

Long-term results of transcatheter cerebral revascularization of the brain with atherosclerotic lesions

Ivan V Maksimovich

Clinic of Cardiovascular Diseases named after Most Holy John Tobolsky, Russia

Background: The research is devoted to long-term results (2-10 years) of the treatment of patients with chronic atherosclerotic brain lesions who previously underwent either transcatheter cerebral revascularization or conservative treatment.

Methods: 946 patients were treated: 568 (60.04%)-transcatheter cerebral revascularization (Test Group), 378 (39.96%)-conservative treatment (Control Group). 482 patients aged 35-85 (average age 76) were re-examined. Of these, 286(59.34%) patients had undergone transcatheter cerebral revascularization, 196 (40.66%)-conservative treatment. The examination plan included: CDR, MMSE, IB assessment (all patients); cerebral CT, MRI, scintigraphy (SG), rheoencephalography (REG) (all patients); cerebral MUGA (72 (12.68%) Test Group patients and 34 (9.00%) (Control Group).

Results: Test Group: Good clinical outcome-459 of which re-examined-228, results maintained-212 (92.98%); satisfactory clinical outcome-91, re-examined-52, results maintained-48 (92.31%); relatively satisfactory clinical outcome-18, re-examined-6, results maintained-5 (83.33%); reduction of hypertrophic symptoms in the brain-254 (88.81%); preservation of cerebral blood flow rate and perfusional blood filling-243 (84.97%); preservation of the lumen and patency of restored vessels, increased collateral revascularization - 69 (95.83%). Control Group: Satisfactory clinical outcome was initially obtained in 65 cases, of which 36 were re-examined, results maintained-14 (38.88%); relatively satisfactory clinical outcome-121, re-examined-74, results maintained-34(45.95%); relatively positive clinical outcome-192, re-examined-86, results maintained-40 (46.51%); growing of hypertrophic brain symptoms-137 (69.90%); reduction of cerebral blood flow rate and perfusional blood filling-128 (65.31%) and further atherosclerosis progression-31 (91.18%).

Conclusion: In the long-term period (2-10 years after the treatment), transcatheter cerebral revascularization can restore brain blood flow and in contrast to the conservative method demonstrates high and stable clinical results maintained for a long time.

Biography

Ivan V Maksimovich, MD, is a ISTAART member, Head Physician of Clinic of Cardiovascular Diseases named after Most Holy John Tobolsky (Moscow, Russia) since 1993. One of the major problems the clinic deals with is the diagnosis and treatment of various brain lesions including Alzheimer's disease.