

LETTERS

Missing deadly etiologies in stroke triage: “What else could this be?”

We thank Dr. Doig and colleagues for their excellent review of thrombotic microangiopathies, including thrombotic thrombocytopenic purpura (TTP), drawing on insights from an unfortunate case of a young man who presented with acute neurologic symptoms that initially resulted in a telephone consult with the on-call stroke neurologist.¹ Increasingly, TTP is being recognized as an important, uncommon cause of ischemic stroke in young adults; it is worth noting that none of the patients in a recent series of 17 cases had the classical pentad of signs suggestive of TTP.² As in the case reported by Dr. Doig and colleagues, patients with TTP often have unremarkable computed tomography (CT) scans of the head and CT angiography (CTA) of the head and neck. It is magnetic resonance imaging — not reported in this case and often not feasible in a peripheral hospital or overnight emergency department setting — that reveals multiple infarcts on diffusion-weighted imaging.³ These realities make it very easy for a triaging stroke physician to miss TTP despite it being a potentially deadly cause of neurologic symptoms.

Currently CT/CTA plays a central role in how stroke teams triage cases while on call, particularly cases from “off-site” con-

sults.⁴ This practice is driven by our intense focus on not missing entities like large-vessel occlusions, critical stenoses, dissections, venous thromboses, or bleeds that would warrant transfer to a comprehensive stroke centre for emergent evaluation and/or treatment.

When CT/CTA is negative, the question we must ask is, “What else could this be?” This question necessarily requires us to hone in on possible causes that could be devastating to the patient if left untreated — sometimes for days — before they are potentially reviewed at the stroke or urgent neurology clinic. In cases strongly suspected to have a vascular etiology, including those with transient symptoms, a negative CTA often leads the physician to think about cardioembolic etiologies, the main “not-to-miss” diagnosis in the acute setting being endocarditis.⁵ Discussion of mimics like seizures or encephalitis often factors into these phone consults, as they would require further urgent neurologic evaluation; however, a critical review of bloodwork performed at the peripheral site rarely occurs beyond perhaps a quick mention of hyper- or hypoglycemia (a potential stroke mimic) or the patient’s anticoagulation status.

The article by Dr. Doig and colleagues highlights the tremendous potential value of spending an additional minute thinking about the patient’s blood counts. Even though the triaging stroke physician likely

would not drive the management of TTP, raising it as a possibility could make all the difference between life and death for a patient who is miles away.

Aravind Ganesh MD DPhil(Oxon)

Neurology resident, Department of Clinical Neurosciences, University of Calgary, Calgary, Alta.; associate fellow, Centre for Prevention of Stroke and Dementia, University of Oxford, Oxford, UK

Malavika Varma MBBS

Clinical director, Advanced Health Analytics (AHA Health Ltd), Calgary, Alta.

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