Chronic obstructive pulmonary disease (COPD) is a pathology characterized by chronic obstruction of lung airflow. The World Health Organization estimates that 80 million people worldwide have moderate to chronic COPD. In the Russian Federation, COPD affects 16,100 people per 100,000 population. Neurological disorders associated with COPD are studied relatively little in Russia.

The aim of this study was to observe the presence of neurological semiotics in patients with COPD.

Materials and methods: We evaluated the neurological status of 53 patients (M/F=30/23) with COPD. Four groups of patients were included: 10 persons with 1 stage of COPD, 10 patients with 2 stage, 15 with 3 stage, and 18 persons with 4 stage of disease. All patients were examined by neurologists, therapists, and spent laboratory-tool researches.

Results: Fifteen percent of patients with stages 3-4 of COPD had displays of pyramidal syndrome; bradykinesia, increase of muscular tone (extrapyramidal syndrome) were found in 18% of people, and 45% had cerebellar syndrome. Cognitive disorders were found in 72% of people. We observed disinhibition of primitive reflexes and infringements of conceptualization, verbal fluency, and dynamic praxis in these stages.

Conclusions: At disease progressing, at stages 3-4 of COPD, forms cognitive impairment, pyramidal, extrapyramidal, cerebellar syndromes.