

STABILITY AND DISCRIMINANT VALIDITY OF BRAZILIAN VERSION OF THE QUESTIONNAIRE "PELVIC PAIN AND URGENCY/FREQUENCY (PUF) PATIENT SYMPTOM SCALE"

Hypothesis / aims of study

The Interstitial Cystitis (IC) is a chronic bladder disease of unknown etiology characterized by symptoms of pain, pressure or discomfort in the suprapubic region associated with urgency, urinary frequency and nocturia [1]. This diagnosis is still a challenge due to the lack of universally accepted criteria. It can be obtained by cystoscopy, urodynamic testing, potassium sensitivity testing, biopsy, laboratory tests and questionnaires, but none is conclusive.

Some authors consider that a symptom questionnaire used to capture and record the presence of all symptoms can be useful for a more accurate diagnosis [1]. Since the questionnaires are an important aid for the diagnosis of interstitial cystitis, and in turn are not available in Portuguese, in Brazil, it is necessary to translate and validate questionnaires developed, tested and used in other countries, to obtain an accurate diagnosis and, consequently, an appropriate treatment and better prognosis. So, the aim of this study is to validate the Brazilian version of the questionnaire "Pelvic Pain and Urgency/Frequency (PUF) Patient Symptom Scale".

Study design, materials and methods

This is a validation of research instrument. In the present study it was analyzed some psychometric properties of the questionnaire "Pelvic Pain and Urgency/Frequency (PUF) Patient Symptom Scale" through test-retest reliability and discriminated validity.

For testing the **stability** of the questionnaire, it was applied twice with an interval of 7 days or less prior to the occurrence of any fact that could change the status of the subject (e.g. administration of a therapy). It was considered to be satisfactory results similar in both applications. We applied the test in a study group with 30 patients with interstitial cystitis and the retest in 24 individuals with the disease. The patients were included in the study group if they had diagnosis of chronic or nonspecific cystitis during the biopsy examination.

To evaluate the **discriminant validity** were used three groups. The study group consisted of the same 30 patients who participated in the test-retest and who had a diagnosis of interstitial cystitis, considering the data for analysis of the first questionnaire. The first control group (control group 1) was formed by people with at least one of the symptoms of interstitial cystitis (pelvic pain, urgency and/or urinary frequency), but without a confirmed diagnosis of the disease. The second control group (control group 2) consisted of individuals without symptoms suggestive of interstitial cystitis. The test was applied to 29 patients in control group 1 and 25 patients in a control group 2.

Results

The mean age considering all participants of the three groups (n=84) was 47.5 years. The average age of the study group (n=30) was 45.2 years, control group 1 (n=29) was 50.9 years and the control group 2 (n=25) was 46.5 years. The Kruskal-Wallis test showed a p-value=0.1497, indicating no difference among the three groups regarding the age.

The average income of the three groups (n=84) was R\$ 1,806.99. The average income of the study group (n=30) was R\$ 2,906.17, the control group (n=29) was R\$ 1,059.03 and the control group 2 (n=25) was R\$ 1,355.60. The Kruskal - Wallis test showed a p-value = 0.0013, indicating that there is significant difference among the three groups in terms of wage income. The income of the study group is significantly higher than in the two control groups that do not differ between themselves.

The chi-square test showed a p-value=0.0243, indicating that there is significant difference among the three groups regarding the schooling. The study group had a higher percentage of people with complete secondary school or more.

The reliability as measured by test-retest by ICC was 0.49, below the value of 0.70, considered suitable for this measurement [2], with no significant difference between test and retest. The sensitivity and specificity of the questionnaire comparing with the diagnosis determined by the physicians based in clinical and objective data (biopsy) were respectively, 100.0% and 25.3%.

Discriminant validity was assessed by Fisher's exact test. For analysis this instrument, the control group 1 was the reference for comparing the other groups, and the p-value <0.0001 obtained by the Fisher exact test indicated that given a level of 5% significance, the null hypothesis was rejected. The instrument classified correctly 100% of patients with interstitial cystitis in the study group. The study group and the control group 1 were equal and both were different from the control group 2 in relation to the classification of patients as having interstitial cystitis.

Interpretation of results

The difference in wage income and education between the study group and control group occurred because the first group have been captured in a region of Brazil, which has a high per capita income.

Due the lack of other studies of test-retest reliability using the ICC, it is impossible to compare these findings. It is believed that this discrepancy in scores on the test and retest may be due to the fact that interstitial cystitis is an unstable disease, and its symptoms change all the time, influencing the responses of the patients.

Some patients in the control group 2 reached a score of ratings for interstitial cystitis, a situation not anticipated by the researchers. During the interview for inclusion in the group, the existence or not of symptoms of CI was questioned, and only patients who said not possess them were included.

However, reading the instruments filled by them, it was noted that 11 (44%) patients had nocturia. Nocturia appears in patients with interstitial cystitis, but it is also characteristic of detrusor overactivity [3], so the correct diagnosis is necessary to make an appropriate treatment.

Concluding message

Despite of the still small number of patients diagnosed with interstitial cystitis in Brazil, the test-retest reliability and discriminant validity of the instrument "Pelvic Pain and Urgency/Frequency (PUF) Patient Symptom Scale" was carried out satisfactorily. In future studies the intention is to carry out further assessments of psychometric measures with larger number of patients.

Disclosures

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Informed Consent: Yes