BACKGROUND

The introduction of highly active antiretroviral therapy (HAART) in pediatric HIV infection has resulted in a substantial reduction in HIV-associated mortality and morbidity. Scientific literature shows evidences of side effects of long term treatment particularly related to Nucleosides (NRTI) use. Currently Pediatric Guidelines suggest to start lifelong HAART very early with a mandatory NRTI backbone. Many studies show how some NRTI-exposed children develop symptomatic mitochondrial toxicity.

MATERIAL AND METHODS

We describe 5 pediatric HIV cases that showed symptomatic myalgia with related high level of Serum Creatine Phosphokinase (CPK), after long time treatment, median 233 months (range 126-248). The customized choice of a NRTI sparing regimen has determined a prompt resolution of symptoms.

RESULTS

In a group of 80 children born with HIV Infection in HAART with NRTI included for a mean value of 120 months (range 12-246, median 106) we describe 5 of these (6.25%), all Male, 3 black, with sudden myalgia without any fever and history of trauma. All five patients did not have any evidence of HIV/AIDS symptoms.

CONCLUSIONS

Mitochondrial toxicity after long term NRTI treatment must be considered especially in paediatric population. In our experience the simplified ARV treatment with dual therapy represented a solution for NRTI toxicity and was well tolerated in all patients. After 2 years of follow up there were no signs of drug-related reactions, no toxicities or virological rebound.