A NEUROPSYCHIATRIC INAUGURAL PRESENTATION OF AN HIV INFECTION - A CASE STUDY

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Introduction

Human immunodeficiency virus (HIV) infection can cause neuropsychiatric disorders such as cognitive impairment, behavioral difficulties or psychiatric symptoms – for instance, mania and psychosis – that are related to a wide variety of factors, including the direct effects of the virus, other cerebral infections caused by immune susceptibility (opportunistic infections), the pre-existing psychiatric conditions and personality vulnerabilities. Most of the neuropsychiatric symptoms are associated with late stage HIV infection.

Opportunistic infections (such as cerebral toxoplasmosis, cryptococcosis and *P. jirovecii* pneumonia), are usually AIDS-defining conditions. An estimated 30% to 50% of HIV-positive individuals infected with *T. gondii* develop cerebral toxoplasmosis, which is associated with high mortality.

Case report

An 32 years-old man presents to the Psychiatric ER as a “not identified male”. He was found **wandering alone, disoriented, suspicious**, with **soliloquies but unintelligible speech**.

Further evaluation in the ER included **CT scan**, which showed multiple ring-enhancing brain lesions associated with edema. The drug tests were positive for cannabinoids.

HIV serology was positive and the patient was admitted to the Infectious Diseases Ward with the diagnosis of cerebral toxoplasmosis.

Images 1 and 2 - CT scan

Interviewing his ex-wife (the only family member available) it was possible to establish a change of behavior in the 3 months prior to hospital admission: he had break up with his wife, been living in a homeless situation and stopped recognizing his family and friends. He also stopped taking care of his hygiene. He had no medical history and the HIV infection was not known. Laboratorial evaluation showed up:

- CD4+ cell count 72 cel/mL (6.4%)
- HIV-1 viral load 1318257 copies/mL
- CD4/CD8 ratio 0.08
- Positive for cryptococcal infection and toxoplasmosis

He was submitted to the adequate treatment but about two months after admission he passed away, as it was not effective.

Images 3 and 4 - MRI

Conclusion

In this case, the neuropsychiatric symptoms were the manifestation of an opportunistic infection related to HIV progression. Although it may be common in this cases, it is not frequent to find them in inaugural presentations. This patient had any prior medical or psychiatric comorbidity and it was mandatory to exclude organic diseases before considering a primary psychiatric disease. Considering the pleiomorphic presentation of multiple organic diseases, such causes should always be excluded in patients presenting to the ER with psychiatric symptoms.

References:

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