

PLENARY PRESENTATIONS

CARDIOEMBOLIC STROKE IN UZBEKISTAN: EPIDEMIOLOGY AND DIAGNOSIS

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Annually, more than 69,000 new cases of stroke are registered across Uzbekistan, with over 160 new cases recorded daily nationwide. In Tashkent alone, 25-30 stroke cases are observed daily, and the mortality rate for patients with ischemic stroke within the first three days, i.e., the hyperacute period, is 38-42%. Currently, the SSS-TOAST classification is most commonly used in practice, according to which ischemic stroke (IS) can be: atherothrombotic, cardioembolic, lacunar, of another determined cause, or of an undetermined cause. Based on population studies, the incidence of cardioembolic stroke (CES) is 29%, atherothrombotic stroke is 16%, lacunar stroke is 16%, stroke due to rarer causes is 3%, and stroke of unknown etiology is 36%. According to our research on 138 patients diagnosed with an acute cerebrovascular accident of the ischemic type, the cardioembolic subtype of IS (CES) was identified in 31% of cases. The average age of these patients was 72.1 ± 8.0 . The characteristics of the disease onset included: sudden onset with loss of consciousness (23%), and retrosternal pain and heart rhythm disturbances (26%). Regarding the causes of stroke, patients with various forms of atrial fibrillation were predominant: 32.4% had the permanent form, 18.6% had the paroxysmal form, and 30.3% had the persistent form. Among patients with sinus rhythm, who constituted 18.7%, the causes of cardiac embolism were: a left ventricular thrombus in the early post-infarction period and dilated cardiomyopathy with a low ejection fraction ($EF < 40\%$).

CEI is characterized by frequent recurrences of ACS. Analysis of patient history data showed that in 34.8% of cases, patients had previously suffered a single ACS, and in 11.6% of cases, they had suffered two or more.

According to instrumental study data, the most pronounced increase in maximum heart rate (HR) during the day and night was observed in cardioembolic stroke compared to other subtypes ($p=0.001$). The circadian index was lower (1.04 ± 0.06) compared to the control group (1.20 ± 0.09) ($p < 0.001$). Additionally, frequent paired ventricular extrasystoles and runs of ventricular tachycardia were detected, along with a prolonged daily corrected QTc interval (464 ± 34 ms), which indicates electrical instability of the heart and a high risk of sudden cardiac death due to life-threatening arrhythmias. The presence of silent myocardial ischemia, detected in 62% of patients, and high heart rate variability indicators require a multidisciplinary approach to the diagnosis and treatment of this ischemic stroke subtype.