Thromboembolic Complications of Endovascular Aneurysm Occlusion Using Matrix Detachable Coils

To the Editor:

We read with great interest the article by Taschner et al.1 The authors presented their philosophy in case selection for aneurysm occlusion using matrix detachable coils and their clinical results. Of the 25 total procedures, 5 were complicated with a thrombus formation in the parent artery during the intervention. One patient was clinically symptomatic with an increased dysarthria and hemiparesis immediately after the treatment, with complete symptom resolution within a few days. In 1 patient, the embolization had to be stopped because of the thromboembolic complications before complete occlusion of the aneurysm.

The reported thrombus formation rate at the neck of cerebral aneurysm using guglielmi detachable coils was up to 4.3% (9/210).2 The thrombus formation rate in this matrix coil embolization series was 4 times higher and difference was statistically significant using Fisher exact test ($P = 0.009$).

The authors had not specified their heparinization regimen, but it would be presumed that the procedures were done under full heparinization. It would be crucial to know about any possible contributing factors, such as coil protrusion, to account for the difference. Bioactive copolymer coating was designed to accelerate clot maturation and aneurysm fibrosis. The effect of protruding matrix coil was not reported previously. Clinician should be aware of this possible complication, and prompt treatment with platelet glycoprotein IIb-IIIa inhibitor3 or systemic heparin may be necessary.

George K.C. Wong, FRCSed(SN)
W.S. Poon, FRCS
Division of Neurosurgery
Prince of Wales Hospital
Chinese University of Hong Kong
Hong Kong, China

Thromboembolic Complications of Endovascular Aneurysm Occlusion Using Matrix Detachable Coils
George K.C. Wong and W.S. Poon

*Stroke*. 2006;37:1363; originally published online May 4, 2006;
doi: 10.1161/01.STR.0000222985.37253.37

*Stroke* is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2006 American Heart Association, Inc. All rights reserved.
Print ISSN: 0039-2499. Online ISSN: 1524-4628

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://stroke.ahajournals.org/content/37/6/1363

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Stroke* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to *Stroke* is online at:
http://stroke.ahajournals.org/subscriptions/