

4th PEDIATRIC INFECTIOUS DISEASES CONFERENCE 2013 (PIDC 2013)
– EMERGING INFECTIONS & VACCINE DILEMMAS
Mumbai, 17th November 2013



Abstract 20

Continued Neurological Damage in HIV Infected Children Despite Antiretroviral Therapy

Drishti Tolani, Ira Shah

Pediatric HIV Clinic, B.J.Wadia Hospital for Children, Mumbai, India

Keywords: HIV, children, continued neurological damage

Abstract

Neurological complications occurring commonly in HIV-AIDS infected individuals are either due to primary HIV infection or due to opportunistic infections. Highly active antiretroviral therapy (ART) has been found to decrease the risk of such neurological damage however continued damage can persist inspite of vigorous antiretroviral therapy. We present two HIV infected children who were both on ART for several years but subsequently died due to progression of neurological disease inspite of good viral control.

Case 1: A 13 years old HIV infected boy on ART since 6 years of age presented with progressive increase of involuntary movements of left side of body with increased tone in Sept 2011. He was diagnosed to have left sided dystonia due to infarct in right lentiform nucleus & left cerebellar cortex in April 2004 due to positive antiphospholipid syndrome. At that time he was diagnosed to be HIV infected and was started on Zidovudine (AZT), Lamivudine (3TC) and Nevirapine (NVP). He continued to remain well till July 2011 when parents noticed increased falls due to increase in involuntary movements of left side of body. In Sept 2011, cerebrospinal fluid (CSF) was tested for cytomegalovirus (CMV), Herpes simplex virus (HSV), Epstein barr virus (EBV), HIV proviral DNA and Toxoplasma PCR which were all negative. A repeat MRI was done in Nov 2011 which showed hyper intensities in bilateral cerebellar hemispheres more marked on left side of unknown etiology and right putaminal area of gliosis suggestive of old insult. His MR angiogram was normal. Subsequently, he became bedridden in Dec 2011 and was hospitalized. His CSF Measles and mumps antibodies were negative. His antiphospholipid antibody (APLA) and anti cardiolipin antibodies were also negative. HIV viral load was undetectable. A brain biopsy from right frontal lobe did not show any viral inclusion bodies. EEG showed generalized slowing. He was continued on ART but he succumbed to his illness.

Case 2: A 7 years old HIV infected boy on ART since April 2009 presented with altered sensorium in Nov 2011. In April 2009 at 3 years 4 months of age he had left sided hemiparesis. MRI brain showed infarct in right basal ganglia, internal capsule, corona radiata, perisylvian frontotemporoparietal cortical and sub cortical region with complete occlusion of right main stem middle cerebral artery (MCA). At that time, antiphospholipid antibodies IgM and IgG were positive. HIV viral load currently was 12,100 copies/ml. CSF was normal. ART was shifted to AZT, 3TC and lopinavir/ritonavir (LPVr). However the child succumbed to his illness in Dec 2011. No other viral markers could be done due to unaffordability.