From cardioembolic to atheroembolic stroke: challenges of triple antithrombotic therapy

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Abstract

Introduction: The introduction of triple antithrombotic therapy on an elderly patient is always an arduous decision to make, particularly if the patient is a Jehovah’s witness. In the event of a much needed carotid revascularization, it might be the only choice.

Case Report: An 88-year-old male was admitted to our stroke unit. During the previous year he had multiple cerebrovascular events—the first was a cardioembolic stroke (right anterior circulation) due to atrial fibrillation (AF), from which he fully recovered. Rivaroxaban was introduced. Two right carotid artery territory transient ischemic attacks (TIAs) followed, and acetylsalicylic acid was added, as the patient had mild bilateral internal carotid artery (ICA) stenosis. On the event of a third TIA of indeterminate aetiology, anticoagulation was switched to apixaban and a new carotid study was obtained. It showed moderate right ICA stenosis and severe left ICA stenosis (>90%). Shortly after, he was admitted with new onset motor aphasia. During hospitalization, episodes of haemodynamic cerebral hypoperfusion were observed. After multidisciplinary discussion, triple antithrombotic therapy was started and left ICA stenting was scheduled. In the first month post-stenting, apixaban dose was reduced. After a month, clopidogrel was stopped and apixaban returned to full dose.

Discussion: This case presents the great variability and complexity of cerebrovascular disease and its aetiologies —cardioembolic, atheroembolic and haemodynamic hypoperfusion syndrome. There are no guidelines on how to manage these cases, and so the team decided on a strategy similar to the one used in coronary stenting in the presence of AF.

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