CLINICAL FEATURES OF COVID-19 ASSOCIATED LACUNAR STROKES

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ABSTRACT
This article discusses the clinical features of Covid-19 associated lacunar strokes. All patients underwent a standard clinical and neurological examination (analysis of patient complaints, anamnesis of life and anamnesis of the disease, an objective examination, including a study of the neurological status) and a physical examination.

KEYWORDS: Covid-19, lacunar strokes, neurological examination, patient complaints, objective examination.

INTRODUCTION
A characteristic feature of single LS is a favorable outcome with full or partial restoration of impaired functions. The clinical diagnosis in this case is confirmed by CT or MRI of the brain, however, according to the available data, the information content of MRI is 78% (while CT is only 30%, especially in the localization of lacunae in the region of the bridge and the internal capsule), since small lacunae, with a capacity of up to several cubic millimeters, are simply not visualized (2).

PURPOSE OF THE STUDY
To identify the clinical features of COVID-19 associated lacunar strokes.
Material and research methods. Taking into account the purpose and objectives of the study, in order to clarify the clinical and neuroimaging features of lacunar strokes (LS) in the acute period, a comprehensive clinical and instrumental examination of 123 patients with LS was carried out, including 65 men and 58 women aged 46 to 67 years (mean age 56.8+9.9 years), who were treated in the neurological department of the City Clinical Hospital №1 with predominantly mild organic symptoms in patients with single or multiple LS. The main group (MG) consisted of 54 patients with LI against the background of a previous coronavirus infection (CVI), the comparison group (CG) consisted of 69 patients with LI who did not have a history of CVI.
All patients underwent a standard clinical and neurological examination (analysis of patient complaints, anamnesis of life and anamnesis of the disease, an objective examination, including a study of the neurological status) and a physical examination.
Processing of the results is carried out by the methods of variational statistics with the determination of the mean and its error values (M±m), differences in the mean values, the

matching criterion ($\chi 2$), and the calculation of the probability (p). The results were accepted as significant at $p<0.05$.

RESULTS

In MG in patients with multiple LS from motor disorders, hemiparesis of mild severity prevailed (7.4%), and with single LS, reflex hemiparesis or monoparesis was detected much more often (5.6%). With a single LS, combined unexpressed coordination disorders prevailed (14.8%), and in patients with multiple LS, static disorders, also expressed to a slight extent (11.1%), were prevalent. In MG patients, changes in sensitivity by hemitype were more often recorded (22.2%). Speech disorders were found only in patients with multiple lacunar foci 13.0%), and they were minor and represented mainly by dysarthria, which developed gradually and patients, as a rule, adapted to this defect, i.e. it practically did not limit their activity. In several patients, both with single and multiple LS, pseudobulbar disorders were determined, the development of which did not correspond to the identified lesions according to MRI (9.2%). The data obtained, to a certain extent, correspond to those described in the literature (1.3) with a certain interpretation of the data, taking into account the timing of our study. In CG, in approximately 39.1% of our patients with multiple LS, on neurological examination, we were practically unable to detect any characteristic clinical signs indicating the presence of lesions in the brain. This is explained by the fact that small cerebral infarctions that occur in clinically "silent" areas can be an accidental finding during neuroimaging and be asymptomatic even in the acute period (3,4), not to mention the long-term period.

It was noted that after the acute stage of LS in 78.4% of patients, neurological disorders were either absent or mild, 21.2% had moderate symptoms and only 0.4% had severe symptoms (2). Repeated LS of the brain can underlie the development of chronic progressive forms of vascular lesions of the brain - dyscirculatory hypertensive or atherosclerotic encephalopathy, they can also lead to the development of subcortical vascular dementia, vascular parkinsonism, etc. (4)

There are several different points of view regarding the long-term consequences of LS. On the one hand, with this type of stroke, there is a faster and better recovery compared to other types of stroke (2), on the other hand, there may be adverse long-term consequences. Thus, according to the available data (2), in patients who have undergone LS, dementia is diagnosed 4-12 times more often than in the "normal" population.

In the acute period, coordinating, motor, sensory and intellectual-negative disorders were predominantly mild and moderate in severity against the background of CCI. More than 80% of patients with multiple LS had associated neurological disorders.

CONCLUSION

Thus, according to our data, in patients with a single LI outside the acute period, an isolated "motor type" (17.2%), coordinating disorders (17.2%) and atactic hemiparesis (13.8%) with minimal clinical manifestations are more often detected.

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