Young Woman Lost for Words Months After Stillbirth

Kate Kneisel is a freelance medical journalist based in Belleville, Ontario.

Case Studies > Neurology

— Coexisting headache, blurred vision and nausea offer diagnostic clues

by Kate Kneisel, Contributing Writer, MedPage Today March 10, 2022

A 30-year-old Ethiopian woman presented after 2-weeks of experiencing a global headache, along with blurred vision, dizziness, and nausea. She explained that since developing the headache, she has also had trouble finding words to express herself. Over-the-counter medications have not given any relief from her headache or other symptoms.

Her past medical history included delivering a dead fetus 2 months previously. She had no other history of previous stillbirth or miscarriage. She had not been diagnosed with diabetes, high blood pressure, or cardiac disease. She noted that she does not use oral contraceptives.

On physical examination, clinicians noted that her blood pressure was 130/70 mm Hg, pulse rate 92 beats per minute, respiratory rate 13 breaths per minute, and temperature 36.5°C (97.7°F).

Clinicians performed a neurological assessment. The patient was fully conscious and oriented; her Glasgow coma score was 15/15; and examination of her cranial nerves, motor, and sensory functioning produced no remarkable findings. An ophthalmological examination of the fundus identified grade 2 papilledema affecting both eyes.

Cognitive assessment of the patient using a 60-second word generating test pointed to significantly affected performance; she was able to name only one wild animal in 60 seconds.

The other aspects of the patient's language skills -- including fluency, comprehension, repetition, writing, and reading -- were normal. Results of brain imaging were suggestive of cerebral venous thrombosis (CVT): magnetic resonance imaging (MRI) revealed inferior left temporoparietal ischemia and magnetic resonance venography (MRV) showed thrombosis of the left transverse and sigmoid sinus along with corresponding cortical veins.

Findings of routine laboratory tests were unremarkable. The patient declined to have further recommended assessments due to financial difficulty, thus clinicians were not able to perform detailed thrombophilic workups such as factor V, protein C, and protein S.

Clinicians confirmed their diagnosis of CVT and admitted the patient to the medical ward. She started bridging anticoagulation with heparin 17,500 IU subcutaneously twice a day for 4 days, followed by warfarin 5 mg daily.

After 7 days in hospital, the patient's symptoms began to improve and she was discharged home with instructions to continue oral anticoagulation treatment.

Medical News from Around the Web

At a follow-up assessment 1 month later, she reported that her headache was resolved and her difficulties with finding words had improved considerably, which clinicians confirmed using the 60-second word generating test.

On her second follow-up at 6 months, clinicians noted complete resolution of her clinical signs and symptoms, although her financial constraints precluded follow-up MRI and MRV assessments. Clinicians discontinued the oral anticoagulation at that point, based on their suspicion that her CVT had been due to transient risk factors, such as being postpartum.

Discussion

Clinicians reporting this case of a patient who developed reversible anomia as a complication of cerebral venous thrombosis noted that timely diagnosis and treatment is vital for a benign prognosis.

They explained that this thrombosis of the cerebral veins and sinuses is uncommon and easily misdiagnosed. Typical clinical features of CVT include focal cerebral edema, venous cerebral infarction, seizures, and intracranial hypertension.

It may occur during the postpartum period "in association with inappropriate perinatal care, metabolic derangements, and infections associated to childbirth," the case report authors noted. Peripartum-associated CVT is reported to occur in 11.6 per 100,000 deliveries.

Overall, CVT is a rare and potentially deadly type of stroke – affecting an estimated 5 per 1 million people, often females and younger women (mean age of 30–40 years). Without appropriate treatment, 4.3% of patients die during the acute phase of CVT.

Risk factors for CVT include "hereditary thrombophilia, acquired hypercoagulable, and hyperviscosity states such as hyperhomocysteinemia, antiphospholipid antibody syndrome, Behcet's disease, and hematological disorders," authors noted, adding that it has also been associated with pregnancy and with the early post-partum period, as well as with oral contraceptive use.

Case authors noted that while they attributed this case of CVT to transient postpartum effects, other researchers have linked the condition to protein C and protein S deficiency and to oral contraceptive usage. They acknowledged that their report was limited by the lack of extensive thrombophilic workup, due to the patient's financial circumstances.

From 80% to 90% of cases of CVT present with headache; anomia is observed less frequently, they wrote, citing the only two other reports of isolated anomia in patients with

CVT, one in a 52-year-old woman.

In a 1985 review of 38 cases of CVT, the most frequent signs were headache (74%) and papilledema (45%). Among focal neurological deficits, the most common was hemiplegia (34%), followed by seizures (29%), confusion or coma (26%), and dysphagia (1%).

"In the present case, the presence of headache, nausea, vomiting, and bilateral papilledema indicated increased intracranial pressure, which occurs secondary to obstruction of cerebrospinal fluid absorption," authors noted, which is consistent with findings of other research studies. Less commonly, word finding problems occur in CVT patients "when the parietotemporal region of the dominant hemisphere is affected as a result of thrombosis of transverse, superior, and sigmoid sinuses," the group explained.

The complex language function of naming requires involvement of numerous cortical region, authors wrote: "However, anomia is commonly associated with lesions involving the inferior temporal gyrus and adjacent parieto-occipital lobes of a dominant hemisphere," areas of the brain that are drained by the ipsilateral transverse sinus, cortical venues, and sigmoid sinuses.

In this case, as in the two others previously reported, anticoagulation therapy was associated with "significant clinical improvement including reversal of the anomia."

Disclosures

The case report authors noted no conflicts of interest.