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Recording of the Breathing Pattern in the Test with Controlled Hyperventilation in Subjects with a Borderline Type Personality Disorder

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The study of the variations of breathing pattern components under the influence of physiological or pathological factors allows to deepen the knowledge in the field of physiology of systemic interaction in the whole body as well as in the pathophysiology of functional, psychosomatic diseases. Taking into account the prevalence of 6% of borderline type personality disorder in primary care and up to 20% in specialized psychiatric centers and the considerable impairment caused to patients, the study of the breathing pattern could offer doctors, especially those at the primary level, an alternative to treatment pharmacologically by correcting the psychophysiological mechanisms of systemic dysfunction. The study was conducted on a group of 95 people between March 2017 and February 2019 at the Department of Human Physiology and Biophysics, USMF "N. Testemitanu". The psychometric assessment preceding the recording of respiratory parameters was performed with the Personality Inventory Test PID-5. The respiratory pattern parameters were recorded using respiratory plethysmography and capnography. The experimental protocol included the recording of respiratory pattern parameters in 3 functional samples (resting breath, hyperventilation test, post-hyperventilation test). In the subjects with borderline type personality disorder group following characteristics of the breathing pattern at rest have been observed – lower tidal volume, higher respiratory frequency and lower end-tidal CO₂.