

UNIVERSITY OF TURKU
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HELLSTEN, TYKO: Mass cerebral lesion as a sole manifestation of sarcoidosis - a diagnostic challenge

Thesis, 7 pages

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Sarcoidosis is a systemic disorder of unknown etiology characterized by noncaseating granulomas. Involvement of the central nervous system (CNS) occurs in a relatively small proportion of patients with sarcoidosis, and isolated neurosarcoidosis without any signs of systemic sarcoidosis is very rare. In this report, we present an unusual case of neurosarcoidosis with intracerebral mass lesion as a sole manifestation of sarcoidosis.

A 25-year-old male presented with a grand mal seizure. Magnetic resonance imaging (MRI) revealed a large mass lesion in the white matter of the left temporal lobe. The first microsurgical biopsy presented inflammatory changes of a demyelinating lesion and multiple sclerosis treatment was initiated. Following further neurological symptoms, and enlargement of the mass lesion in MRI, a partial resection of the lesion was performed. This time, the pathological examination revealed a granulomatous inflammatory lesion compatible with neurosarcoidosis. No evidence of systemic sarcoidosis was found. Azathioprine and dexamethasone were initiated to treat neurosarcoidosis, and a positive treatment response was obtained with shrinking of the MRI lesions.

Now, eight years after the first symptoms the patient is in remission, the only neurological symptom being a defect in the right upper quadrant of his visual field. He is presently continuing on cyclophosphamide infusions once a month, with additional dexamethasone. Brain MRI still shows an active lesion in the left hemisphere. The case underscores the importance of including neurosarcoidosis in differential diagnostics of a single intracerebral mass lesion.

Keywords: Neurosarcoidosis, intracerebral mass lesion, central nervous system biopsy, sarcoidosis treatment