C.	Charles	Warlow
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Edinburgh, UK

Carotid Endarterectomy

Charles Warlow, Department of Clinical Neurosciences, The University of Edinburgh Western General Hospital, Crewe Road, Edinburgh EH4 2XU (UK)

In future I hope that we will not have to wait half a lifetime before new surgical treatments are finally shown to work - or not - to everyone's satisfaction (not just the surgeons'). The 'passionate debate' referred to by Professor Bousser in her review article went on for so long because surgeons and neurologists refused to randomise patients in trials that would have been big enough to be convincing; the North American Trial in the 1960s was definitely the right thing to do at the time but, unfortunately, it was too small to provide a precise result (in fact that old result is quite compatible with those of the ECST and NASCET). Failure to randomise patients to alternative treatment policies, when there is uncertainty as to which is best, is unethical, a fact which is well understood by those doing drug trials. Now that the ECST and NASCET have shown that international randomised trials of surgical techniques are not doomed to produce a negative result, I hope that it will be much easier to *quickly* evaluate new non-drug approaches to stroke prevention and treatment: for example, angioplasty, surgery for vertebrobasilar ischaemia, and all the myriad of untested (but certainly not untried) rehabilitation techniques.

It is worth mentioning a small methodological point. Randomised trials are definitely not trials done with a random sample of all eligible patients. Neither the ECST, nor the NASCET, randomised *all* eligible patients. That would have been impossible. All eligible patients do not necessarily notice their transient ischaemic attack or if they do they do not necessarily report it to a doctor, or get referred to hospital, or get to a hospital collaborating in the trial.

Randomised trials contain highly selected patients and it is, therefore, important *not* that eligible but non-randomised patients are in some way accounted for or described, but that the *randomised* patients are extremely well described. Inferences for future practice will come from deciding whether a future patient is similar enough to those in the randomised trials that the result of those trials can be reasonably applied to that individual. Of course, in trials of surgery one absolutely cannot assume that the risk of surgery is the same in one's own institution as in the trial and this, as Professor Bousser rightly points out,

must be subject to independent quality control. What *is* generalisable is the remarkable fact that in patients with a recent carotid ischaemic event, tight stenosis of the ipsilateral internal carotid artery is responsible - one way or the other - for almost all the ipsilateral ischaemic strokes over the next few years. Remove this stenotic lesion - safely - and those strokes are prevented!