

学位論文の要旨

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<p>主論文の題名</p> <p>Preventive effects of cilostazol against the development of shunt-dependent hydrocephalus after subarachnoid hemorrhage</p> <p>主論文の要旨</p> <p>OBJECTIVE: Chronic hydrocephalus develops in association with the induction of tenascin-C (TNC), a matricellular protein, after aneurysmal subarachnoid hemorrhage (SAH). The aim of this study was to examine if cilostazol, a selective inhibitor of phosphodiesterase Type III, suppresses the development of chronic hydrocephalus by inhibiting TNC induction in aneurysmal SAH patients.</p> <p>METHODS: The authors retrospectively reviewed the factors influencing the development of chronic shunt-dependent hydrocephalus in 87 patients with Fisher Grade 3 SAH using multivariate logistic regression analyses. Cilostazol (50 or 100 mg administered 2 or 3 times per day) was administered from the day following aneurysmal obliteration according to the preference of the attending neurosurgeon. As a separate study, the effects of different dosages of cilostazol on the serum TNC levels were chronologically examined from Days 1 to 12 in 38 SAH patients with Fisher Grade 3 SAH.</p> <p>RESULTS: Chronic hydrocephalus occurred in 12 of 36 (33.3%), 5 of 39 (12.8%), and 1 of 12 (8.3%) patients in the 0 mg/day, 100 to 200 mg/day, and 300 mg/day cilostazol groups, respectively. The multivariate analyses showed that older age (OR 1.10, 95% CI 1.13–1.24; p = 0.012), acute hydrocephalus (OR 23.28, 95% CI 1.75–729.83; p = 0.016), and cilostazol (OR 0.23, 95% CI 0.05–0.93; p = 0.038) independently affected the development of chronic hydrocephalus. Higher dosages of cilostazol more effectively suppressed the serum TNC levels through Days 1 to 12 post-SAH.</p> <p>CONCLUSIONS: Cilostazol may prevent the development of chronic hydrocephalus and reduce shunt surgery, possibly by the inhibition of TNC induction after SAH.</p>			