Meningiomas are the most frequently reported intracranial extra‑axial tumors, accounting for nearly 30% of all primary brain neoplasms, and the falx cerebri is one of the most frequent sites of its occurrence. On nonenhanced T1-weighted images, most meningiomas have no signal intensity difference compared with cortical gray matter. Fibromatous meningiomas may be more hypointense than the cerebral cortex. On T2‑weighted images, the signal produced is variable. T2-weighted signal intensity is best correlated with both the histology and the consistency of the meningioma. In general, low-intensity portions of the tumor indicate a more fibrous and harder character (e.g., fibroblastic meningiomas). The similarity of location and the imaging characteristics in our patient with a fibrous xanthoma suggests that this entity should be considered as a rare differential diagnosis of a falcine meningioma.

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revealed aneurysmal SAH, and computed tomographic (CT) angiogram revealed bilateral ophthalmic segment internal carotid artery (ICA) aneurysms. Her initial electrocardiogram (ECG) revealed T wave depression in the V1 to V3 leads; her troponin I values (0.298 ng/mL) and creatine phosphokinase-MB values (38 U/L) were mildly elevated. Her ECG showed mild left ventricular hypertrophy, mid and distal anterolateral, inferolateral wall, distal interventricular septal, and distal anterior wall hypokinesia, with fair left ventricular systolic function. She never experienced chest pain despite these disproportionate findings on investigations. She remained hypotensive from the day of admission and throughout her hospital stay. Her neurological status improved within 2 days, and remained clinically asymptomatic thereafter. The noradrenaline ionotropic support initiated early, was tapered and stopped within three days. The cardiac regional wall motion abnormalities (RWMA) were more extensive than seen in the typical apical involvement observed in Takotsubu cardiomyopathy. Hence, an alternative diagnosis of NSC was considered. Given the high risk involved, her relatives were not willing for immediate surgery. She was managed conservatively for 2 weeks by euvolemia, and administered additional oral salt and a beta-blocker. She was clinically asymmetric during this period. The standard guidelines recommend nimodipine administration; however, as it resulted in severe hypotension, it was withheld during rest of her clinical course. After 2 weeks, she underwent a repeat echocardiogram, which revealed resolution of the RWMA. The ECG showed evolutionary deep, symmetrical T-wave inversions (cerebral T waves). She underwent coiling of her right ICA aneurysm [Figure 1]. Her postoperative period remained uneventful. Her 1 year and 6 month clinical and imaging follow up remained unremarkable.

Two broad subtypes of stress-induced cardiomyopathy described are Takotsubu cardiomyopathy (apical ballooning syndrome) and NSC. Many similarities have been noted between the two subtypes that include similar female predominance, pathophysiology, ECG changes, cardiac marker elevations, management, and recovery. The prognosis of both the entities depends on the severity of the initial insult, the rapidity of recovery, the response to therapy, and the development of complications such as cardiac failure and thromboembolism.

NSC is increasingly being diagnosed and successfully treated. The reasons may be better monitoring and periodic reviewing of the mortality and morbidity registry, as well as the inclusion of Takotsubu cardiomyopathy in the differential diagnosis of acute coronary syndrome in the United States and international guidelines. The few published case reports from India are mainly of the non-neurogenic etiology. Three cases of Takotsubu cardiomyopathy following SAH have been described recently; however, NSC has not been reported.

SAH following intracranial aneurysmal rupture is one of the predominant causes of NSC. Several issues pose significant dilemma in the management of such patients. Ruptured aneurysm needs to be treated at the earliest by either neuroendovascular coiling or open surgical clipping. However, the presence of significant ECG changes and cardiac enzyme elevation in stress-induced cardiomyopathies may delay aneurysmal treatment. At times, findings such as ST-segment elevation and incidental presence of nonsignificant coronary artery stenosis may divert the clinician’s attention entirely toward the cardiac management with a delay in the diagnosis and treatment of the intracranial pathology. Conversely, the impact of true acute coronary syndrome, which may occur during any major injury or surgery, can be underestimated, mistaking the entity to be stress-induced cardiomyopathy. Development of hypotension following NSC increases the possibility of delayed cerebral ischemia (DCI) secondary to vasospasm. Further, nimodipine administration can cause further fall in blood pressure requiring the addition of ionotrophic agents along with nimodipine administration. The development of acute hydrocephalus following SAH also causes tachycardia predisposing to worsening of cardiomyopathy. Maintenance of euvolemia as a preventive or therapeutic measure of vasospasm may be difficult in patients with cardiac failure. Longer intensive care unit and hospital stay with additional investigations may increase the economic burden of patients. Addition of warfarin in patients with left ventricular dysfunction to prevent thromboembolism may add to the morbidity and increase the mortality during the initial aneurysm surgery as well during the subsequent shunt operation or during therapeutic intervention with arterial balloon dilatation for vasospasm. Whether or not the preference for the less invasive endovascular coiling or open surgical clipping of aneurysm can reduce operative morbidity and mortality in such cases, remains an elusive question. In addition, delaying surgery (performed after more than 72 hours) may lead to a fair recovery of the myocardium as compared to early surgery (performed within 24 hours); however, the risk of re-rupture of the aneurysm is of a significant concern. Re-rupture of the aneurysm has to be avoided while waiting for surgery or even during the conduction of surgery because such an event may further worsen the cardiac status.

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