Durability of Treatment of Intracranial Aneurysms With Hydrocoils Is Not Different From Standard Platinum Coils

To the Editor:

With interest we read the article by Gaba et al1 about the use of Hydrocoils for 50 intracranial aneurysms. The results were compared with a matched historical control group of 57 aneurysms treated with standard coils. We have some concerns about the methodology. First of all, aneurysm volume assessment assuming the aneurysm to be an ellipsoid is notoriously inaccurate2,3 and may account for the reported volumetric percentage occlusion of over 100% in more than half of the aneurysms. In addition, no standard angiographic follow-up interval to detect reopening was available and follow-up interval for aneurysms treated with standard coils was significantly longer. More aneurysms treated with standard coils were coiled with balloon remodelling (21 versus 7) indicating that more of these aneurysms had wide necks which may have influenced reopening rate.

A dazzling amount of confusing data are presented and interpreted toward better results of Hydrocoil. In fact, the bottom line of durability of treatment is the retreatment rate at follow-up, which is influenced by many other factors besides aneurysm volume and volumetric occlusion such as follow-up interval, proportion of partially thrombosed aneurysms and proportion of wide-necked aneurysms. A difference in retreatment of 4 of 41 aneurysms treated with Hydrocoil versus 7 of 41 aneurysms treated with standard coils is not significant, and both numbers are in the expected range of platinum coils.4,5 If these nonsignificant differences make the authors conclude that Hydrocoils are superior, a similar way of interpretation of results would conclude a higher complication rate (4% versus 0%) in aneurysms treated with Hydrocoils. One may wonder why such an effort is made to make the reader believe that results of Hydrocoils are better. Possibly the answer lies in the acknowledgments and colophon.

Disclosures

None.

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Stroke. 2006;37:2874; originally published online October 19, 2006; doi: 10.1161/01.STR.0000248207.87405.32

Stroke is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
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Print ISSN: 0039-2499. Online ISSN: 1524-4628

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