Reviewer's report

Title: Cortisol suppression and hearing thresholds in tinnitus after low-dose dexamethasone challenge

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Reviewer: Cornelia Weise

Reviewer's report:

The paper "Cortisol suppression and hearing thresholds in tinnitus after low-dose dexamethasone challenge" is a very interesting and necessary contribution to the existing research in tinnitus. As mentioned by the authors, stress has often been discussed as an important factor in tinnitus patients, however, little is known about the relationship between tinnitus and stress. Besides one question regarding the matching of the sample, I only have minor comments.

Major Comments:
- The two samples are matched for age, education and BMI. However, they are obviously not matched for gender. What was the reason for this procedure? Please add an explanation for this or discuss this as a possible shortcoming.

Minor Comments:

Abstract:
--"21 matched controls". Writing age-matched (as later in the manuscript) would make the abstract even clearer.

--"pharmacological challenge" is unclear here. Reading would be facilitated by mentioning the DEX suppression test instead/additionally.

Introduction
--1st paragraph, 3rd sentence: No reference is given. I guess the reference from the next sentence is also the one for the first sentence. However, this should be clarified.

--2nd para, 5th sentence ("taken for granted in classical teachings on tinnitus [13]"): Reference is an edited book. Please specify this reference.

Methods:
--Cortisol assessment and manipulation, p.9, 2nd para: "participants took 0.5mg of DEX..." - was there any check if they really took the DEX? Did they take it at home or in the lab? Please specify.

--Hearing assessment, p9, last para: "Hearing detection and discomfort thresholds...at the same time of day..." -- same as what? Please clarify.

Discussion:
Discuss the shortcomings of the study, e.g. differences in gender between two groups.

**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