Pain is a common and distressing symptom in ICU patients. Yet a major challenge exists in assessing and evaluating the pain. Although the patient’s self-report of pain is the “gold standard” for pain assessment, other methods must be considered when patients are unable to self-report. Currently only two pain behavior instruments have been tested for their reliability, validity, and feasibility of use in ICUs: the pain behavior scale and the Critical-Care Pain Observation Tool. The CPOT has 4 sections, each with different behavioral categories: facial expression, body movements, muscle tension, and compliance with the ventilator for intubated patients or vocalization for extubated patients. Items in each section are scored from 0 to 2, with a possible total score ranging from 0 to 8.

Aim of investigation: To validate the Critical-Care Pain Observation Tool. Before performing direct validation of the scale "CPOT" was held in her adaptation of Russian-speaking environment with the ethno-linguistic features of the population according to international standards. The reliability of the questionnaire was confirmed by the "test-retest", calculating Cronbach's coefficient α (α> 0,8).

Methods: The study included 93 patients (age 33-74 years, 22 women, 71 men) who performed thoracic intervention, operations on the upper floor of the abdominal cavity and reconstructive operations on the abdominal aorta. For each of the 3 testing periods, patients were evaluated by using the Critical-Care Pain Observation Tool at rest, during a nociceptive procedure (positioning), and 20 minutes after the procedure, for a total of 9 assessments. Each patient’s self-report of pain was obtained while the patient was conscious and intubated and after extubation. Assessment of pain was carried out by two independent observers simultaneously at rest, during and 15 min after the procedures . Level of sedation was measured using the Richmond agitation sedation scale (RASS). Measures of interrater reliability, internal consistency and discriminant validity of the CPOT were obtained to examine the properties of the Russian version of CPOT.

Results: For criterion validity, significant associations were found between the patients’ self-reports of pain and the scores on the Critical-Care Pain Observation Tool. Discriminant validity was supported by higher scores during positioning (a nociceptive procedure) versus at rest.

Conclusion: The Russian version of the CPOT is a suitable instrument for assessing pain in critically ill adults. Thus, CPOT can be used in ICU patients to assess the intensity of pain, and to assess the efficiency of analgesia.