

## TRANSLATION AND LINGUISTIC VALIDATION OF THE RUSSIAN VERSION OF THE PELVIC PAIN AND URGENCY/FREQUENCY PATIENT SYMPTOM SCALE (PUF)

### Hypothesis / aims of study

The objective of this study was to achieve a linguistic adaptation of the original version of the Pelvic Pain and Urgency/Frequency (PUF) Patient Symptom Scale into Russian and compare the results of questionnaire of patients with IC/PBS with the control group of healthy volunteers.

### Study design, materials and methods

A linguistic adaptation was carried out by 2 native Russian speakers who were also fluent in English. First, the original English version of the PUF was translated into Russian. A panel, which included the 2 translators, reviewed the translations to form a single reconciled forward translation of the Russian version. Then another translator, having never seen the original version, back-translated the first version of the Russian translation of the PUF into English, and this back-translation was subsequently assessed for equivalence to the original. The panel discussed all discrepancies and produced a second version. After revising the 2nd version, 90 participants (40 interstitial cystitis (IC/ PBS) patients and 50 persons from the general population), stratified variously by age, sex, and educational level, answered the PUF and were systematically debriefed afterwards. The severity of the symptomatology was assessed according to the visual analogue scale of pain and diaries of urination. 40 patients (5 men, 35 women) with symptoms of IC / PBS aged from 31 to 75 years, 50 healthy volunteers (16 men, 34 women) aged 18 to 75 years who did not suffer from IC / PBS twice completed the questionnaire. Patients with IC / PBS were underwent by cystoscopy with hydrodistension (HD).

### Results

The multi-step process of forward translation, reconciliation, back-translation, cognitive debriefing, and proofreading of the Russian version of the PUF was completed. Among the patients with IC / PBS, 5 of them were men and 35 women. Their average age was 55 years (from 31 to 75 years). The average score on the PUF scale was  $25.31 \pm 6.9$  (the average symptom score was  $14.72 \pm 4.5$ , the average discomfort was  $8.7 \pm 2.5$ ). Among the volunteers, 16 were men and 34 women. All of them filled the questionnaire again 2 weeks after the initial questioning. Their average age was 31 years (range from 18-75). The mean score on the PUF scale was  $2.1 \pm 2.7$  (mean symptom score -  $1.6 \pm 1.2$ , average discomfort -  $0.6 \pm 1.9$ ). The PUF scores were well correlated with the presence / absence of each of the following symptoms: urgency ( $P = 0.002$ ), frequency ( $P = 0.009$ ), urination at night ( $P < 0.001$ ), dysuria ( $P = 0.002$ ), pelvic pain ( $P < 0.001$ ).

### Interpretation of results

All 40 patients underwent cystoscopy with urinary bladder hydrodistension. In 17 of 40 (42.5%) patients were identified diffuse submucosal hemorrhages, submucous hemorrhages in 25 of 40 (45%) and Gunner lesions in 5 of 40 (12.5%) were detected. A higher score according to the PUF questionnaire was available in patients with a cystoscopic view of Hunner's bladder lesion ( $P = 0.024$ ). The average capacity of the bladder with hydrodistension was 450 ml ( $\pm 130$  ml). A higher PUF score was associated with a lower capacity of the bladder (correlation =  $-0.497$ ,  $P = 0.001$ ).

### Concluding message

The Russian version of the PUF scale may be helpful for screening IC patients in the Russian population and can now be used in Russian Federation.

### Disclosures

**Funding:** n/a **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of First Saint-Petersburg Medical University name I P Pavlov **Helsinki:** Yes **Informed Consent:** Yes