LETTER TO THE EDITOR

Carotid stenting and angioplasty

To the Editor—Carotid stenting and angioplasty have recently attracted major media attention, and we feel that patients and some health care professionals are being misled by the publicity about this form of treatment. Our normal clinical practice is seriously undermined by such publicity. Presented below is a statement concerning the appropriate role of carotid stenting and angioplasty from the Specialty Boards of General Surgery and Neurosurgery, Hong Kong and the College of Surgeons of Hong Kong.

The routine clinical treatment for severe carotid stenosis is antiplatelet therapy and carotid endarterectomy. Such practice is supported by the following multicentre randomised controlled trials: (1) the European Carotid Surgery Trial[1]; (2) the North American Symptomatic Carotid Endarterectomy Trial[2]; and (3) the Asymptomatic Carotid Artery Stenosis Study.[3] Specific guidelines have been made by many medical professional bodies on the specific indications for carotid endarterectomy—for example, by the American Heart Association and the Canadian Neurological Society.[4,5] Their message is that carotid endarterectomy can reduce the risk of stroke in patients with severe carotid stenosis, if the operation is performed in centres that have low perioperative stroke and mortality rates.

Carotid stenting and angioplasty is a new treatment modality for carotid stenosis, and reputable professional bodies have extensively reviewed its current role:

> There is no evidence as yet to support a change in the routine clinical treatment of patients with carotid stenosis to carotid percutaneous transluminal angioplasty (PTA) with or without stenting. However, the data support the continuing randomisation of patients within clinical trials between PTA and conventional treatment.[6]

> The techniques of carotid angioplasty and carotid stenting are available, as are a limited degree of experience and a high level of interest. The existence of a technique, however, does not justify or mandate its use. We must remember a basic tenet of medicine: *primum non nocere*—first do no harm. At this point, with few exceptions, use of carotid stenting should be limited to well-designed, well-controlled randomised studies with careful, dispassionate oversight. This will allow accurate comparison of a promising tool with the well-described, relatively safe gold standard of surgical carotid endarterectomy. Use of the technology because it and the patient it is to benefit exist is not at this point justified and justifiable.[7]

Despite these clear recommendations, there has not yet been any new and substantiated evidence to support the use of carotid angioplasty in place of carotid endarterectomy. Our conclusion and recommendation on the use of carotid stenting angioplasty and stenting in Hong Kong are as follows:

Carotid stenting and angioplasty is a feasible treatment modality under investigation and should be performed only in the context of a randomised controlled trial approved by a local ethics committee. The only exception to the rule is for patients who, after a joint clinical assessment by a neurologist and a surgeon with a special interest in carotid artery surgery, have been found to be indicated for carotid endarterectomy, but for whom surgery is not suitable. A carotid surgeon is defined as a neurosurgeon or a vascular surgeon who performs carotid endarterectomy on a regular basis with low mortality and morbidity. Suitability for carotid endarterectomy is determined by factors such as concurrent medical conditions, the location of the stenosis, and management results of the surgical centre.

We believe that this guideline should be followed by health care professionals in Hong Kong to safeguard the interests of the public, until further medical evidence indicates a need for change.

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References

1. European Carotid Surgery Trialists' Collaborative Group. MRC European Carotid Surgery Trial: interim results for symptomatic patients with severe (70-90%) or mild (0-29%) carotid stenosis. Lancet 1991;337:1235-43.
2. North American Symptomatic Carotid Endarterectomy Trial Collaborators. Beneficial effect of carotid endarterectomy in symptomatic patients with high-grade carotid stenosis. N Engl J Med 1991;445:53.
3. Executive Committee for the Asymptomatic Carotid Atherosclerosis Study. Endarterectomy for symptomatic carotid artery stenosis. JAMA 1995;273:1421-8.
4. Moore WS, Barnett HJ, Beebe HG, et al. Guidelines for carotid endarterectomy. A multidisciplinary consensus statement from the ad hoc Committee, American Heart Association. Stroke 1995;26:188-201.
5. Findlay JM, Tucker WS, Ferguson GG, Holness RO, Wallace MC, Wong JH. Guidelines for the use of carotid endarterectomy: current recommendations from the Canadian Neurological Society. CMAJ 1997;157:653-9.
6. Crawley F, Brown MM. Percutaneous transluminal angioplasty and stenting for treatment of carotid artery stenosis (Cochrane review). The Cochrane Library 1999 Issue 1 (CD-ROM). Oxford: Update Software Ltd; 1999.
7. Bettmann MA, Katzen BT, Whisnant J, et al. Carotid stenting and angioplasty: a statement for health care professionals from the Councils on Cardiovascular Radiology, Stroke, Cardio-Thoracic and Vascular Surgery, Epidemiology, and Prevention, and Clinical Cardiology, American Heart Association. Stroke 1998;29:336-8.

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Letters should be type-written double-spaced, should not exceed 500 words, and have no more than five references. Letters may be edited before publication. Please include telephone and fax numbers. Financial associations or other possible conflicts of interest should always be disclosed.