COMPLICATIONS OF THE DISEASE IN PATIENTS WITH A HISTORY OF COVID-19

M. M. Yuldasheva
Tashkent Pediatric Medical Institute
E.N. Majidova
Tashkent Pediatric Medical Institute
J.A. Nazarova
Center for the development of professional qualifications of medical workers
Ministry of Health of the Republic of Uzbekistan

Abstract: This article discusses the complications of the disease in patients with a history of Covid-19. Severe severity according to the NIHSS scale was detected in 43.3% of patients with AT and 40.0% with CE, extreme severity was observed in 25.4% with AT and 36.4% with CE. Thus, severe IS at admission was detected in 36.6% of all examined patients and in 73.8% of patients with AT and CE subtypes of IS.

Keywords: Covid-19, background of coronavirus infection, literature, rule, narrow range.

Introduction

Based on the current situation, the need for a full-fledged dynamic study of the state of cerebral hemodynamics in terms of the relationship of these indicators with the results of neuro-immunological examinations and neuroimaging data, as well as determining the effect of cerebral blood flow reserves, as a parameter of functional plasticity of cerebral hemodynamics in patients with stroke against the background of COVID-19, is beyond doubt and definitely relevant from the point of view of practical neurology.

Studies are ongoing to study anticoagulant and antiplatelet therapy in the aspect of prevention of thrombotic complications, including CVT and IS, which has the potential to reduce morbidity and mortality in patients with severe COVID-19 [3].

The main findings and results

Prevention of COVID-dependent stroke is based on the use of anticoagulants and antiplatelet agents, the appropriateness of prescribing them is determined by the severity of the disease and biomarkers of thrombus formation. Currently, anticoagulant prophylaxis for COVID-19 is carried out with enoxaparin, heparin, rivaroxaban, fondaparinux, and antiplatelet prophylaxis with acetysalicylic acid, clopidogrel and dipyridamole [5].

To date, according to a review of the literature, there is no consensus regarding anticoagulant and antiplatelet prevention of cerebrovascular complications in COVID-19 [3].

A decrease in VPK against the background of high rates according to NIYSS and the Rankin scale indicates the depletion of the autonomic nervous system against the background of prolonged pronounced sympathicotonia (Table 6).

VPK in patients with moderate IS according to SR corresponded to a moderately pronounced sympathicotonia (1.38 c.u.) and in dynamics, on the 7th and 14th day of hospitalization, quantitatively decreased - 1.27 and 1.13 c.u. e. respectively.

Table 1.

IS Severity Prediction Scale

Sign	units	points
age, years	>70	0
	<70	1
stroke severity in points, measured by the United States National Institutes of Health Scale (NIHSS)	5--11	1
	12--23	2
	>24	3
Charlson Comorbidity Index	<5	1
	6<12	2
	13<23	3
Vegetative indicator of blood circulation VPK	>1,56	1
Subtypes of IS (Atherothrombotic and Cardioembolic)		1
History of COVID-19		1

Low risk	**1—4**
Medium Risk	**5--10**
High risk	**11--16**

Thus, against the background of stabilization of vegetative homeostasis, positive neurological dynamics occurred. This category of patients also had an average CI on the Charlson and CIRS scales of 6.2 and 5.6, respectively. In patients with a good outcome of IS on the Rankin scale, VPK during hospitalization was characterized by moderate sympathicotonia (1.26 c.u.), on the 7th and 14th days of inpatient treatment,
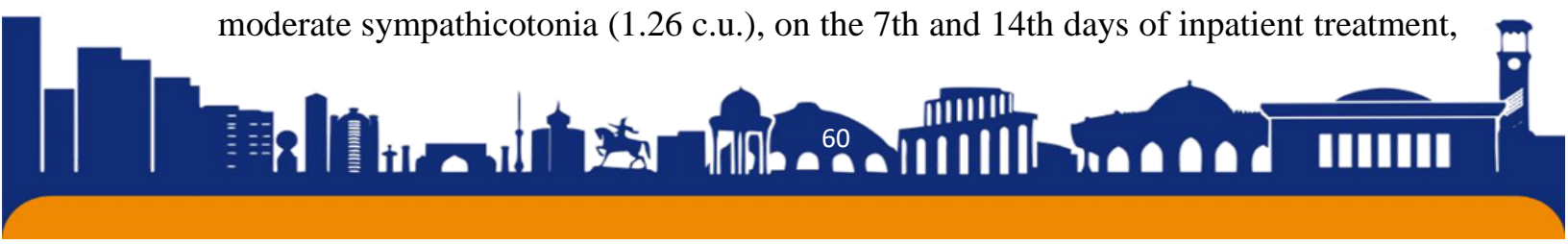
VPK was 1.16 and 1.09 c.u. e. respectively. In this category of patients, Charlson IC scores and CIRS scores were 3.1 and 3.9, respectively (with significant intergroup differences) (Table 6).

Thus, a direct correlation was found between the severity of IS according to NIHSS and its outcome according to SR with the severity of comorbid diseases according to the Charlson IC and the CIRS scale. Statistical analysis of multiple regression with the gradual removal of predictor variables that affect the outcome of IS stated the correlation of scores according to the Charlson IC, according to the NIHSS scale and c.u. VPK (r=0.7221, r=0.5214 and r=3308, respectively; p=0.0031).

The conducted ROC analysis demonstrated sufficient specificity and sensitivity of such variables as age, CI according to Charlson, VPK, scores according to the NIHSS scale and subtype of IS relative to the correlated scores of SR:

- age, years;
- stroke severity in NIHSS scores;
- IC Charlson and scores on the CIRS scale;
- AT and CE subtypes of IS;
- VPK, ye;
- History of COVID-19.

Based on the calculations, we formed the Scale for assessing the severity of IS (Table 7), from which it can be seen that the only indicator that can be changed is the TPC, and this will make it possible to prevent severe outcomes of IS.

Conclusion

Our study found a direct correlation between the severity of IS according to NIHSS and its outcome according to SR with the severity of comorbid diseases according to the Charlson IC and the CIRS scale. Statistical analysis of multiple regression with the gradual removal of predictor variables that affect the outcome of IS stated the correlation of scores according to the Charlson IC, according to the NIHSS scale and c.u. VPK (r=0.7221, r=0.5214 and r=3308, respectively; p=0.0031).

References

1. Akilov H. et al. Interim guidelines for the management of patients infected with COVID-19 (Version 10). Ministry of Health of the Republic of Uzbekistan and the National Chamber of Health of the Republic of Uzbekistan, January 2022.

2. Alferova, V. V. Clinical significance of humoral compensatory reactions in the acute period of ischemic stroke / V. V. Alferova, M. G. Uzbekov, E. Yu. Misionzhnik // Journal of Neurology and Psychiatry named after S. S. Korsakov. – 2011. – № 8. – P. 36–40.

3.   Prognostic criteria for outcomes of hemorrhagic and ischemic strokes in the acute period: a guide for doctors / OA Balunov, N. Yu. Safonova. - St. Petersburg, 2010. – P. 19.

4.   Wayne, A. M. Autonomic disorders. Clinic, diagnosis, treatment / A. M. Wein. – Moscow: Medical Information Agency, 2003. – P. 752.

5.   Vilensky, B. S. Stroke - the current state of the problem / B. S. Vilensky // Neurological journal.– 2008. – № 2. – P. 4–10.