Introduction-

Neurosarcoidosis is a relatively uncommon inflammatory condition of CNS and most commonly involves meninges and cranial nerves. Patients often present with neurological symptoms.

Case Presentation-

A 42-year-old African American female presented to the hospital for evaluation of severe, episodic, left sided, throbbing headache associated with aura, fever and left sided weakness.

Upon evaluation, she was oriented, appropriately conversant and walked independently. Speech, vision, and hearing examination was normal. Upper extremity weakness was present in both hands and decreased fine and gross motor skills in right upper extremity.

CT scan of head without contrast is unremarkable She underwent a lumbar puncture and was found to have aseptic meningitis. Acyclovir is given as treatment. She has been experiencing persistent tactile fever which has been rising to 100.3F. Blood cultures were negative. MRI of the head showed leptomeningeal findings in the brain and in the cervical, thoracic, and lumbar spine. CSF analysis after lumbar puncture showed elevated ACE levels. The patient then underwent left sided craniotomy for biopsy. The patient's biopsy was positive for non-caseating granuloma. This was consistent with neurosarcoidosis. On recognition, he received IV steroids which were later shifted to oral Prednisone. CT chest was unremarkable.

Conclusion-

MRI head is an important diagnostic method for detection of leptomeningeal enhancement in inflammatory conditions like Sarcoidosis. An adult patient presenting with severe headache and has elevated leukocyte count and ACE level in CSF should be suspected for Neurosarcoidosis, even when chest CT is negative. Prompt biopsy confirmation and treatment helps in preventing adverse outcomes.