

2<sup>nd</sup> Edition of EuroSciCon Congress on

## Heart Disease and Interventional Cardiology

February 25-26, 2019 Paris, France

Interv Cardiol J 2019, Volume: 5 DOI: 10.21767/2471-8157-C1-006

## **HIV-1/AIDS ASSOCIATED DILATED CARDIOMYOPATHY**

## Tamar Saralidze<sup>1</sup>, F Gabunia<sup>2</sup>, T Svanidze<sup>1</sup> and I Mamatsashvili<sup>1</sup>

<sup>1</sup>Tbilisi State Medical University, Georgia <sup>2</sup>Infectious Disease and AIDS Clinical Centre (Georgia)

Dilated cardiomyopathy (DCM) and its etiology remains a challenging problem under age of 40. We present cases of DCM developed on the background of undiagnosed HIV-1/AIDS. We observed 13 patients with age of 29-38 (9 men, 4 women). Searching the causes of DCM revealed HIV-1/AIDS. CD4<sup>+</sup> T cell count was in the range of 99-199/mm³, viral load was from 14.4×10<sup>5</sup> to 100×10<sup>5</sup> copies/ml. Patients had heart failure class 3 (NYHA). Echocardiography (EC) revealed total dilation of all cardiac chambers and reduced ejection fraction (EF) 35-41%. Other viral or opportunistic infection that could trigger development of DCM was not detected. Patients were treated with antiretroviral therapy (ART) Tenofovir/ Emtricitabine/Efavirenz-300/200/600 mg/day lifelong and monitored every six months. In 11 patients with good adherence to ART increase of CD4<sup>+</sup>T cells and decrease of viral load was accompanied with disappearance of clinical signs of DCM. After a year heart size was in normal range and EF increased to 55% accompanying with digression of HIV-1. CD4<sup>+</sup>T cell count was more than 350/mm3 and viral load was non-detectable. In two patients who refused to continue ART, CD4<sup>+</sup>T cell was less than 200/mm3 and virological failure was observed. In these patients DCM still existed. Our study showed that long-term successful ART provides regression and even recovery of HIV-1/AIDS associated DCM. Selenium was not included in treatment showing that selenium deficiency is caused by its increased consumption by HIV and main reason of development of DCM is HIV incorporation in cardiomyocytes and its indirect influence on the vital processes of the cell. In all cases of DCM, especially under 40-50 years should be ruled out HIV infection.

tamar.saralidze@gmail.com