

REFRACTORY CHRONIC HEADACHE AS ISOLATED CLINICAL MANIFESTATION OF NEUROSARCOIDOSIS

G. Ferrigno¹, M.R. Mazza¹, A. Quattrone^{1,2}, F. Bono¹



¹ Headache Group, Magna Graecia University of Catanzaro, Italy.

² Neuroimaging Research Unit, Institute of Molecular Bioimaging and Physiology- National Research Council- Catanzaro, Italy

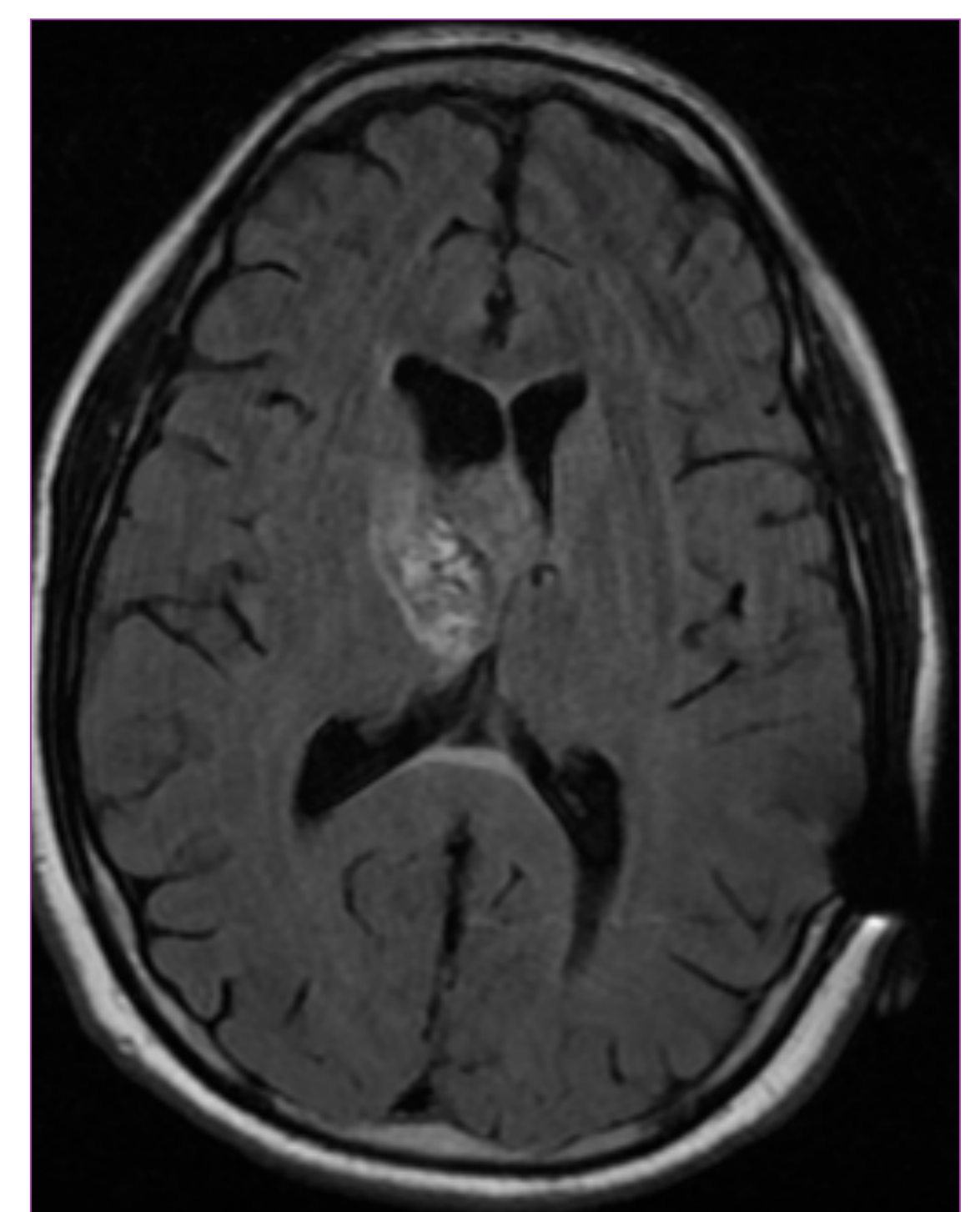
Introduction

Symptomatic neurologic involvement develops in 5 to 13 % of sarcoidosis patients, and on rare occasions sarcoidosis may develop only in the nervous system. Although headache is a common symptom of neurosarcoidosis, isolated chronic headache as a presenting symptom of neurosarcoidosis has not been reported. Here, we report two patients with neurosarcoidosis who had an isolated chronic headache.

Case presentation

• Case 1.

A 19-year-old man complained of episodes of prolonged chronic headache and on rare occasions had diplopia. Head pain was pulsating, severe, unilateral, aggravated at night and in the morning. When the head pain worsened he had nausea and vomiting. Neurological examination showed horizontal nystagmus. A gadolinium-enhanced brain MRI showed hydrocephalus and an enhancing solitary intraventricular mass in the third ventricle near the foramen of Monro, which appeared isointense on T1-weighted imaging and hyperintense on MR T2-weighted imaging. He received an emergency ventricular-peritoneal shunt. A mass biopsy made a histopathological diagnosis of sarcoid granuloma. Computed tomography (CT) of chest and abdomen, whole-body gallium-67 scanning, and positron emission tomography scan did not detect multisystemic sarcoid involvement. On the base of these results, we made a diagnosis of isolated neurosarcoidosis.



Oral prednisone therapy had no good effect on headache. While a high-dose intravenous methylprednisolone treatment followed by daily oral prednisone provided a sustained improvement of headache in this patient.

• Case 2.

A 23-year-old man presented with refractory chronic headache of 6 months duration. Head pain was pulsating, severe, bilateral, and worsed during the night and in the morning associated with nausea and vomiting. A gadolinium-enhanced brain MRI displayed a leptomeningeal enhancement. The cerebrospinal fluid (CSF) evaluation showed a lymphocytosis and elevated protein levels. A thoracic computerized tomography (CT) scan showed a mediastinal adenopathy, and a lymph node biopsy revealed a sarcoidosis. A high-dose intravenous methylprednisolone treatment had a good effect on headache.

Discussion

The causes of chronic headache may be an intraventricular sarcoid granuloma leading to obstructive hydrocephalus in a case, and a chronic granulomatous inflammatory meningitis in the other case.

Conclusions

These observations highlighted that chronic headaches may be an isolated clinical manifestation of neurosarcoidosis, suggesting that when headache sufferers are suspected of having neurosarcoidosis a gadolinium-enhanced brain MRI should be performed for detecting leptomeningeal enhancement.