

Letters

Cerebral venous thrombosis should be considered in a postpartum patient with headache and seizure

In a recent *CMAJ* Practice article, Causer and colleagues¹ described a young woman who presented with recurrent seizures and headache at 7 days postpartum. They provided a differential diagnosis for seizures in that setting, highlighting the need to consider general causes, as well as pregnancy-specific diagnoses. One critical diagnosis that would also be prudent to include in a differential of seizures and headache, especially for young females or patients in the peripartum period, is cerebral venous thrombosis (CVT).

Cerebral venous thrombosis refers to thrombosis of the intracranial venous vasculature, which can include the dural venous sinuses, deep venous system and cortical veins. It accounts for close to a third of pregnancy-associated strokes, with predisposition toward occurring at the end of pregnancy or within 6–8 weeks after delivery.^{2,3} Unlike more common causes of stroke, CVT often presents with nonfocal symptoms at onset, such as headaches or visual changes, that progress over time. Seizures affect more than one-third of patients with CVT at onset.⁴ Several risk factors have been linked to CVT, most pertinent to this case being the prothrombotic state provoked by the puerperium.

Separating CVT from the general umbrella of stroke when formulating a differential diagnosis is important for correct and timely diagnosis, as well as management. Cerebral venous thrombosis is often missed on a non-contrast computed tomography (CT) scan of the head or mag-

netic resonance (MR) imaging; the optimal imaging modality for diagnosis is contrast-enhanced MR venography or CT venography.⁵ Management is distinct from other stroke types; new Canadian Best Practice Guidelines are forthcoming in 2024.

Diagnosis of CVT is often delayed from symptom onset.^{6–8} The causes are multifactorial and may include the initially undifferentiated presentation of patients, underawareness of the disease, need for dedicated vascular neuroimaging and the predisposition of younger females — who often face diagnostic delays for stroke in general — to be affected by CVT.^{9,10} Reducing delays in diagnosing CVT is vital to facilitating timely initiation of appropriate treatment¹¹ and better outcomes.

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Competing interests: Thalia Field is the co-chair of the committee for the Canadian Best Practice Guidelines for Management of Cerebral Venous Thrombosis with the Heart and Stroke Foundation of Canada, and was the principal investigator for the SECRET Trial, which received in-kind study medication from Bayer Canada. She reports consulting honoraria for Bayer Canada, Roche Canada, HLS Therapeutics and AstraZeneca, and personal fees from the Canadian Medical Protective Association. She is on the board of DESTINE Health. No other competing interests were declared.

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