

Abstract

Sarcoidosis is a multisystem inflammatory disease commonly involving the lung and the thoracic lymph nodes. The gold standard diagnosis can be achieved by demonstrating non-caseating granulomas in the involved tissues. More than 90% of patients present with pulmonary involvement, while the eyes, skin, heart, central and peripheral nervous systems, liver, and parotid glands will be involved in the remaining (1). Neurological involvement accounts for only 5% of cases (2), which may present with cranial neuropathies more commonly (3). Sarcoidosis presenting as stroke is extremely rare, and only a few case reports exist in the literature. Although the brain biopsy is the gold standard of investigation, it has been replaced by the MRI brain due to its invasive nature. So far, steroids are the accepted first-line management therapy.

Case Presentation

Our patient is a 34-year-old man with a background history of unevaluated dry cough over the past six months with constitutional symptoms presented with acute left-sided stroke with an NIHSS (National Institutes of Health Stroke Scale) score of 4, outside the window period for thrombolysis, which was medically managed as a lateral medullary syndrome. There were no identifiable metabolic risk factors other than two pack years of smoking and no other features of connective tissue disease. Further workup revealed generalized lymphadenopathy, pulmonary infiltrations, and nodules on imaging with non-caseating granulomatous inflammation on lymph node biopsy. He had elevated serum ACE levels. His MRI brain showed a hyperintense T2 flair signal, suggesting possible lymphocytic infiltration into the left lateral medulla. Other possible causes that could give rise to generalized lymphadenopathy were reliably excluded with the diagnosis of pulmonary sarcoidosis stage 2 with neurological involvement. There were no features to suggest eye, cardiac, or cutaneous involvement. He was started on high-dose oral steroids, which showed a good response with improvement of his neurological deficits.

Conclusion

Sarcoidosis is a multisystem inflammatory condition that has a variable way of presentation. Though extremely rare, the disease can also present with nervous system involvement. As in our case, neurosarcoidosis can also present as a stroke; therefore, thorough history, examination, and investigations are needed, especially in young stroke patients who do not have other known risk factors for cerebral infarction not to miss this rare diagnosis.