Reviewer's report

Title: Long-term survival after initial hospital admission for peripheral arterial disease in the lower extremities is as poor as survival following other atherosclerotic diseases

Version: 1 Date: 15 July 2009

Reviewer: Horst Rieger

Reviewer's report:

1. Is the question posed by the authors well defined ?
   Yes
2. Are the methods appropriate and well defined ?
   Yes
3. Are the data sound ?
   Yes
4. Does the manuscript adhere to the relevant standards for reporting and data deposition ?
   Yes
5. Are the discussion and conclusions well balanced and adequately supported by the data ?
   see comment below
6. Are limitations of the work clearly stated
   Yes
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished ?
   No (see comment below)
8. Do the title and abstract accurately convey what has been found ?
   see comment below
9. Is the writing acceptable ?
   Yes

As to the title:
"Long-term survival after initial hospital admission for peripheral arterial disease in the lower extremities" is enough. The part "...is as poor as survival following other atherosclerotic diseases" can be cancelled because it is a matter of discussion.

In general this is a really good long-term study done with much care. As to the
reviewer's knowledge this work includes the biggest number (> 4000) of patients suffering from PAD dealing with their prognosis in terms of morbidity and mortality.

On the other hand the high mortality of PAD-patients is well known. It is generally accepted that in patients with PAD arteriosclerotic lesions can be found in other vascular regions like coronary, carotid or renal arterial systems. So higher mortality rates - compared with norman population - as a consequence of coronary heart disease and stroke are not surprising and - again - well known due to earlier publications.

So the so called getABI study (german epidemiological trial on ankle brachial index) comes to similar results concerning survival rates of PAD-patients:

or
- Diehm, C. et al.: Five-year Results of the getABI study, Circulation 2007; 116 II 841-b (abstract)
or
- The "Nixdorf-study" dealing with incidence, prevalence and prognosis of cardiovascular diseases including PAD (see Internet)

However the awareness on the bad long term prognosis of PAD-patients is - I agree with the authors - is so poor in patients and doctors that we need more studies on that to confirm each other and to make the problem of reduced long term survival of PAD-patients as clear as possible - not only for doctors but also for the health institutions of our countries.

It is necessary, however, to take the studies mentioned above into consideration and to complete the discussion of the underlying paper being under review.

According to the reviewer's opinion this article is of importance in its field, but can only be accepted after revision.

**Level of interest:** An article of importance in its field

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

**Declaration of competing interests:**

The reviewer declares that there are no competing interests