

Disclosing A Covert Brain Abcess Through Neuropsychiatric Clues In HIV Positive Patients : A Case Report In 49-Years Old Man

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BACKGROUND

Human Immunodeficiency Virus (HIV) **does not always present with symptoms due to decreased immunity**, but in some conditions, symptoms of HIV infection may appear as manifestations of secondary infections due to immune supression influenced by the progression of the HIV disease. Symptoms such as **irritability, disorientation or confusion are among the most prominent neuropsychiatrics signs**, often resulting from intracranial infections due to HIV infection. A thorough history taking and accurate selection of supporting examinations will help expedite diagnosis and appropriate treatment, which is expected to improve the patient's quality of life.

CASE ILLUSTRATION

A 49-year-old Asia men presented to the hospital with **behavioral changes** associated with psychiatric disorders, including **irritability, prolonged depression, and disorientation in time and place**. A thorough history revealed **persistent upper tooth infections** and swelling, recurrent itching all over the body, and unexplained fever. A head CT scan with contrast also revealed **a cerebral abcess with maxillary and ethmoidal sinusitis, and a rapid HIV test was reactive**. These test were performed to support suspicions based on the patient’s medical history and occupation, which indicated a high risk of HIV infection. During one week of hospitalization, the patient showed no signs of improvement and **eventually died of cardiac arrest**

DISCUSSION

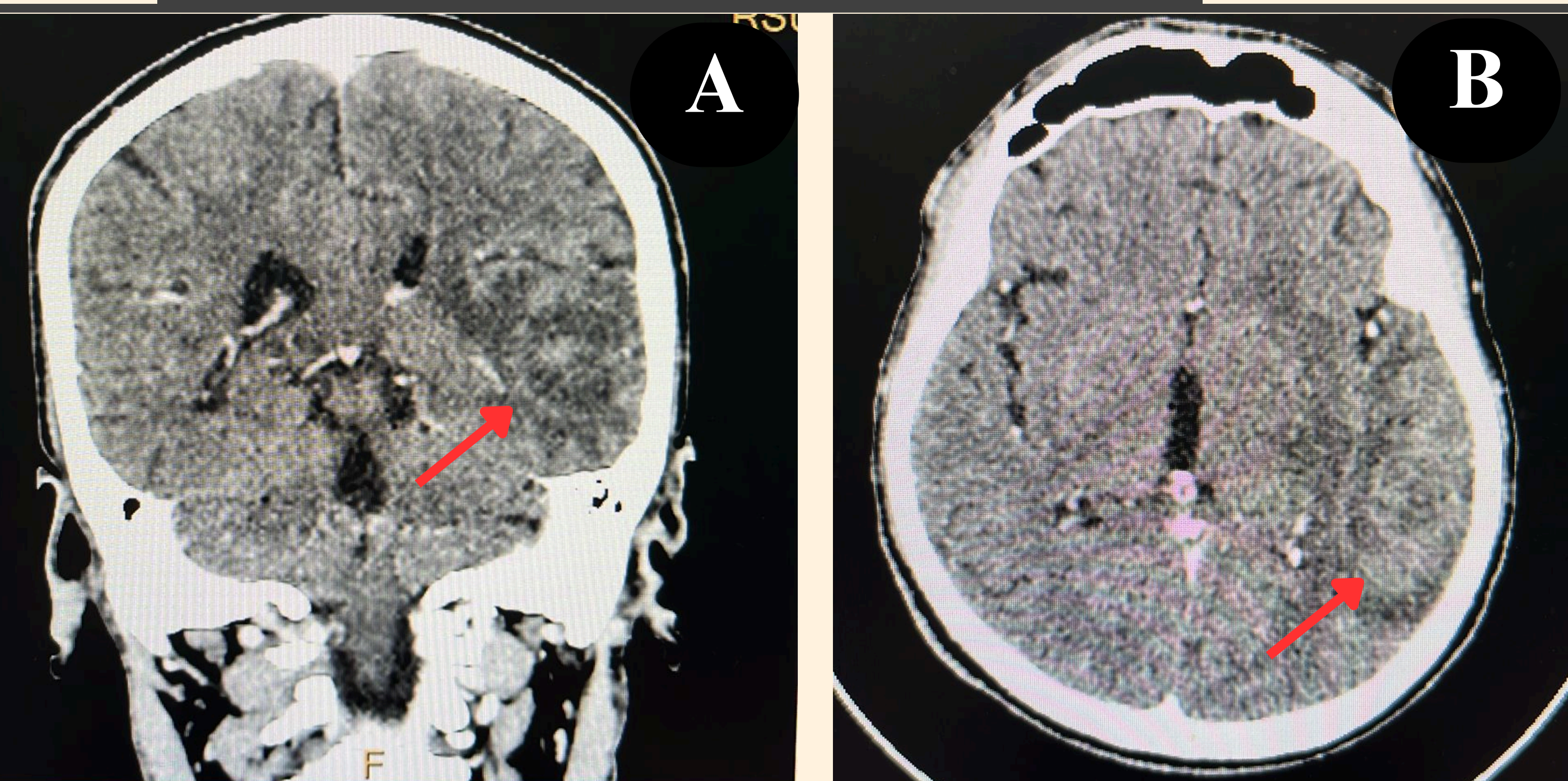
This case highlights that HIV infection **may not only manifest as immune suppression but also as nonspecific behavioral changes**, which can **indicate underlying opportunistic infections**. While brain abscesses in HIV patients typically present with focal neurological deficits, they may also appear as neuropsychiatric symptoms, as seen in this patient.

HIV-related immunosuppression facilitates opportunistic infections, including brain abscesses that may originate from **sinus or dental sources** and spread by **percontinuity or hematogenously**. Neuropsychiatric signs such as irritability, disorientation, and behavioral changes should raise suspicion of intracranial infection in immunocompromised patients.

Accurate diagnosis relies on **thorough history taking combined with appropriate imaging**, as symptoms may mimic primary psychiatric disorders. Early recognition and targeted investigations are essential to guide timely treatment and improve prognosis.

Unlike typical reports, this patient presented with prolonged psychiatric symptoms as the main clue to an intracranial infection, underscoring the importance of considering organic causes in unexplained behavioral changes. **Early recognition and appropriate investigations are essential to prevent diagnostic delays and improve patient outcomes.**

HCT-CONTRAST



(A)A post-contrast coronal CT scan showing cerebral abscess in the left temporal lobe, accompanied by extensive vasogenic edema causing minimal midline shift to the right

(B)A post-contrast axial CT scan showing cerebral abscess in the left temporal lobe, accompanied by extensive vasogenic edema causing minimal midline shift to the right.

CONCLUSION

This case call attention **to highlights the importance of sharpening the history and selecting appropriate supporting test** to determine the cause of the disorder. As in some cases, the disease can present with unusual clinical manifestations, such as HIV infection which can present with behavioral changes caused by brain abcess.

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