Reviewer's report

**Title:** Tinnitus in elderly patients and prognosis of mild-to-moderate congestive heart failure: a cross-sectional study with a long-term extension of the clinical follow-up

**Version:** 1  **Date:** 13 September 2010

**Reviewer:** pietro Di Pasquale

**Reviewer's report:**

I think that the affirmation of authors of a relation between tinnitus and NYHA class is not supported by performed study.

1) Usually in HF patients the tinnitus is determined by diuretic use with their othoxic effects mediated by RAAS activation and reduction of effective plasmatic volume. In fact in other study (with high diuretic dose) is reported none tinnitus in patients with effective plasmatic volume maintained by a normal sodium diet.

2) the higher functional class usually is related with a greater dose of diuretic. In their study the author should insert diuretic dose and on this base rewiver the conclusion and modify results and discussion.

3) Could the author to explain the high use of FANS in tinnitus positive? Usually the FANS are forbidden in HF patients, this finding for my opinion is an important bias.

THE BNP and EF data are related with functional class and apperas difficult to relate this result with tinnitus rate.

It is corrected to claim that hypotension is related with tinnitus, but it has to be explained because this group (higher functional classes) had hypotension. does it depend by treatment?

4) Would be useful to know renal function and laboratory parameters as serum sodium.

For my opinion is not corrected the conclusion of authors claiming a relation between tinnitus and functional class, and to suggest the tinnitus as marker of HF worsening.

study claim ithat the CHF class is related with tinnitus,after having studied in observational study a cohort of patients with HF (I-III class), in addition the authors claim also that patients with tinnitus were more hipotensive.

I do not think that this affermation could be affirmed,because the tinnitus in CHF patients is determined mostly by diuretic treatment responsible of RAAS activation and of Plasma volume effective diuretic dependent. In their study the authors do not report diuretic dose, and in addition an important rater of patients with tinnitus were receiving NSAID ,which by prostaglandin inhibition determines a reduction of renal flow,contributing to heart failure worsening.
In conclusion, it is not corrected to affirm that NYHA class is correlated with tinnitus, and that tinnitus could be inserted as a marker of HF worsening. Further, it is clear that patients with worst HF needed more diuretic dose.

Quality of written English: Acceptable

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