Cerebral Aneurysm

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EDITORIAL

Cerebral aneurysm, a common neurological disorder, has an abrupt onset and is often lethal by subarachnoid hemorrhage. Once a cerebral aneurysm ruptures, almost half of all patients will have a severe outcome. Neurological deficits last a long time and the patient costs are high [1,2]. On the other hand, methods of diagnosis and treatment are advancing rapidly.

Diagnosis became possible due to non-invasive techniques such as MRI and 3DCTA [3]. However, it is not clear for whom examination is recommended or how to determine the examination interval. Some physicians have attempted to examine these issues [4,5]. The natural course of unruptured aneurysms was statistically clarified [6-8], but individual rupture of aneurysms cannot be exactly predicted. Thus, physicians should elucidate how to treat this disorder with the best cost performance.

The treatment results of ruptured and unruptured aneurysms are improving [9,10]. Clipping and coil embolization are the two major treatment methods. Unfortunately, not all aneurysm patients are able to receive treatment by skilled neurovascular surgeons or endovascular surgeons because of their residence or emergency. Regarding selection of treatment for ruptured aneurysms, ISAT clarified that coil embolization results in statistically better outcomes than clipping [11]. Treatment by coil embolization is effective for prevention of rupture of unruptured aneurysms [12]. However, for individual aneurysms, some are more suited to clipping, i.e. large aneurysms [13]. From an ethical viewpoint, young neurovascular surgeons and endovascular surgeons have less training in the operation room, and how young surgeons should undergo clipping and endovascular coiling training is a growing concern [14-16].

We physicians need to solve these problems. Thus, we published this special issue on cerebral aneurysms in the Journal of Neurological Disorders and Stroke.

REFERENCES
