Author's response to reviews

Title: Correlation Between Psychological Stress Levels and the Severity of Overactive Bladder Symptoms

Authors:

H. Henry Lai (laih@wudosis.wustl.edu)
Vivien Gardner (gardnerv@wudosis.wustl.edu)
Joel Vetter (vetterj@wudosis.wustl.edu)
Gerald L. Andriole (andrioleg@wudosis.wustl.edu)

Version: 3
Date: 23 January 2015

Author's response to reviews: see over
January 23, 2015

To the Editors of BMC Urology,

I would like to thank all the reviewers for their excellent comments on the manuscript entitled: “Correlation Between Psychological Stress Levels and the Severity of Overactive Bladder Symptoms”. I have responded to the reviewers’ comments and have revised the manuscript accordingly (the lines numbers were given, and the revised text was highlighted in yellow). A point-by-point response was provided below. Thank you once again for consideration of publication in BMC Urology.

Sincerely yours,

H. Henry Lai, MD
Division of Urologic Surgery
Department of Surgery
Washington University School of Medicine
St Louis, Missouri
USA

Response to Reviewers’ Comments:

Reviewer 1:
Some details could be improved, as discussed below.

MAJOR COMPULSORY REVISION:

1) Did the Authors investigate about any recent or previous physical or sexual abuse in the patients’ history? Please, specify in the manuscript.

Response: History of physical or sexual abuse was assessed as part of the study. We are happy to report the results in the manuscript.

(Lines 166-169): Additional psychosocial factors including childhood traumatic events, anxiety, and depression were assessed using the childhood traumatic event scale and hospital anxiety and depression scale (HADS), respectively.[16, 17]

(Lines 247-253): Influence of childhood traumatic history, anxiety, and depression on perceived stress levels:

Stress levels may be influenced by psychosocial factors such as childhood traumatic events, anxiety and depression. These factors were assessed using the childhood traumatic event scale and the hospital anxiety and depression scale (HADS), respectively.[16, 17] OAB patients with a childhood history of sexual trauma or physical
trauma reported higher stress levels on the PSS compared to OAB patients without such a history (PSS of 20.6 ± 1.8 versus 15.2 ± 1.4, p=0.048). OAB patients with higher anxiety scores (HADS-A≥8) had higher stress levels than

2) Given a high prevalence of anxiety and depression in OAB has been reported both in the literature and in this study, did the Authors consider the option of stratifying their results according to the presence of any of these conditions? Otherwise, they may include a pertinent citation among the limitations of the study.

Response: Anxiety and depression in OAB patients were also assessed. We are happy to report the results in the manuscript.

(Lines 166-169): Additional psychosocial factors including childhood traumatic events, anxiety, and depression were assessed using the childhood traumatic event scale and hospital anxiety and depression scale (HADS), respectively.[16, 17]

(Lines 253-256): Influence of childhood traumatic history, anxiety, and depression on perceived stress levels:

OAB patients with higher anxiety scores (HADS-A≥8) had higher stress levels than those with lower anxiety scores (HADS-A<7), PSS of 23.1 ± 1.3 versus 11.9 ± 1.1, p<0.0001. OAB patients with higher depression scores (HADS-D≥8) had higher stress levels than those with lower depression scores (HADS-D<7), PSS of 22.9 ± 1.2 versus 15.1 ± 1.4, p=0.014.

MINOR ESSENTIAL REVISIONS

1) Some acronyms should be corrected (see lines 55 and 58)

Response: The acronyms were corrected on lines 55 and 58.

2) Did the Authors take records about obesity? It may be specified it in the manuscript

Response: Obesity data were not recorded as part of the study (see line 169).

3) Some further information about anxiety and depression may be of interest, such as the time of diagnosis, the exact nosological entity (e.g. major depression?), drugs taken (time, duration of treatment, recent modification)

Response: See point #2 above. Anxiety and depression symptoms were assessed using the HADS questionnaire. We did not have access to psychiatric medical records as part of the study to determine if the patients have a clinical, psychiatric diagnosis of
major anxiety disorder or major depression. Thus information on the time of diagnosis, psychiatric drugs taken, etc were not readily available as part of the study.

4) Lines 250-8: Does the Authors’ opinion just refer to urgency incontinence or also to other OAB-related LUTS? The two cited papers report an improvement just on urgency incontinence. Please, specify in the manuscript.

Response: The reference to OAB from lines 267-276 (previously lines 250-8) was changed to urgency incontinence as recommended by the reviewer.

DISCRETIONARY REVISIONS

1) Did the patients undergo any previous or recent treatment for OAB?

Response: (Lines 132-133): The majority of OAB patients were undergoing treatments as recommended by the AUA OAB Guideline.[9]

2) Lines 264-6:
“While it is not surprising that incontinence can increase psychological stress (UI -> stress), the reverse may also occur, i.e. high psychological stress may exacerbate existing symptoms in OAB (stress -> UI).”
Do the Authors mean that any OAB symptom can increase psychological stress or do they especially refer to UI? Possibly, it could be specified in the text, also because while reverting the sentence there is not a whole correspondence.

Response: We intend to specifically refer to UI instead of OAB broadly based on the data. The manuscript was edited to refer this change (lines 278, 284).

Reviewer 2:

Dear authors,
your article is very interesting. The scientific literature on the subject is actually lacking.

The article is well written and according to the standards of this journal.

Discretionary Revisions:

Sex of the patients could be a limitation of your study?
Table 1 shows that women appear to be 100% in the group with IC / BPS, 73% in those with OAB and only 57% in controls.

Response: Thank you for the comment. We performed additional statistical analysis to
show that:

(Lines 191-194): There was no sex difference between OAB patients and healthy controls (p=0.14). OAB patients were less likely to be females compared to IC/BPS (73% versus 100%, p=0.0027, Chi-square test).

(Lines 204-207): Because IC/BPS patients were more likely to be females and older than OAB patients, we incorporated age and sex into our multivariate modeling. On multivariate analysis, PSS remained significant different between OAB and controls (p=0.001) after adjusting for age and sex.

Reviewer 3:

Dear authors,

Thanks for your submission. The study is well planned and designed, literature research and selection process is well documented. The findings are consistent with the data presented in the study. For these reasons I think that the study can be accepted after discretionary revisions.

Discretionary revisions:

I have just one comment to make: men represent a small percentage of the sample (27% of OAB and 0% of IC/BPS), but they are the 43% in the Controls group; have you assessed whether it could be a confounder? In groups OAB and Controls have noticed significant differences between the two sexes (PSS, OAB symptom scores)?

Response: Thank you for the comment. We performed additional statistical analysis to show that:

(Lines 191-194): There was no sex difference between OAB patients and healthy controls (p=0.14). OAB patients were less likely to be females compared to IC/BPS (73% versus 100%, p=0.0027, Chi-square test).

(Lines 204-207): Because IC/BPS patients were more likely to be females and older than OAB patients, we incorporated age and sex into our multivariate modeling. On multivariate analysis, PSS remained significant different between OAB and controls (p=0.001) after adjusting for age and sex.