

Neurosarcoidosis disease characteristics and response to intervention at Kings County Hospital Center

Objective: Sarcoidosis affects individuals of African descent at rates two to three times higher than Caucasians. While studies have been conducted documenting general and pulmonary sarcoidosis amongst patients with African ancestry, the literature on neurosarcoidosis within this population is sparse at best. This study documents the characteristics of this disease, its progression, and potential treatment responses with the goal of expanding the current literature and understanding of how neurosarcoidosis presents in patients of African descent at Kings County Hospital.

Methods: A retrospective chart review of patients seen between January 2010-December 2021 was performed. Patients were identified using the SlicerDicer™ tool on Epic EMR. The search criteria included (1) the diagnosis of sarcoidosis and (2) a visit with either the neurology or ophthalmology department. These two search criteria helped classify patients with neurologic manifestations of sarcoidosis

Results and Discussion: Table 1 summarizes the patient characteristics. Table 2 documents the primary manifestation of neurosarcoidosis in our patients, the most common being cranial neuropathies at 67%. Finally, the third table shows the most common treatments used, mainly prednisone and methotrexate, and the patients' response to treatment. Symptoms of neurosarcoidosis manifested quite equally between CNS and PNS, showing almost a 50-50 split amongst patients. The most common neurological manifestation of sarcoid was cranial neuropathies, with cranial nerve II being the most affected.

Conclusion: Currently, our study is the first to document and describe the neurosarcoidosis patient population at Kings County and their response to treatment. We anticipate our findings to expand the very limited existing literature on neurosarcoidosis, especially in minority populations.