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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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We would like to thank Drs Almekhlafi and Goyal for their comments[1] concerning our article, "Temporary Solitaire Stent-Assisted Coiling: A Technique for the Treatment of Acutely Ruptured Wide-Neck Intracranial Aneurysms."[2]

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,[2] 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[3]; thus, we did not use antiplatelet therapy in our series. Recently, Bechan et al[4] 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,[5] especially in middle cerebral artery and anterior communicating artery aneurysms.[6] 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.

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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 Græcia
Catanzaro, Italy
F. Turjman
FHU IRIS, Department of Interventional Neuroradiology
Hôpital Neurologique Pierre Wertheimer, Hospices Civils de Lyon
Lyon, France