

# **Effect of arachnoid plasty using fibrin glue membrane after clipping of ruptured aneurysm on the occurrence of complications and outcome in the elderly patients.**

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## **Abstract:**

**Background.** In elderly patients with aneurysmal subarachnoid hemorrhage (SAH), complications including vasospasm, subdural effusion, and late hydrocephalus, are liable to occur even after aneurysmal surgery. We examined prospectively the efficacy of arachnoid plasty using fibrin glue membrane during surgery of ruptured aneurysms in the elderly patients for preventing complications. The effects on the modified Rankin scale (mRS) and the Glasgow outcome scale (GOS) 3 months after SAH were noted. **Methods.** Total of 31 patients aged more than 70 years selected from a consecutive series of patients with aneurysmal SAH, were divided into two groups alternately, a group with arachnoid plasty (n = 16) and a control group without arachnoid plasty (n = 15). Statistical analyses were performed to assess relationships among various clinical and neuroradiological variables, especially between arachnoid plasty and occurrence of symptomatic vasospasm, subdural effusion, late hydrocephalus, or outcome such as mRS and GOS 3 months after onset. **Findings.** Statistical analyses revealed that arachnoid plasty were associated with late hydrocephalus and subdural effusion negatively, but with better mRS at 3 months after SAH. A tendency to be associated with less frequent symptomatic vasospasm was also noted. **Conclusion.** Arachnoid plasty using fibrin glue is suggested to be effective in preventing complications associated with SAH and aneurysmal surgery. A better outcome in the elderly patients can be achieved. © Springer-Verlag 2006.