

Endovascular Surgery

1. Staffs and Students (December 2010)

Professor:	Shigeru Nemoto
Attending:	Yoshikazu Yoshino
Secretary:	Yoko Yanagida

2. Purpose of Education

There are various attracting subjects in the field of clinical or basic research. It is essential to acquire the sufficient knowledge and insight into the pathological conditions as well as normal functions of the vascular system, which will directly benefit for the improvement of clinical results. Main educational purpose of Endovascular Surgery in the graduate course is to provide students opportunity to acquire the proper technique as well as the broad knowledge, and to nurture the mind of exploration.

3. Research Subjects

Our experimental research program is objected to elucidate unsolved questions derived from daily clinical experience. To treat vascular diseases of central nervous system, facial and head-neck lesions, we need to understand detailed vascular anatomy, accurate function of these organs and exact pathophysiology of each disease. Our essential research target is the hemodynamics in the vascular diseases of these lesions. Especially we are interested in the integration of the fluid engineering technology into the endovascular field in an effort to open a new frontier of endovascular treatment.

4. Clinical services

Endovascular Surgery is a clinical department dealing with various vascular diseases of central nervous system, spinal cord, facial and head-neck lesions including tumors, congenital malformation, and functional disorders.

5. Publications

Original Articles

1. Shojima M, Nemoto S, Morita A, Miyata T, Namba K, Tanaka Y, Watanabe E. Protected endovascular revascularization of subacute and chronic total occlusion of the internal carotid artery. *AJNR Am J Neuroradiol.* 2010 Mar;31(3):481-6.
2. Shojima M, Nemoto S, Morita A, Oshima M, Watanabe E, Saito N. Role of shear stress in the blister formation of cerebral aneurysms. *Neurosurgery.* 2010 Nov;67(5):1268-74.
3. Takeuchi S, Takasato Y, Masaoka H, Hayakawa T, Otani N, Yoshino Y, Yatsushige H, Sugawara T. Progressive subdural hematomas after epidural blood patch for spontaneous intracranial hypotension. *J Anesth.* 2010 Apr;24(2):315-6. Epub 2010 Feb 2.
4. Takeuchi S, Takasato Y, Masaoka H, Hayakawa T, Otani N, Yoshino Y, Yatsushige H, Sugawara T. Middle cerebral artery occlusion resulting from hypereosinophilic syndrome. *J Clin Neurosci.* 2010 Mar;17(3):377-8. Epub 2010 Jan 13
5. Takeuchi S, Takasato Y, Masaoka H, Hayakawa T, Otani N, Yoshino Y, Yatsushige H, Sugawara T. Hemorrhagic encephalitis associated with Epstein-Barr virus infection. *J Clin Neurosci.* 2010 Jan;17(1):153-4. Epub 2009 Dec 9.
6. Yatsushige H, Takasato Y, Masaoka H, Hayakawa T, Otani N, Yoshino Y, Sumiyoshi K, Sugawara T, Miyawaki H, Aoyagi C, Takeuchi S, Suzuki G. Prognosis for severe traumatic brain injury patients treated with bilateral decompressive craniectomy. *Acta Neurochir Suppl.* 2010;106:265-70.
7. Otani N, Takasato Y, Masaoka H, Hayakawa T, Yoshino Y, Yatsushige H, Miyawaki H, Sumiyoshi K, Sugawara T, Chikashi A, Takeuchi S, Suzuki G. Surgical outcome following a decompressive craniectomy for acute epidural hematoma patients presenting with associated massive brain swelling. *Acta Neurochir Suppl.* 2010;106:261-4.
8. Otani N, Takasato Y, Masaoka H, Hayakawa T, Yoshino Y, Yatsushige H, Miyawaki H, Sumiyoshi K, Sugawara T, Chikashi A, Takeuchi S, Suzuki G. Significance of monitoring the initial intracranial pressure on hematoma irrigation with trephination therapy for acute subdural hematomas in critical conditions. *Acta Neurochir Suppl.* 2010;106:257-60.