What is the current role of the new antiplatelet agents or double antiplatelet therapy in stroke prevention?

Paulo Castro Chaves¹²

From the Porto University Center of Medicine Stroke Update Course, Porto, Portugal 20–21 June 2017.

Abstract

Stroke is one of the main causes of death and neurological disability and is also a major cause of dementia and age-related cognitive decline in the adult. Guidelines recommend urgent assessment and treatment of stroke patients, including risk factor control, carotid endarterectomy or stenting, and immediate oral anticoagulation for documented atrial fibrillation or aspirin therapy for most other cases. The International Stroke trial (IST) found that acute ischemic stroke patients who received 300 mg of aspirin within 48 h of experiencing symptoms had significant reductions (3.9% vs. 2.8%) in recurrence of ischemic stroke as evaluated over a period of 14 days. Emerging studies suggest that early administration of dual antiplatelet therapy may be better than monotherapy for prevention of early recurrent stroke and cardiovascular outcomes in acute ischemic stroke and transient ischemic attack (TIA). There is also ongoing research on novel antiplatelet agents, with the aim of decreasing recurrent stroke rates as well as bleeding events. In fact, few randomized trials have tested aspirin directly against other antiplatelet agents for the treatment of ischemic stroke or TIA in the acute period. However, in the SOCRATES trial of over 13,000 subjects with acute ischemic stroke or TIA, ticagrelor monotherapy was not significantly better than aspirin monotherapy (both started within 24 hours of symptom onset) for the 90-day composite endpoint of stroke, myocardial infarction, or death. There are new developments expected in the shortcoming that address future possibilities for antiplatelet treatment for ischemic stroke and that may ultimately contribute to risk reduction. All these aspects will be reviewed in the current presentation.