



## APPA 2020 Virtual Conference Resident Poster Presentation

### Abstract 20-2-07

**Title:** Neurosarcoidosis and Psychosis, a Case Study

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**Summary:** Background: Sarcoidosis is a systemic disease characterized by noncaseating granulomatous inflammation with an estimated incidence of 35.5 per 100,000 person-years in African Americans and 10.9 per 100,000 person-years in Americans of European descent. Nervous system involvement occurs in 5-16% of cases and common presenting signs often involve the optic nerve, other cranial nerves, the spinal cord, or brainstem. However, less common presenting signs include involvement of the meninges, cognitive decline, hydrocephalus, and hypothalamic-pituitary-adrenal axis dysfunction. Delirium and psychosis are estimated to manifest in 1% of individuals with sarcoidosis.

Case: We describe a 35-year-old African-American male with a history of obstructive hydrocephalus, seizure disorder, obstructive sleep apnea, and morbid obesity who presented with a two month history of intermittent paranoia and visual hallucinations progressing in intensity, as well as drowsiness. His psychotic symptoms were reported to onset shortly after a shunt revision procedure, though there was no evidence of shunt malfunction or seizure activity on evaluation. The patient exhibited signs of hypercapnic respiratory failure and subsequent CT of the thorax revealed significant mediastinal and hilar adenopathy. Mediastinal lymph node biopsy showed granulomatous processes indicative of sarcoidosis, and high dose intravenous corticosteroids were administered with gradual improvement of psychosis and agitation.

### References:

1. Ibitoye RT, Wilkins A, Scolding NJ. (2017) Neurosarcoidosis: a clinical approach to diagnosis and management. *Journal of Neurology*. 264:1023–1028
2. Spiegel DR, Morris K, Rayamajhi U. (2012) Neurosarcoidosis and the Complexity in its Differential Diagnoses: A Review. *Innovations in Clinical Neuroscience*. 9(4):10–16
3. Westhout FD, Linksey ME. (2008) Obstructive hydrocephalus and progressive psychosis: rare presentations of neurosarcoidosis. *Surgical Neurology*. 69:288– 292
4. Zajicek JP, et. Al. (1999) Central nervous system sarcoidosis—diagnosis and management. *Quarterly Journal of Medicine*. 92:103–117