Author’s response to reviews

Title: The Lactobacillus flora in vagina and rectum of fertile and postmenopausal healthy Swedish women

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Author’s response to reviews: see over
Answer to the reviewers revision 2

Thank You for valuable criticism of our manuscript “The Lactobacillus flora in vagina and rectum of fertile and postmenopausal healthy Swedish women”, MS 1470189084821803. We are happy You have accepted our changes performed so far. Now we have tried to answer your further questions. We think the manuscript has been improved after the revision. Now we hope You want to reconsider it for publication. The changes are highlighted in red in the manuscript. We have also reloaded the figures. Below we give our response to the reviewer’s remarks and suggestions as follows:

Answer to the Editor,

Background

Postmenopausal women, who suffer from depletion in vaginal lactobacilli, are sometimes colonized by adverse microbial flora that may cause bacterial vaginosis and urinary tract infection [11, 12]. The articles that are used as a reference state that BV are not so common among postmenopausal women. I can accept this statement as you says: ?may cause? but the reference 11 only investigate urinary tract infections and lactobacilli. The correct sentence should be:

are sometimes colonized by adverse microbial flora that may cause urinary tract infection [11] and bacterial vaginosis [12].

Reply: We have changed the place of the references as suggested above, please see page 3, section 3.

Discussion

but not in the next sentence in the discussion?.

?This may suggest that rectal colonization by H2O2- producing lactobacilli may contribute to maintain the vaginal ecosystem [19]. The present results did not support that differences in rectal flora could explain the increased prevalence of bacterial vaginosis in postmenopausal women [11, 12].

This statement is not acceptable! BV does not increase in prevalence in postmenopausal women. Cauci (reference 12) state ?The prevalences of bacterial vaginosis (assessed as a Nugent score of >7) in fertile (9.8%) and perimenopausal (11.0%) women were not statistically different, whereas the prevalence was significantly lower overall in postmenopausal women (6.0%)? Delete

You discuss the presence of Bacterial vaginosis however you do not give us any results. How many of the ?healthy women? did have BV? If you don?t know you must discuss this as one of the limitations of the study. But in the Material & Method you have done PAP smears. Why not use those for investigate for BV. There are many that can investigate PAP smears for BV if none of you can do that for that. (ex Katarin.Eriksson@aland.net).

Reply: We have deleted the sentence mentioned in the discussion, page 10, last sentence in the first section. We apologize for that mistake.
Before inclusion of the women, we examined them by asking them questions about symptoms, performed a gynaecological examination and a specialist examined the PAP smears. If any of the women were sick, had symptoms, pathological findings on examinations or any infection, they were never included in the study. Also bacterial vaginosis was excluded, both clinically and by PAP smear. Thus, no one of our participating women had bacterial vaginosis. We have made this clearer now in the M&M, page 4, section 2.

A new sentence is inserted on page 10, last sentence in the first section, in respect to this.

Referee 1

My critique:

“page 4, line 5. “Twenty healthy fertile women”. This is a problematic statement if not qualified by explicit reference to observations/examinations (structured clinical data and results of i.e. Amsel or Nugent scores). If this kind of data was not collected it is a major weakness in the study design.”

resulted in the following action by the authors:

“Reply: The subjects were examined by a basic clinical examination to exclude disease. A gynaecological examination including PAP smear and smear for a bacterial culture were carried out. All patients had normal cytology and a normal bacterial flora. This is now mentioned in the manuscript, page 4, line 7-10.”

The reply and action by the authors does not address the real problem that there are no criteria or other definition in the description of the basic set of patient that defines the included women as healthy with respect to genital (including STI) ailments. This is a major weakness of the study that affects the conclusions and usefulness of the outcome of the study. In fact undermines the statement that the study concerns “healthy Swedish women”.

Reply: Before inclusion of the women, we examined them by asking them questions about symptoms, performed a gynaecological examination and a specialist examined the PAP smears. If any of the women were sick, had symptoms, pathological findings on examinations or any infection, they were never included in the study. Also bacterial vaginosis was excluded, both clinically and by PAP smear. Thus, no one of our participating women had bacterial vaginosis. We have made this clearer now in the M&M, page 4, section 2.

In the revised manuscript the following statement is introduced”The present results did not support that differences in rectal flora could explain the increased prevalence of bacterial vaginosis in postmenopausal women.” Bacterial Vaginosis is a condition affecting otherwise healthy women of fertile age according to most authorities on the subject. The newly introduced statement and discussion based on the statement in the revised manuscript thus should be modified or deleted.
Reply: We have deleted the sentence mentioned in the discussion, page 10, last sentence in the first section. We apologize for that mistake. A new sentence is inserted on page 10, last sentence in the first section, in respect to this.