Author's response to reviews

Title: Short-term and one-year outcome of infective endocarditis in adult patients treated in a Finnish teaching hospital during 1980-2004

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Version: 4 Date: 9 June 2007

Author's response to reviews: see over
Dear Editor,

Thank you for your positive letter regarding our manuscript MS: 1081487658126031 entitled “Short-term and one-year outcome of infective endocarditis in adult patients treated in a Finnish Teaching Hospital during 1980-2004 ” by drs. Maija Heiro, Hans Helenius, Saija Hurme (born Mäkilä), Timo Savunen, Erik Engblom, Jukka Nikoskelainen, and myself. We were pleased to hear that only a few revisions are required in this manuscript.

We have made the changes required by Reviewer 1 in the revised version of the manuscript. Also, we include here a list providing our responses to his latest comments and indicating the changes made in the text according to his suggestions.

We have also made the changes required by the Senior Assistant Editor, including removal of the information regarding ethical approval from the title page and including it in the Methods section and removal of the information regarding competing interests from the title page. Unfortunately, our tables do not fit in a A4 page in portrait format. Therefore, we have uploaded the tables as an additional file with our manuscript, as suggested by the Editor.

During the “once-more checking procedure” made since our previous submission, we observed that our statistician had erroneously dropped 26 patients with neurological complications from the analyses presented in Table 3. When correcting this error, the numbers regarding the neurological complications as well as cerebral emboli in Table 3 have changed. This caused only one p value to change from insignificant to significant. This p value involved the group p value concerning the association between neurological complications and different causative agents of infective endocarditis. We have made these numerical changes in Table 3 and added this information in the text as follows:

“There were significant differences in the frequency of neurological complications between infective endocarditis caused by different pathogens, these complications being most common in episodes caused by S. pneumoniae and least common in blood culture-negative endocarditis.” (page 8, lines 12-15).

No further errors were observed during this “once-more checking procedure”. We are very sorry for this regrettable incident.

We hope that after these revisions and clarifications, you will find this paper satisfactory and suitable to be published in your Journal. Finally, we would like to thank you and the Reviewers for your time, consideration and valuable criticism.

Yours sincerely,

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Comments on the criticism presented by the Reviewers and a list of the changes made according to their suggestions.

**Reviewer 1 (Peter AP Wilson)**

**Major Compulsory Revisions**

**Comment 1.**
The Reviewer comments on that higher patient mortality with raised creatinine probably reflected the worse general condition of these patients (Page 7).

**Response:**
We totally agree with the Reviewer at this point. Consequently, we have added this comment in our Discussion section on page 11 (lines 23-24, revised version), where the value of serum creatinine as a prognostic factor is addressed.

**Comment 2.**
Regarding the laboratory parameters, the Reviewer points out that the comment in the first sentence cannot be used if the difference was not statistically significant and that at most there could be said to be a trend (Page 7).

**Response:**
We assume that the Reviewer means the text regarding the association between the requirement for valve surgery and the laboratory parameters, in particular the CRP value, on admission. Indeed, no significant difference was observed between the requirement for surgery and the level of CRP on admission, although there appeared to be a trend.

Therefore, we have changed the text as follows:

“There was a trend for a more common requirement for surgery during the index hospitalisation in patients with CRP values \( \geq 100 \text{ mg/l} \) on admission as compared to those with lower CRP values, but the difference did not reach statistical significance (p = 0.060).” (page 8, lines 1-3, revised version)

Similarly on page 9 at bottom.

“Patients with CRP values \( \geq 100 \text{ mg/l} \) on admission tended to require surgery during the index hospitalisation more commonly than those with lower CRP values, but the difference was not significant (p = 0.063).” (page 10, lines 15-17, revised version)

**Comment 3.**
The Reviewer notes that this could be more detailed- in particular CRP probably was not even measured at the start of the study (P12).
Response:
We have to admit that we do not quite understand what the Reviewer means by this comment, but it is true that the CRP value on admission was not measured in all patients during the earliest years of the study. The reason for this was evidently the fact that during this early phase, all of our colleagues were not yet familiar enough with this laboratory parameter, and did not use it in a clinical setting. Therefore, the serum CRP value on admission was available in only 272 episodes. Among the other laboratory parameters taken on admission, erythrocyte sedimentation rate (ESR) was available in 192 episodes, white blood cell (WBC) count in 290 episodes, and serum creatinine value in 282 episodes. In our submitted manuscript, data on the numbers of episodes with serum CRP value, ESR and serum creatinine value available on admission were given in Tables 1 and 2. We have added these data also on page 7, lines 5-7, in the revised version of the manuscript, where data regarding the number of patients with available WBC counts is also given.

Minor essential revisions

Comment 1.
The Reviewer feels that the abbreviation IE may be better given in full.

Response:
Following the recommendation of the Reviewer, we have changed the abbreviation IE to “infective endocarditis” throughout the text.

Comment 2.
The Reviewer asks what “other valve site” means on page 6.

Response:
It means either one native valve or a prosthetic valve. Since the phrase “other valve site” is evidently inaccurate, we have changed the text accordingly (page 6, lines 15-16, revised version).

Comment 3.
The Reviewer points out that in the tables, bacterial names should be changed to italix.

Response:
This has been done.

Reviewer 2 (Michel Wolff)
We thank the Reviewer for his kind words.