

Image based diagnosis of intracranial tuberculoma is fairly accurate in patients from endemic regions and it is not considered necessary to obtain a histological diagnosis. However, Selvapandian et al^[7] have demonstrated the low positive predictive value for a diagnosis of intracranial tuberculoma on CT alone and they stress the need for confirming histological diagnosis. Surgical excision is feasible when such a lesion is easily accessible and not in an eloquent area.

In conclusion, the possibility of a fungal granuloma needs to be considered in an indolent lesion in an immunocompetent host. Histological diagnosis before initiating empirical therapy is recommended for all intracranial masses.

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Distress triggered cervical root compression pain by looped vertebral artery

Sir,

A 21-year-old girl presented with a 20-day history of right-sided cervicobrachialgia radiating in her hand and fingers. Whenever she was distressed, she experienced the pain associated with involuntary movements and the absence of nocturnal recrudescence and hypoesthesia of right thumb. History of familial neurofibromatosis and cervical spine trauma were absent. Both the physical and neurological examination was normal. However neither vascular bruit nor pain compliance has been detected. Cervical right oblique X-ray

showed a minimal and T₂ weighted axial MRI showed moderate foraminal widening at C₆₋₇ intervertebral foramen [Figure 1]. Bright blood axial MR images revealed that vertebral artery loop compressed the C₇ root in the intervertebral foramen [Figure 2]. The 3D TOF (time-of-flight) MR Angiography showed a vertebral artery tortuosity [Figure 3]. The patient refused an operation against further disturbances. Tricyclic anti-depressant Amitriptyline was given 10 mg for first 3 days, and continued 20 mg at night. All symptoms relieved and analgesia achieved within 2 days.

Progressive cervical radiculopathy due to loops of the vertebral artery is seen rare. The average age was 55 and our case is the youngest one as compared with in previous reports. However, the mechanism of how VA loop forms is unclear. A cervical trauma and spondylotic changes with the degree of VA tortuosity has been reported.^{[1],[2],[3],[4]} But our case has neither spondylosis nor cervical trauma.

It is difficult to distinguish the tortuosity of the vertebral artery from expected clinical symptoms with cervical myelopathy or radiculopathy in patients. It is emphasized that the frequent acroparesthesia and dysesthesia of fingers, and rare

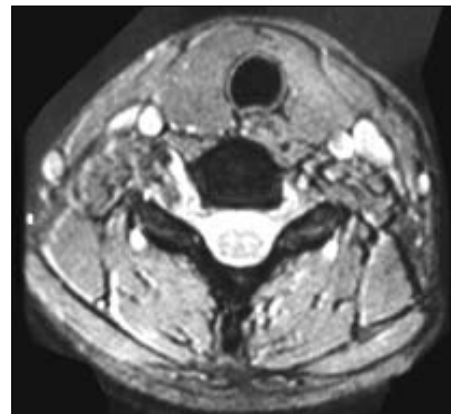


Figure 1: T₂ weighted axial MR image shows moderate neural foraminal widening

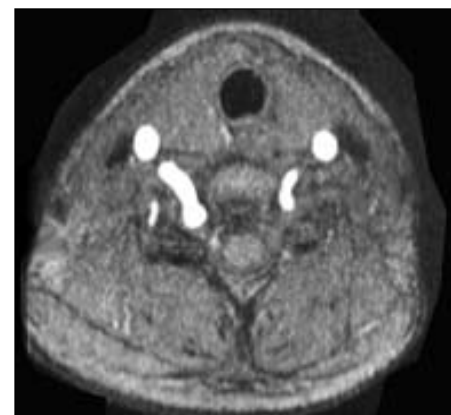


Figure 2: Bright blood axial MR image reveals that neural foraminal widening was due to vertebral artery tortuosity, and vertebral artery loop formation is compressing the C₇ root in the intervertebral foramen



Figure 3: 3D TOF (time-of-flight) MR Angiography reveals vertebral artery tortuosity

neurological deficits and nocturnal recrudescence are quite valuable in differential diagnosis.^[5] We suggest that the anxiety because of stress-elevated intra-arterial blood pressure triggers the radiating pain in our case.

An axial MR is a valuable scan as evaluation of loop formation. If MRI findings suggest any possible VA tortuosity and migration, then MR angiography should be performed to confirm these findings.^[3]

In treatment modalities, it has been experienced that most patients require surgical procedures in spite of they were treated conservatively initially. The traditional surgical procedures are anterolateral microvascular decompression and anterolateral cervical vascular reconstruction of the loop vertebral artery.^[5]

Mild sedatives relieved symptoms. Surgery has been advised as preventive for further progressive disturbances. However she refused the surgical procedure. The onset of analgesia with tricyclic anti-depressants ranges from 3 to 7 days for radicular pain. Pain relief in this patient showed us that within 2 days sedation (one of common side effects of amitriptyline) was effective to relieve the stress of patients as well as the stress related to hypertension. In our further investigations, we saw that she was calm, and her blood pressures were at normal levels.

This case is, the youngest and only case with a pain aggravated by anxiety as far as we have seen in vertebral artery compression syndromes. Loop compression has some characteristics, which differentiate it from other cervicobrachialgia syndromes. The MR with MR angiography is the preferred modality in diagnostic work-up. Conventional angiography may be indicated only if the vascular reconstruction is planned for the compressive evaluation, which includes the balloon occlusion test.

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Intracranial actinomadura granuloma

Sir,

Intracranial granulomas caused by aerobic bacteria of the actinomycetes group are rare. We report a case of an intracranial granuloma caused by *Actinomadura pelletieri*. Our literature survey did not reveal any report of such a granuloma.

A 24-year-old woman presented with headache of 1-year and seizures of 1-month duration. About a week prior to the onset of the seizures, she had developed a swelling on the scalp close to the midline in the left parietal region discharging pus intermittently. She had history of injury to the scalp, ten years



Figure 1: Contrast computerized tomography (CT) scan showing the enhanced mass in the left parietal parasagittal region with perifocal edema. The wall of the sagittal sinus and the adjacent dura are thickened and enhancing