Reviewer's report

Title: Absence of autoantibodies in girls and women with Turner syndrome

Version: 1 Date: 24 June 2007

Reviewer number: 2

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General
The manuscript by Stenberg et al. reports negative result of the autoantibodies in Turner syndrome. They concluded that “the autoimmune disorders associated with Turner syndrome do not seem to be of the same origin as Addison’s disease, the type I or II autoimmune polyendocrine syndrome” and these negative results of autoantibodies “may be enhanced the theory of age dependent sensorineural hearing impairment because of the lack of estrogen.”

Autoimmune inner ear disease is a multifactorial disorder and TS has been known as connected to many different autoimmune disease. It is not easy to show the clear relationship of cause and effect between two. However, the authors focused on the specific autoantibodies of AD, APS I and APS II, which also have similar autoimmune diseases to TS. And they clearly showed the negative results. Data are solid, the paper is well written.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

However, the title, “Absence of autoantibodies in girls and women with Turner syndrome,” is broad interpretation relative to the results. As they mentioned in the results and the discussion, the presence of the antibodies to TPO were reported in 40% of the subjects.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1) Page 3, last line. The abbreviation of “TPO” was appeared first without full terminology.
2) Page 6, Reference # 5. The title has misspelling, “Turner’sTurner’s”.
3) Reference # 9 & 23. The original title showed “Turner” not “Turner’s”.
4) Reference # 12. The page is 84; 909-12.
5) Reference #14 & 15. The authors were more than 3, they were 9 and 10, respectively.
6) Reference # 18. The title according to the citation is “Two different cytochrome
P450 enzymes are the adrenal antigens in autoimmune polyendocrine syndrome type I and Addison's disease."

7) Figure 1, in the table. There was misspelling of “side-chain cleavage enzyme.”
It is somewhat confusing to match disease and antigen. Lines between antigens will be helpful.

Discretionary Revisions (which the author can choose to ignore)

Even though the antibodies “investigated” were not overrepresented among the Turner patients, I would like to suggest that the effect of TPO antibody (possible cause of the autoimmune inner ear disease) and the effect of the hypothyroidism on the hearing need to be considered carefully.

What next?: Accept after minor essential 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.