

Summary

1. Based on the results of our group of patients treated with a stent we conclude that the stability of aneurysms is sufficient. By the end of the year 2005 we have followed-up 33 (84.6%) patients from the group of 39 living patients. The fact of incidence of only three overgrown aneurysms is a great promise for the future.

2. Self-expandable stents are more flexible and can be delivered into almost all localizations of aneurysms. The relative contraindication for the stent implantation is kinking of the internal carotid artery. There is no problem to get the stent into the right position, but the expansion of the stent is almost impossible. Balloon expandable stents or stentgrafts are not a solution for the tortuous anatomy of the vascular bloodstream and should not be used. It is also recommended to use coaxial system of a long sheath and long guiding catheter for the support of the stent delivery.

3. Even if the number of per-procedural complications (14.5%) is relatively high, thanks to immediate intervention in the neurolab or in the department of the intensive acute care complications have been successfully solved in almost all cases. The mortality and morbidity of the procedures 4.1% is not higher than M/M of published cases.

4. This type of neurointerventional procedures should be performed only in the neurovascular centers with high quality of neurosurgery and radiology background, where the aneurysm treatment is a regular procedure. The necessary complex and intensive approach to patients is the only way for the minimization of possible procedural complications.

5. We have used stents for the treatment of wide-neck aneurysms in 3.8% patients HH 0, and in 20% patients after SAH – HH 1-HH 3. This number is still lower than morbidity and mortality in ISAT study. We can confirm that this type of treatment is possible to use for the treatment of acutely ruptured aneurysms.

6. For the case of acutely ruptured aneurysms, where the dual antiaggragate therapy is not possible before the procedure, we recommend to apply bolus of eptifibatida during the procedure. It is necessary to mention that even if dual antiaggragate therapy is used, the instent thrombus formation cannot be fully prevented.

7. The results of our work confirm that use of intracranial stents for the treatment of intracranial aneurysms extends possibilities of the endovascular treatment to aneurysms, which were earlier contraindicated for the endovascular treatment. It should be mentioned that we still face the problem of technical limitations and the problem of thrombogenicity, which are associated with higher risk of per-procedural and post-procedural complications.