Sagittal sinus thrombosis in puerperium

Dear Editor,

Postpartum headache is a very common complaint and it is not uncommon for an obstetrician to prescribe analgesics in such cases. This case highlights that rare etiology like cortical venous sinus thrombosis (CVST) should be kept in mind while dealing with persistent postpartum headache so as to prevent catastrophic complications.

Herein, we present a case of 23 years, para 3 live 3 (P3L3) admitted on postpartum day 15 with complaints of fever, headache, and vomiting for the last 4 days. She had a history of home vaginal delivery followed by postpartum hemorrhage 15 days back. She presented with throbbing headache in the frontal, parietal, and temporal regions. There was no history of seizures, loss of consciousness, bowel or bladder symptoms, neck pain, visual blurring, head injury, ear discharge, cough, breathlessness, chest pain, and foul-smelling vaginal discharge.

On examination, she was drowsy and severely anemic. Systemic, vaginal, and fundus examination was normal.

Her hemoglobin was 5 g%. Prothrombin time, activated partial thromboplastin time, and homocysteine level was normal. She was given two units of blood transfusion. Ultrasound of pelvis was normal. Computed tomography (CT) of brain showed venous infarct in bilateral frontal lobe with foci of hemorrhages suspicious of superior sagittal sinus thrombosis. Magnetic resonance imaging (MRI) of the brain with magnetic resonance venography (MRV) confirmed superior sagittal sinus thrombosis. Anticoagulant therapy in the form of low molecular weight heparin and warfarin was started and she is currently on follow-up [Figures 1 and 2].

The frequency of peripartum and postpartum cerebral venous sinus thrombosis is about 12 cases per 100,000 deliveries. Most common venous sinus to develop thrombosis (or probably detected commonly) is the superior sagittal sinus. Headache is the most frequent symptom, often mimics migraine but is persistently unilateral or diffuse and is not relieved after sleep, increases gradually over a couple of days, but can also start in a split second, mimicking intracerebral or subarachnoid hemorrhage. Presence of focal neurological signs often misleads the diagnosis as intracranial space occupying lesion.

MRV is the diagnostic modality of choice. Treatment of choice is anticoagulation. In the presented case, an urgent CT and MRI of the brain clinched the diagnosis. This case illustrates that clinical suspicion, supporting investigations, and a high index of suspicion are important in clinching the diagnosis.

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Sir,

Pure acute medial subtalar dislocation without any fractures is very rare and hardly reported in the literature. Such injuries are more likely to be open and associated with fractures of the surrounding foot bones. We report a very rare case of a closed subtalar dislocation without any related fractures treated with conservative treatment; a closed reduction with a cast immobilization. The result was satisfactory with a good functional recovery. We discuss in details the mechanism of such an injury and highlight the importance of prompt closed reduction and early mobilization to ensure a satisfactory long term outcome.

A 23-year-old man presented to the Emergency Department after sustaining a motorbike accident, exhibiting a severe pain and deformity in his left ankle. The clinical examination revealed an ankle fixed in plantar flexion with a bony prominence appreciable laterally [Figure 1a]. The dorsalis pedis and the posterior tibialis pulses were palpable. The radiological examination plainly showed a medial dislocation of both the talonavicular and talocalcaneal joints without associated fractures [Figure 1b]. Closed reduction under a general anesthesia was performed by manual foot traction, with application of firm digital pressure over the head of the talus as the ankle was plantar flexed and then dorsiflexed. The reduction was completed with an audible clunk, and the ankle was immobilized in a short leg cast. Post-reduction films showed good realignment and a computed tomography (CT) scan did not reveal any further occult injuries [Figure 2]. The patient was mobilized with crutches on the third day, with no weight-bearing. Passive ankle motion was permitted after cast removal.

At 4 weeks the patient initiated partial weight-bearing with crutches and full weight-bearing was allowed at 2 months. At 32-months follow-up, the patient was autonomous and active, joint motion and full weight-bearing were painless without instability at the left ankle on joint stress tests.

Subtalar dislocation can be defined as simultaneous dislocation of both the talonavicular and the talocalcaneal joints without a major fracture of the talus.

1. Coutinho JM, Ferro JM, Canhão P, Barinagarrementeria F, Cantú C, Bousser MG, et al. Cerebral venous and sinus thrombosis in women. Stroke 2009;40:2356-61.
2. Schaller B, Graf R. Cerebral venous infarction: The pathophysiologial concept. Cerebrovasc Dis 2004;18:179-88.
3. Bousser MG, Chiras J, Bories J, Castaigne P. Cerebral venous thrombosis-a review of 38 cases. Stroke 1985;16:199-213.
4. de Bruijn SF, Stam J, Kappelle LJ. Thunderclap headache as first symptom of cerebral venous sinus thrombosis. CVST Study Group. Lancet 1996;348:1623-5.
5. Fink JN, McAuley DL. Cerebral venous sinus thrombosis: A diagnostic challenge. Intern Med J 2001;31:384-90.