

A CASE OF PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY; CIDOFOVIR TREATMENT

FAYET-PÉREZ A¹, MARTOS-ROSA A¹, URDA-ROMACHO J¹, GONZÁLEZ-VAQUERO D¹, ACOSTA-ROBLES P¹, MORALES-MOLINA JA¹, COLLS-GONZÁLEZ M²

anna.fayet@ephpo.es

(1) Hospital de Poniente, El Ejido, Almería, Spain (2) Hospital de Bellvitge, Pharmacy Department, Bellvitge, Spain

Background

Progressive multifocal leukoencephalopathy (PML) is an opportunistic infection caused by reactivation of the polyomavirus JC (JCV) characterized by severe demyelination disease of the central nervous system, which is invariably fatal. PML mainly occurs in immunosuppressed individuals. Within the context of HIV infection, prognosis with highly active antiretroviral therapy (HAART) only leads to 50 percent of patients with PML to survive longer than one year.

No specific therapy exists for JCV infection. The main treatment approach involves HAART to reverse the immunosuppression. Cidofovir has been used in patients with HIV infection as treatment for PML, but the largest clinical studies have reported no benefit. .

Purpose

To describe and evaluate the efficacy of cidofovir for the treatment of PML in HAART treated HIV patients

Material and methods

A 43-year-old man diagnosed with HIV infection for 10 years without following. In June 2011 the patient began treatment with tenofovir, emtricitabine and efavirenz (11 cells/mm³ CD4, HIV-RNA 111,560 copies/mL). After three months the patient presented aphasia, hemiparesis and visual field deficits (hardly blind).

His medical record was reviewed with a focus on drug treatments, laboratory results and clinical evolution.

Results

On admission he had 68 cells/mm³ CD4, HIV-RNA undetectable, JCV PCR of the CSF was 5,417,063 copies/mL. *Toxoplasma gondii* and BK virus was negative. He had been diagnosed with PML, with magnetic resonance imaging support disease. Treatment started with cidofovir 325 mg bi-weekly and optimized HAART (abacavir, lamivudine and efavirenz).

Cidofovir was withdrawal after two months; result showed an improvement of deficit motor. However dysphasia and visual loss continued. Three years after infection patient is still alive with neurologic deficits.

Conclusions

In patients with HIV and PML, main treatment approach should be the restoration of the host adaptive immune response with optimizing effective HAART. Cidofovir can be useful to help decrease the progression of PML.