Reviewer’s report

Title: Silent Cerebral Infarct After Cardiac Catheterization as Detected by Diffusion Weighted Magnetic Resonance Imaging: A Randomized Comparison of Radial and Femoral arterial approaches.

Version: 4  Date: 20 March 2007

Reviewer: Christian Lund

Reviewer’s report:

General: Given the millions of cardiac catheterizations performed worldwide each year, the scientific questions raised by the SCIPION study have high clinical importance. Iatrogenic cerebral damage has not, from my point of view, been focused sufficiently upon, especially not by invasive cardiologists.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached): none

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct): I have only a few minor comments:

1. SCIPION is a multicenter study, but how many centres are actually engaged?
2. How large is the TCD subgroup?
2. The terms "silent infarct", "silent injury" and "new cerebral lesions" are all used in "Study objectives" (page 6), which may be some confusing.
3. Any "non-silent infarcts", how will they be taken into account?
4. I suggest that both "hard and soft neurological signs and symptoms" should be assessed by a neurologist within the first few hours after catheterization for all patients.
5. I suggest that the follow-up should be performed at 6, and not at 12, month’s post-catheterization, and that a T2 MRI then also should be performed in order to explore if all DWMRI lesions represent permanent injury.

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Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.