FIRST-YEAR OUTCOMES AFTER CARDIOEMBOLIC STROKE REHABILITATION IN ATRIAL FIBRILLATION (AF) PATIENTS TREATED WITH NEW ORAL ANTICOAGULANTS (NOACS)

S. Deme[1], D.S. Ioncu[1], S. Dragan[2], N.C. Hreniuc[1], D.C. Jianu[3]
[1]*Neurology Department, Western University of Arad Vasile Goldis, Arad, Romania, Romania*
[2]*Cardiology Department, Victor Babes University of Medicine and Pharmacy, Timisoara, Romania, Romania*
[3]*Neurology Department, Victor Babes University of Medicine and Pharmacy, Timisoara, Romania, Romania*
sandademe@yahoo.com

Background: Nonvalvular AF is associated with diastolic dysfunction (DD), which could lead to ischaemic stroke and heart failure.
Aims: To compare the effect after physical intensity exercise in accordance to present recommendations in patients with first ever cardioembolic stroke, hemiparesis, DD and oral anticoagulant treatment.
Methods: 48 subjects (mean age 58.5 years, 41 male) with nonvalvular AF, ischaemic stroke, hemiparesis and DD (defined as early diastolic tissue velocity (E`) 8 m/s), were included to moderate-intensity exercise for 260 minutes/week for 12 weeks. Subjects were examined using tissue Doppler echocardiography, VO2peak-test and biochemical measurements. They were evaluated at admission, after 6 months and after a year using NIHSS scale, CT scan/MRI, Rankin Modified Scale (mRS), and MMSE score. 25 patients have received NOACs.
Results: Moderate-intensity exercise significantly improved DD; E` by 18.8%, early mitral filling velocity (E) by 15% and shortened isovolumic relaxation time (IVRT) by 12%. Systolic tissue Doppler velocity (S`) increased with 17%, waist circumference (WC) reduced with 2.5 cm, VO2peak increased with 5.2 ml/kg/min, HbA1c reduced with 5%. VO2 peak, WC returned to baseline values in the moderate-intensity group. The mRS score varied from 5.6 to 1.4 after 1 year and the NIHSS average score was higher after 1 year of physical exercises with 3.46 points on the scale(p0.001,CI95%). The mean MMSE score after 1 year was 25.6.
Conclusions: In the first year the moderate-intensity exercises improved DD, neurological parameters, obesity, and blood pressure. The mortality rate was 4.2 % by cardiac arrest. NOACs were well tolerated.