, angio-

graphic assessment could have been influenced by the results of the duplex scan and CTA. These limitations might have caused selection bias and distorted the results. On the basis of this study, design valid conclusions cannot be drawn.

The recommendation that no further work-up is indicated if both duplex scanning and CTA show an occlusion is not supported by the data, as in two of the 44 patients an open carotid artery was found on angiography or during exploration, despite occlusion on duplex and CTA. The most difficult patients are those with an occluded artery on duplex scanning who have ipsilateral symptoms as a result of impending occlusion. In these patients, accurate additional diagnostic tests are needed to determine whether the carotid artery is still open or occluded. In this study it is not clear how many of these patients had angiography. As the predictive value of a test is influenced by the pre-test chance of having an open or occluded artery, which in turn is influenced by the spectrum of patients under investigation, it is questionable whether CTA is as good as the authors suggest. The authors already realise that this study has shortcomings. From the discussion I quote that “in the remaining cases there was no control, and this is one of the weaknesses of this study”.

The only conclusion which I can draw from this study is that we do not have the answer and that further studies are needed. In my view, angiography should still be performed in symptomatic patients who are serious candidates for carotid endarterectomy despite an occluded carotid artery on duplex scanning or CTA.

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References


No reply received

The Stresst’er Ergometer

Sir,
In response to the interests generated from the article on the Stresst’er ergometer by Cameron et al., we would like to share the experience we have had with the Stresst’er ergometer. We have completed a small study on six patients (12 limbs) who attended the surgical outpatient’s for conditions unrelated to peripheral vascular disease. None of them had any orthopaedic or rheumatology conditions that prevented them from participating in the Stresst’er test. All of them managed to complete the 2-minutes and the 5-

minutes exercise tests, with 1 flexion per second. There was no significant drop in the ankle pressure index from rest, after the 2-minutes or the 5-minutes Stress-
t’er test (p>0.1). Therefore, we would expect those with