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## Cardiac Surgery for Infective Endocarditis, Complicated by Septic Cardioembolic Stroke Jeroen Schouten, Alexander Bindels, Peter Pickkers and Hans G. van der Hoeven

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## Cardiac Surgery for Infective Endocarditis, Complicated by Septic Cardioembolic Stroke

To the Editor:

We would like to comment on the recent article written by Dr Ruttman et al on neurological outcome of cardiac surgery for infective endocarditis complicated by septic cardioembolic stroke.<sup>1</sup> We congratulate the authors on their extensive and thorough research, which demonstrates that early surgical intervention appears to be safer than was previously thought. There is, nonetheless, an important question that remains unanswered, and we hope the authors will be able to respond.

In our view, the results of the study of Ruttman do not answer the question whether surgery is *always* indicated in patients with infective endocarditis complicated by cerebral embolism. Performing cardiac surgery in every patient with infective endocarditis with an episode of cerebral embolism but without cardiac failure is—in many countries—not the first choice of therapy and is certainly not supported by a lot of evidence.<sup>2</sup> Moreover, in their introduction, Dr Ruttman et al state that the risk of septic cerebral embolism affecting the course of infective endocarditis is ≈40% and the recurrence rate is >50% and even up to 80% in patients with a short duration of clinical symptoms.<sup>1</sup> In the referenced study<sup>3</sup> performed in 288 patients, in 17.4% of the patients the clinical course was complicated by one and in 20.2% by recurrent embolism of which 71% was cerebral. To our knowledge, this study in 288 patients is the only one that retrospectively compares surgical (n=22) and nonsurgical (n=27) treatment in patients with recurrent cerebral embolism during infective endocarditis. Because less than half of the patients was operated on in this study, it appears plausible that also in the hospital of Dr Ruttman not every patient with cerebral embolism during infective endocarditis was operated on during the study period 1985 to 2004. The clinical course of this nonsurgical patient group is not reported. It is of evident clinical importance to compare outcomes between patients who were operated purely on the indication of cerebral embolism (rather than cardiac failure) and those who were treated conservatively with antibiotic and supportive therapy. We wonder whether the authors could provide us with data about this nonsurgical group and possibly compare the outcome of these patients with the operated study group.

Thus, with the study of Ruttman, it has become more clear that when a decision is made to operate, early surgery is safe. However, additional data of nonoperated patients could help to answer the essential question of whether the patient should be operated on or not.

## Disclosures

None.

**Jeroen Schouten, MD, PhD**

Department of Intensive Care  
University College of London Hospital  
London, UK

**Alexander Bindels, MD, PhD**

Department of Intensive Care  
Catharina Hospital  
Eindhoven, The Netherlands

**Peter Pickkers, MD, PhD**

**Hans G. van der Hoeven, MD, PhD**

Department of Intensive Care  
Radboud University Nijmegen Medical Centre  
Nijmegen, The Netherlands

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