Reviewer’s report

Title: The study of visceral hypersensitivity and psychological stress in gastroesophageal reflux disease

Version: 2 Date: 21 February 2011

Reviewer: Daniel Sifrim

Reviewer’s report:

The manuscript is much improved. The study focus and narrative is more clearly defined and communicated, and the written English is now excellent.

Specific comments:

• The study question is now well defined, and scientifically relevant.

• The methods are well described. The acid/saline/anticipation protocol might have been better in a random fashion. For example, the psychological anticipation to a perfusion that “may cause heartburn” is likely to be altered depending on whether or not they actually felt heartburn during the prior acid infusion.

• The authors’ use of the NERD-SI- group is accepted. The group is still likely to include those with FH. It would also be of interest to know the SI in the other groups.

• The data appears sound. The dramatic reduction in the reported recruitment numbers presumably reflects the elimination of a large part of the psychological data.

• The conclusions now fit the data more accurately. Obviously a large volume of data has been filtered to make these conclusions, and this must be remembered in interpreting the results. However the principle that brain activation between the groups may differ is an interesting one and deserves further study.

Discussion of limitations:

This is a useful addition. I agree that the checking of PPI responsiveness in all groups would have been appropriate. I feel that the authors sell themselves short by making this the last section of the article. It could be put earlier in the discussion, leaving the final paragraph as a positive statement about their interesting findings.

Importance:

The content of the paper is of significant interest to people interested in the pathogenesis of GERD.

Major compulsory revisions:
Minor compulsory revisions
Nil

Discretionary revisions
1. Place the comments of limitations earlier in discussion.

Recommendation
• Accept after discretionary revisions

Level of interest
• An article of importance in its field

Quality of written English
• Acceptable

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

Declaration of competing interests
• I declare that I have no competing interests

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**Quality of written English:** Acceptable

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