Re: ‘Long-term Results of a Randomized Controlled Trial Analyzing the Role of Systematic Pre-operative Coronary Angiography before Elective Carotid Endarterectomy in Patients with Asymptomatic Coronary Artery Disease’

We wish to thank Dr. Galyfos and his associates for their interesting and helpful comments. The fact that patients undergoing systematic coronary angiography/percutaneous coronary intervention (PCI) were treated on a dual antiplatelet regimen, whereas patients not undergoing coronary angiography were treated under a single antiplatelet regimen, was clearly mentioned in both of our papers as a potential source of bias. Nonetheless, even taking into account the hypothesis that, according to Dr. Galyfos’s own references, a dual antiplatelet regimen could have reduced the incidence of post-operative myocardial infarction (MI). This would have resulted in, at most, a 20% relative reduction in the MI rate, therefore from 9% to 7% in the control group vs. none in the PCI group, which would still represent a significant difference in favor of prophylactic coronary revascularization. Furthermore, at discharge from the hospital, all patients in both study groups received a dual antiplatelet regimen and our most updated results have shown that pre-operative coronary angiography PCI was correlated with a significant reduction in late MI. The hypothesis of a bias related to different medical regimens is therefore inconsistent. The rate of restenosis after PCI was not included among the secondary endpoints of the study because to schedule a coronary angiogram at regular time intervals in the absence of clinical symptoms of myocardial ischemia with a standard, normal cardiac work up, and with normal physical activity did not appear justified. Only one case of symptomatic re-stenosis of a previous PCI was observed during the entire study period, and this event did not affect the significant differences between the two study groups in terms of primary outcome. We obviously cannot rule out the possibility that a few, asymptomatic PCI restenoses might have occurred, but they did not translate into clinically evident MIs.

Finally, Dr. Galyfos and his associates suggest that limiting our cardiac monitoring to electrical changes and serum troponin level to the first post-operative day may have led us to miss out on some asymptomatic MI occurring beyond that period. However, since all the patients received strict cardiac follow up throughout the study, it seems highly unlikely that such events would not have translated into late ECG changes. Nonetheless, even assuming that this was the case, and according to Dr. Galyfos’s own studies showing that asymptomatic post-operative myocardial ischemia is associated with late myocardial events independently from cardiac risk, we can reasonably conclude that these asymptomatic and undetected post-operative myocardial ischemic events would be evenly distributed between the two groups, without modifying the statistically significant higher prevalence of MI in the non-coronary angiography group.

In any event, this type of speculation has little or no effect on the main results of our study, in which it has been shown that systematic pre-operative angiography followed by PCI or coronary artery bypass grafting, when needed, significantly reduces the incidence of post-operative and late MI, with fewer cardiac deaths and better late survival for our patients.

REFERENCES


G. Illuminati

“F. Durante” Department of Surgical Sciences, University “La Sapienza”, Rome, Italy

J.-B. Ricco

Department of Vascular Surgery, University of Poitiers, Poitiers, France

*Corresponding author. Department of Vascular Surgery, University of Poitiers, Poitiers, France.

Email-addresses: jeanbaptistericco@gmail.com, jbricco2@mac.com (J.-B. Ricco)