Thunderclap Headache without Subarachnoid Hemorrhage Associated with Growth of Previously Partially Occluded Aneurysms Using Guglielmi Detachable Coils

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Purpose
To present the association between thunderclap headache in a patient without subarachnoid hemorrhage and growth of aneurysms which have been previously partially occluded with GDC coils.

Materials & Methods
Two patients, a 46-year-old woman with a right posterior communicating aneurysm and a 39-year-old woman with a right anterior cerebral artery aneurysm both presented for endovascular embolization of ruptured aneurysms both with Hunt and Hess grade 2 using Guglielmi detachable coils (GDC). Embolization in both was partial. The first woman presented 26 days after her embolization with sudden onset headache and diplopia almost similar in severity as the one when she presented with subarachnoid hemorrhage. The second woman presented 365 days after her embolization with headache of very severe pain intensity also almost as intense as the headache when she presented with subarachnoid hemorrhage but without neurologic deficit. Both women underwent CT, LP, and cerebral angiography.

Results
Neither woman demonstrated subarachnoid hemorrhage on CT or LP on the second presentation. Cerebral arteriograms on both patients demonstrated growth of the partially embolized aneurysm. One patient underwent surgical clipping of the regrown aneurysm and the other is scheduled for embolization.

Conclusion
Thunderclap headache following partial endovascular occlusion using GDC may represent growth of that aneurysm.