

Incidence of in-hospital asymptomatic cerebral infarction detected with brain MRI after carotid artery stenting using distal protection devices

¹Saitama Cardiovascular Respiratory Center

Shinya Fujii¹, Tetsuya Ishikawa¹, Haruka Kimura¹, Satoshi Itou¹, Jyoichi Tsutsumi¹, Takuro Fujii¹, Akimichi Murakami¹, Teruhiko Suzuki¹, Yosuke Nakano¹, Takashi Miyamoto¹, Makoto Mutoh¹

The incidence of peri-procedural complications after carotid artery stenting (CAS) needed to be further reduced. In the present study, we retrospectively examined the incidence of in-hospital asymptomatic cerebral infarction (CI) detected by brain MRI during the hospitalization after the CAS procedure. In our single center, CAS was done in 62 patients during from 2003 January to 2012 July with the distal protection method using the distal ballooning device (PercuSurge) or filter device. Of these, cerebral hemorrhage owing to the hyper-perfusion phenomenon 2 days after CAS was observed in 1 case (0.016%), and the brain MRI was undergone in 42 patients (67.7%). Asymptomatic CI was detected by the evidence of high intensity area with diffusion weighted image of brain MRI after during hospitalization, and was observed in 17 cases without clinical manifestation among 42 patients (39.5%). Thus, there was a relative percentage of asymptomatic CI after the CAS procedure despite using the distal protection devices when it was detected by brain MRI during hospitalization.