

The role of the EC-IC bypass in the microsurgical treatment of complex brain aneurysm

Complex brain aneurysm remains still the neurosurgical challenge. The treatment is usually a combination of various microsurgical techniques - clipping, wrapping, trapping, aneurysmorhaphy and EC-IC bypass. Insurance or protective bypass is crucial for next steps of surgery and protection of brain tissue. We present the cohort of patients who were treated at our neurosurgical department between 2012 and 2022. Overall, 13 patients were included, 6 women and 7 men. The locations of aneurysm were internal carotid artery in 8 cases, middle cerebral artery in 4 cases, posterior inferior cerebellar artery in 1 case. In 10 cases aneurysms were incidentally detected, in 3 cases it was associated with subarachnoid hemorrhage, 5 of aneurysms were gigantic and in 2 cases was blister type. The treatment was specific for each aneurysm including EC-IC bypass in every patient in this study. The aim is presentation of unique EC-IC bypass usage as a part in the treatment of complex brain aneurysm.