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**In Reply to Antiplatelet Therapy Prior to  
Temporary Stent-Assisted Coiling**

B. Gory, F. Signorelli and F. Turjman

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## In Reply to Antiplatelet Therapy Prior to Temporary Stent-Assisted Coiling

**W**e would like to thank Drs Almekhlafi and Goyal for their comments<sup>1</sup> concerning our article, “Temporary Solitaire Stent-Assisted Coiling: A Technique for the Treatment of Acutely Ruptured Wide-Neck Intracranial Aneurysms.”<sup>2</sup>

Almekhlafi et al noticed that we performed the procedures without preadministering antiplatelet therapy, and they would like to caution against the wide adoption of this technique without pretreatment with antiplatelet agents. They reported the endovascular treatment of 10 aneurysms (6 unruptured and 4 ruptured) in 8 patients by using temporary stent-assisted coiling. One of their patients with an unruptured aneurysm was not pretreated with dual antiplatelet therapy and presented with a procedural in-stent thrombosis with no clinical sequelae.

An antiplatelet regimen is usually administered before stent placement in selective cases. However, in our article,<sup>2</sup> we reported our experience in a different situation (acutely ruptured aneurysms). In this setting, to the best of our knowledge, it seems clear that adverse events happen more commonly and clinical outcomes are likely to be worse than those achieved without stent assistance<sup>3</sup>; thus, we did not use antiplatelet therapy in our series. Recently, Bechan et al<sup>4</sup> compared the rate of stent-placement complications in acutely ruptured versus unruptured aneurysms, and they have shown that the morbidity and mortality increased. Application of dual antiplatelet therapy in stent-assisted coiling of acutely ruptured aneurysms is associated with an increased risk of hemorrhagic complications following shunt placement,<sup>5</sup> especially in middle cerebral artery and anterior communicating artery aneurysms.<sup>6</sup> In our series, 4 of the 8 patients underwent emergent shunt placement and no hemorrhagic complication was noted.

As Drs Almekhlafi and Goyal noted, temporary stent-assisted coiling could be a helpful technique; however, it should be considered only when other endovascular techniques are not feasible, especially in the setting of acute ruptured aneurysms. The current

literature does not support using antiplatelet therapy in this setting because it associated with worse prognosis.

### REFERENCES

1. Almekhlafi MA, Goyal M. **Antiplatelet therapy prior to temporary stent-assisted coiling.** *AJNR Am J Neuroradiol* 2014;35:E6 [CrossRef Medline](#)
2. Signorelli F, Gory B, Turjman F. **Temporary Solitaire stent-assisted coiling: a technique for the treatment of acutely ruptured wide-neck intracranial aneurysms.** *AJNR Am J Neuroradiol* 2014;35:984–88 [CrossRef Medline](#)
3. Bodily KD, Cloft HJ, Lanzino G, et al. **Stent-assisted coiling in acutely ruptured intracranial aneurysms: a qualitative, systematic review of the literature.** *AJNR Am J Neuroradiol* 2011;32:1232–36 [CrossRef Medline](#)
4. Bechan RS, Sprengers ME, Majoie CB, et al. **Stent-assisted coil embolization of intracranial aneurysms: complications in acutely ruptured versus unruptured aneurysms.** *AJNR Am J Neuroradiol* 2015 Sep 24. [Epub ahead of print] [CrossRef Medline](#)
5. Kung DK, Policeni BA, Capuano AW, et al. **Risk of ventriculostomy-related hemorrhage in patients with acutely ruptured aneurysms treated using stent-assisted coiling.** *J Neurosurg* 2011;114:1021–27 [CrossRef Medline](#)
6. Yang P, Zhao K, Zhou Y, et al. **Stent-assisted coil placement for the treatment of 211 acutely ruptured wide-necked intracranial aneurysms: a single-center 11-year experience.** *Radiology* 2015;276:545–52 [CrossRef Medline](#)

 **B. Gory**

FHU IRIS, Department of Interventional Neuroradiology  
Hôpital Neurologique Pierre Wertheimer, Hospices Civils de Lyon  
Lyon, France

 **F. Signorelli**

Department of Neurosurgery  
Hôpital Neurologique Pierre Wertheimer, Hospices Civils de Lyon  
Lyon, France

Department of Experimental and Clinical Medicine

University Magna Graecia

Catanzaro, Italy

 **F. Turjman**

FHU IRIS, Department of Interventional Neuroradiology  
Hôpital Neurologique Pierre Wertheimer, Hospices Civils de Lyon  
Lyon, France

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