## LETTER TO THE EDITOR

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# **Prognosis of Cerebral Venous Sinus Thrombosis – Author Response**

Keywords: Cerebral venous sinus thrombosis, Stroke

We thank Dr Musee and Dr Kumar for their interest in our article and for sharing their own experience with cerebral venous sinus thrombosis (CVST) from a Neurological Intensive Care Unit in Tennessee, in the mid-south of the United States. 1,2 We also found of interest the contrast in the proportion of patients with pregnancy as the aetiology between our study, the study presented by Dr Musee and Kumar, and the International Study on Cerebral Vein and Dural Sinus Thrombosis (ISCVT).<sup>3</sup> This proportion was lowest in our study (5%), intermediate in the ISCVT (13.8%) and highest in the data from Tennessee (34.1%). When studying conditions as uncommon as CVST, selection bias is a major obstacle including that occurring from referral patterns. This is a challenge for all studies including international registries making it difficult to obtain truly population-based data. Our tertiary care hospital offers comprehensive services including cardiac, surgical, pediatric, transplant, trauma, neurological and neurosurgical, including a neurological intensive care unit. We are the only tertiary care centre and the only comprehensive stroke centre in the entire north of the province therefore have a fixed catchment area. However, we are not an obstetric centre despite having a neonatal intensive care unit. It is conceivable that referral patterns direct women with CVST in the puerperium to one of two other hospitals that offer obstetric services, postpartum care and neurological consultation leading to our low prevalence. The opposite phenomenon could be occurring at your centre in Nashville depending on the obstetric services vou offer. the number of obstetric hospitals within your referral base and the availability (or lack thereof) of other hospitals with similar expertise in the region. In regard to the thrombophilia workup we are in agreement, and it is accepted, that some tests are affected by the presence of anticoagulation although the genetic tests are not. Often, a stroke neurologist is able to take just a few minutes to draw investigations for thrombophilia prior to starting anticoagulation. Therefore, in many situations, the hypercoagulable battery results become available. This may not be possible in the neurological intensive care unit where patients

may come to you with anticoagulation already started but tests not necessarily drawn ahead of time. As pointed out, early levels of certain clotting factors such as protein C and S are still not reliable being affected by the presence of acute thrombosis. We thank you again for your thoughtful comments and perspective on this topic.

#### STATEMENT OF AUTHORSHIP

TJ, DA, and JK conceived of the research. TJ drafted and edited the manuscript. DA and JK provided critical review.

## CONFLICTS OF INTEREST

None.

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