Reviewer’s report

Title: One Year Follow-up of Patients with Refractory Angina Pectoris Treated with Enhanced External Counterpulsation

Version: 1 Date: 19 February 2006

Reviewer: Dierk Werner

Reviewer’s report:

General

It is rationale to start with a new therapeutic principle in patients who are refractory to established medical therapies. In the field of coronary artery disease the number of symptomatic patients despite PCI, CABG and medical therapy is growing. The idea to use EECP in this field is not new (e.g Heart 2003; 89: 830-833). However, several recent papers indicating the present interest in this field (Am J Cardiol 2006; 97: 17-20 / J Intern Med 2006; 259: 276-284). Therefore, it is worthwhile to have a first report of experiences with EECP from the Scandinavian area.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The present study has a clear design and the clinical results confirm the data from other groups. The majority of the selected patients suffered from severe angina. Two patients died during the study period. In the case of progressive heart failure the authors should describe more specifically their treatment regime.

The authors found an improvement for anginal status of one or two CCS classes persisting for 12 months. This clinical benefit is similar to the results of PCI or CABG therapy. In the discussion chapter, the author report the known and well understandable acute hemodynamic and hormone changes during EECP. However, at present no proven explanation exists for the reported long-term effect of EECP. If you stop nitrate or ACE inhibitor therapy in angina or heart failure patients after 7 weeks nobody would expect a sustained effect after 12 months follow-up. If you stop physical training after 7 weeks the effects will also not persist unchanged for the next year. The authors should mentioned this discrepancy of clinical data and missing pathophysiological explanation for the long-term effects.

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research
interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

In 2000, I received a research fund from the company Vasomedical Inc., Westbury, NY, USA.