

Images in Infectious Diseases

Isolated amoebic brain abscess with excellent therapeutic response

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Our patient was a previously healthy 40-year-old man. The patient presented with dysarthria and subtle monoparesis of the right upper limb. Brain magnetic resonance imaging (MRI) revealed a left frontal region contrast-enhancing lesion with associated edema (**Figure A**). He received albendazole (400 mg TID) for 30 days as treatment for neurocysticercosis; however, due to clinical deterioration, neurosurgery was performed with material drainage and biopsy. The lesion was still shown on the new brain MRI.

The histopathological results showed round lesions suggestive of trophozoites (**Figure B**). Immunohistochemistry with indirect immunoperoxidase yielded the presence of GFAP and macrophages CD68v, which indicated an infectious process. Tuberculosis, fungi, bacteria, cytomegalovirus, herpes simplex virus, and toxoplasma were ruled out using periodic acid-Schiff stain, Grocott methenamine-silver, and acid-fast bacillus (**Figure B**). The patient was eventually admitted in the hospital. Cerebrospinal fluid was collected from 2 cells and 17 proteins, and metronidazole (750 mg TID) and ceftriaxone (2 g BID) were administered as intravenous antibiotic therapy for four weeks. After completing the intravenous treatment, the patient received oral axetylcefuroxime (1 g BID) and metronidazole (750 mg TID) for another four weeks and underwent a repeat brain MRI, which showed radiological improvement (**Figure C**). After the treatment, the patient had no complaints or limitations. This report provides evidence of a favorable evolution. An amoebic brain abscess, caused by *Entamoeba histolytica* infection, is usually characterized by rapid evolution and high lethality if left untreated¹. Similar cases have been described, but with unfavorable outcome². This case report emphasizes the early diagnosis and treatment of suspected cerebral amebiasis cases³.

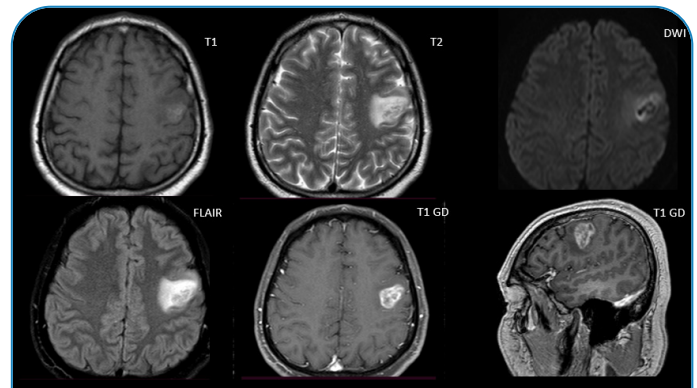


FIGURE A: First MRI. Left to right, top to bottom, brain MRI sequences of axial slices in unenhanced T1, T2, diffusion, FLAIR, T1 with contrast, and sagittal T1 with contrast, respectively. Lesions pointed by blue arrows.

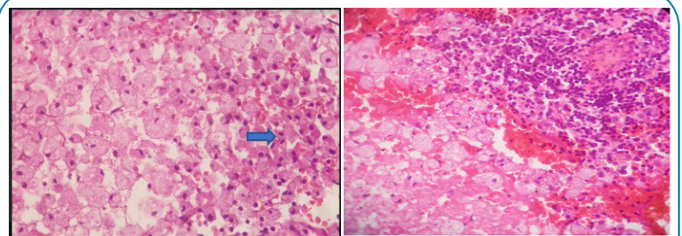


FIGURE B: Focused photos. Sheets of xanthomized cells. On the left, 20× magnification; lymphocytic infiltrate (blue arrow), 40× magnification on the right.

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Authors' contribution: JWLTJ, ARdA, PpdAC: Conceptualization; JWLTJ: methodology; JWLTJ, ARdA: writing original draft preparation; JWLTJ, ARdA, PPdAC: writing, review and editing; JWLTJ: visualization; JWLTJ and PPdAC: supervision; JWLTJ, PPdAC: project administration.

All authors have read and agreed to the published version of the manuscript.

Conflict of Interest: The authors declare that they have no conflict of interest.

Received 30 January 2022 | **Accepted** 9 March 2022

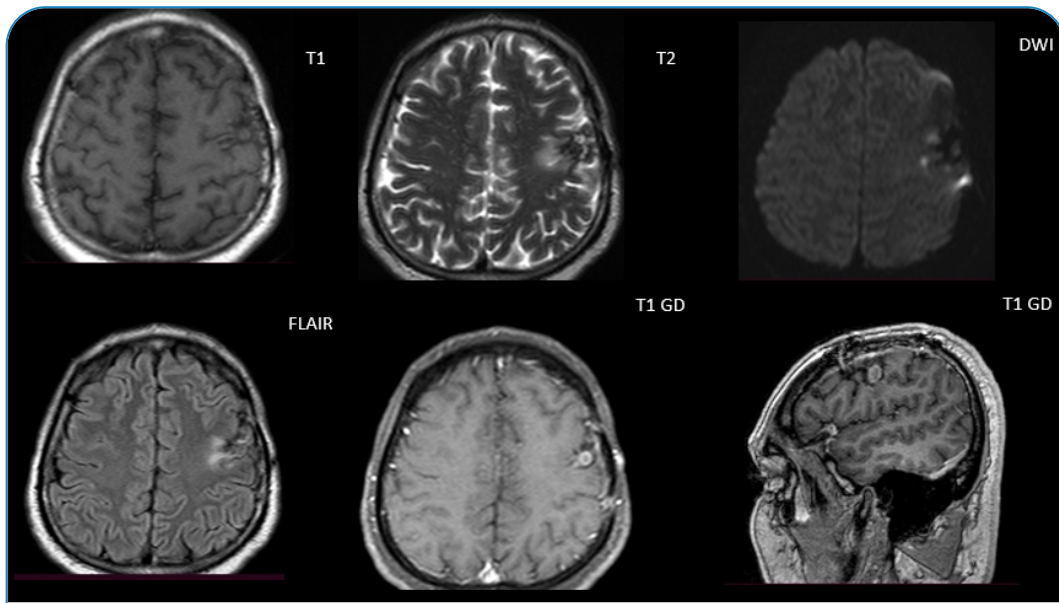


FIGURE C: After the second month of amoebic brain abscess treatment. Left to right, top to bottom, brain MRI sequences of axial slices in unenhanced T1, T2, diffusion, FLAIR, T1 with contrast, and sagittal T1 with contrast, respectively. Radiological improvement after treatment demonstrated by blue arrows.

ACKNOWLEDGMENTS

The authors are grateful to the patient and his family.

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