Chronic obstructive pulmonary disease as a risk factor for dementia

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Relevance: Chronic obstructive pulmonary disease (COPD) remains a major public health problem. According to data released by the World Bank and the World Health Organization (WHO), it is expected that in 2020 it will be on the 5th place on the damage caused by diseases globally. It is now known that pulmonary pathology leads to disruption of cerebral blood flow. Insufficient oxygen supply to the brain at bronchial obstruction, which negatively affects the brain functions such as memory, attention, thinking.

Purpose: To identify the state of the higher brain functions in patients with chronic obstructive pulmonary disease.

Materials and methods: There were studied 40 patients aged 26 to 87 years (including 28 men, 12 women) with COPD III and IV. Determined by pulse oximetry oxygen saturation of the blood. The study was conducted using the Montreal Cognitive Assessment Scale.

Results: The study showed a significant reduction of memory, attention, thought in 14 patients (35% -19 points), moderate decline of higher brain functions in 14 patients (35% -20 and 23 points ), a slight decrease in 8 patients (20% -25 points), and the norm in 4 patients (10%). At the same time found a direct correlation between cognitive impairment and peripheral oxygen saturation: the saturation 95% were identified cognitive impairment, with 85% dementia.

Conclusion: The present study indicates a significant impact of COPD on the higher brain functions of humans.

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