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R. Melotti I G[1], Rodrigues Palma P C[1], T. Juliato C R[1], Zanettini Riccetto C L[1]
***1.*** *Universidade Estadual de Campinas UNICAMP*

# CORRELATION OF ANXIETY AND DEPRESSION WITH SYMPTOMS OF OVERACTIVE BLADDER IN WOMEN.

Hypothesis / aims of study

Overactive bladder (OAB) in women can significantly affect the quality of life, social, psychological, occupational, domestic, physical, and sexual aspects. As a result, OAB remains underreported, despite increased awareness and improvements in diagnosis and treatment.(1) Researches pointed the need to investigated anxiety and depression impact in women with symptoms of overactive bladder. (2) OAB can cause anxiety and depression, but these conditions may also triggered it. Previous studies have shown a positive correlation between anxiety, depression and OAB symptoms in women. The aim of this study is to objectively correlate the level of anxiety and depression with OAB symptoms in women, using well-defined and validated instruments.

Study design, materials and methods

One hundred fifty-three women with OAB (22 and 76 years-old) were included in this study. The inclusion criteria were age from 18 years; volunteer interest in participating in the study; understanding and signing the informed consent. And the exclusion criteria were: diagnosed or suspected pregnancy; current lactation; hypertension on diuretics; coronary heart disease or incapacitating; primary psychiatric disorders such as schizophrenia, manic depression, psychotic disorders or other; insufficient cognitive ability to respond the questionnaires; refusal to sign the term of free informed consent; refusal to participate in the study. Only those who met the inclusion criteria were interviewed by the same researcher (psychologist). The following instruments were applied to all patients: (a) a socioeconomic profile; (b) Beck Depression Inventory (BDI); (c) Beck Anxiety Inventory (BAI); and International Consultation on Incontinence Questionnaire-Overactive Bladder (ICIq-OAB). After the assessment, a feedback of results was given to the all subjects. According to patients' answers, BDI and BAI were classified in four categories: absent; mild; moderate; or severe. The score for BDI was considered: absent (0-11); mild (12-19); moderate (20-35); or severe (36-63); and for BAI was considered absent (0-10); mild (11-19); moderate (20-30); or severe (31 -63).The sum of ICIQ-OAB "a" items resulted in a objective symptom score, ranged from 0 to 16. The sum of ICIQ-OAB "b" items was used as a subjective assessment of the impact of OAB symptoms on patients' QoL. Statistical analysis was performed using, ANOVA, Wilcoxon Rank test and Spearman's Correlation test. The significance level adopted for all tests was 95% ($p<0.05$).

Results

There was a positive correlation between ICIQ-OAB "a" items sum and BDI (r=0.217 p=0.0070) and BAI (r=0.246 p=0.0022) scales. Also, there was a positive correlation between ICIQ-OAB "b" items sum and BDI (r=0.225, p=0.0050) and BAI (r=0.225 p=0.0051) scales (Tables 1and 2).

Interpretation of results

Although the sample size should be expanded, it was observed that when OAB is addressed through appropriate psychological assessment instruments, associated anxiety and depression levels can be highlighted. The presence of anxiety and depression impacts other areas of intimate, personal and social life of women with OAB. It is recommended to investigate the intensity levels of depression and anxiety in patients who have associated organic complaints. OAB can be the expression of symptoms of anxiety and depression previously present in women, who further developed urinary symptoms.

Concluding message

There is a significant correlation between OAB, anxiety and depression. Such studies are relevant because the confirmation of these data may aid the understanding and treatment of OAB.

Table1. ICIQ-OAB versus (BDI)

| | MINIMUM | LIGHT | MODERATE | SEVERE | p-value* |
|---|---|---|---|---|---|
| | n = 47 | n = 27 | n = 49 | n = 30 | |
| ICIQ-OAB "a" items | 9.3 (3.1) | 9.5 (3.0) | 10.4 (3.5) | 11.3 (2.6) | **0.0307** (a) |
| ICIQ-OAB "b" items | 29.7 (8.7) | 30.5 (8.2) | 32.4 (9.4) | 33.9 (7.1) | **0.0467** (b) |

*ANOVA with transformation by ranks followed by Tukey's test to identify differences
(a) severe versus mínimum
(b) severe versus minimum - moderate versus minimum

Table 2. ICIQ-OAB versus (BAI)

| | MINIMUM | LIGHT | MODERATE | SEVERE | p-value* |
|---|---|---|---|---|---|
| | n = 28 | n = 36 | n = 51 | n = 38 | |
| ICIQ-OAB "a" items | 9.1 (3.1) | 9.3 (2.9) | 10.7 (3.6) | 10.7 (2.7) | **0.034** (a) |
| ICIQ-OAB "b" items | 29.8 (9.4) | 29.5 (9.0) | 32.1 (8.7) | 33.9 (7.1) | 0.070 ** |

*ANOVA with transformation by ranks followed by Tukey's test to identify differences
(a) moderate versus minimum ** teste de Kruskal-Wallis

References
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Disclosures
**Funding:** CAPES **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** MINISTÉRIO DA SAÚDE, Conselho Nacional de Saúde, Conselho Nacional de Ética em Pesquisa. Na Universidade Estadual de Campinas - UNICAMP - CNPJ 04.606.842/0001-33 na FACULDADE DE CIÊNCIAS MÉDICAS NO COMITÊ DE ÉTICA EM PESQUISA CAAE:0174.0.146.000-10 **Helsinki:** Yes **Informed Consent:** Yes