examination was unremarkable. MRI of the brain revealed multifocal enhancing lesions and edema as well as multifocal signal abnormality throughout the supratentorial and infratentorial parenchyma. Her cerebrospinal fluid showed elevated opening pressure, elevated nucleated cells, elevated protein and normal glucose. CSF cytology, gram stains and cultures were unremarkable. Possibility of sarcoidosis, mycobacterium and fungal etiologies were ruled out. Other work up included but not limited to MRA head, MRV head, diagnostic cerebral angiogram, extensive serum and CSF autoimmune labs were also unremarkable. She underwent a brain biopsy which showed necrotizing granulomatous inflammation with associated dystrophic calcification. Patient was started on high dose methylprednisolone followed by a 6-week prednisone taper. There was a complete resolution of her symptoms, as well as improvement in her follow up MRI brain over a six month period.

Design/Methods
N/A.

Results
N/A.

Conclusions
We describe what we believe would be the third reported case of necrotizing granulomatous meningitis of an unknown cause in humans. This case demonstrates the response of necrotizing granulomatous meningoencephalitis in humans to steroid therapy. Yet, further studies are necessary to determine symptomatology and pathogenesis, as well as the treatment in humans.

Disclosure: Dr. Lateef has nothing to disclose. Dr. Gharaibeh has nothing to disclose. Ms. Zamir has nothing to disclose. Dr. Sheikh has nothing to disclose.

Ischemic Stroke in Neurosarcoidosis: A Retrospective Cohort Analysis

Spencer Hutto, Kevin Kyle, Denis Balaban, Nagagopal Venna

Objective
To provide a detailed analysis of the clinical features and course of ischemic stroke secondary to sarcoidosis of the CNS and to observe the effects of immunosuppression in the prevention of recurrent cerebrovascular disease.

Background
Cerebrovascular disease is rarely reported in neurosarcoidosis and constitutes one of its least well-described forms, though recognition for it has grown in the last decade with recent studies estimating a higher frequency of occurrence than previously known.

Design/Methods
Patients with ischemic stroke were included if the mechanism was directly attributable to sarcoidosis of the CNS. Patients were excluded if an alternative stroke etiology was of equal or higher likelihood than CNS sarcoidosis.

Results
Neurologic disease was the initial presenting manifestation of sarcoidosis in 8/11 (72.7%), and ischemic stroke was an inaugural manifestation of sarcoidosis in 4/11 (36.4%). Small vessel disease was the predominant ischemia subtype (10/11, 90.9%) with pontine perforating vessels (6/11, 54.5%) and lenticulostriate arteries (3/11, 27.3%) being the vessels most often affected. Vessels with a more rostral supratentorial distribution were uncommonly affected. Common neuroinflammatory accompaniments included leptomeningitis (10/11, 90.9%) and cranial nerve disease (4/11, 36.4%). Recurrent strokes occurred in 8/11 (72.7%), and recurrent neuroinflammation occurred in 7/11 (63.6%). Antiplatelet drugs were used in 6/11 (54.5%). Most patients (10/11, 90.9%) required at least two lines of immunosuppression to achieve inflammatory disease remission in this context; infliximab was the most successfully employed immunosuppressant (7/8 treatment courses, 87.5%). The presenting median modified Rankin Scale score of 4.0 improved to 2.0 over a median period of follow-up of 52.0 months.

Conclusions
Ischemic strokes in neurosarcoidosis occur in a caudal-to-rostral distribution, tend to affect small caliber blood vessels that lack collateral blood flow, and typically associate with inflammatory leptomeningeal disease.

Disclosure: Dr. Hutto has nothing to disclose. Dr. Kyle has nothing to disclose. The institution of Dr. Balaban has received research support from Biogen. Dr. Venna has nothing to disclose.

Pachymeningitis in Biopsy-Proven Sarcoidosis: Clinical Course, Radiographic Findings, Response to Treatment, and Long-Term Outcomes

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Objective
To study the clinicoradiographic features of pachymeningeal involvement in neurosarcoidosis and its evolution over time in response to treatment.

Background
Meningeal inflammation is one of the most common forms of neurosarcoidosis, occurring in 16-69% of affected patients. While the clinical and radiographic features of leptomeningitis in neurosarcoidosis are well known, those of pachymeningitis are far less clear.

Design/Methods
Patients with a diagnosis of neurosarcoidosis seen at Emory University [01/2011-8/2021] were included if pachymeningeal involvement was evident by MRI and the patient's sarcoidosis was pathologically confirmed (from a neural or extraneural site).

Results
26/215 (12.1%) patients with neurosarcoidosis qualified for inclusion. Pathological confirmation came from neural tissue in 50%. Median age of onset was 43.5 years; most were male (16/26, 61.5%). Symptoms were primarily related to pachymeningitis in 20/26 (76.9%). Headache (19/26, 73.1%), visual dysfunction (12/26, 46.2%), and seizures (7/26, 26.9%) were the most common symptoms. All patients had cranial pachymeningitis; only a single patient undergoing spinal imaging (1/11, 9.1%) had spinal pachymeningitis. The falx cerebri (16/26, 61.5%) was the most commonly affected dural structure, but the anterior and middle cranial fossae and tentorium were frequently involved (12/26 each, 46.2%). The pachymeningeal lesions were unifocal (11/26, 42.3%) or multifocal (15/26, 57.7%) in distribution, nodular morphologically (23/25, 92.0%), and homogeneously enhancing (24/25, 96.0%). Symptomatic improvement occurred with steroids initially in 22/25 (88.0%). Ultimately, 23/26 (88.5%) required initiation of steroid-sparing immunosuppressants, including 8/26 (30.8%) eventually undergoing TNF inhibition. Pachymeningeal relapses occurred in 7/26 (26.9%). Median clinical follow-up was 48 months. Median mRS at last follow-up improved to 1.0 from 2.0 at presentation.

Conclusions
Sarcoid pachymeningitis often presents with headaches and visual dysfunction, usually affects the falx cerebri and anterior and middle cranial fossae, and tends to require steroid-sparing immunosuppressants. It has the potential to relapse, but the prospect for recovery is excellent.

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Neurology 2022;99;S63
DOI 10.1212/01.wnl.0000903504.95803.1c