

Abstract

Background

Central nervous system (CNS) tuberculosis is one of most devastating forms of human mycobacterial infections. It can present as meningitis, tuberculoma, tuberculous abscess and spinal arachnoiditis. When an immunosuppressed patient presents with multiple ring enhancing lesions in brain imaging apart from tuberculous abscess wide range of central nervous system pathologies such as infectious, neoplastic, inflammatory, demyelinating and vascular diseases should be considered. Aspiration of the lesion not only decompresses the abscess but also aid in definitive microbiological and histopathological diagnosis.

Case presentation

48 year old renal transplant recipient presented with severe headache and constitutional symptoms 4 months duration. Multiple ring enhancing lesions were seen in the brain imaging. Her cerebrospinal fluid (CSF) full report was not suggestive of tuberculosis. CSF culture and polymerase chain reaction for tuberculosis became negative. CT guided aspiration of the abscess was done. Tuberculosis was detected in the aspirate by the polymerase chain reaction technique. The patient was commenced on anti-tuberculosis treatment and he responded dramatically with resolution of symptomatology and radiological features.

Conclusions

Multiple ring enhancing lesions of the brain is a frequently seen neuroimaging abnormality found in immunosuppressed patients and it is associated with wide range of central nervous system pathologies including infections and malignancies. Methodical clinical evaluation with early MRI or CT guided stereotactic aspiration is a very useful diagnostic and therapeutic modality in these patients to establish a definite diagnosis. This case report highlights the value of CT guided aspiration to arrive at an aetiological diagnosis in a patient with brain abscess.