The value of investigating cardiac involvement in human immunodeficiency virus infection in children

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Introduction. Cardiac involvement in infection with human immunodeficiency virus (HIV) has particularly severe effects for morbidity and mortality in these patients and therefore requires early detection for appropriate treatment. Objectives. The research of the main clinical aspects and diagnostic problems of cardiac involvement induced by human immunodeficiency virus infection (HIV infection/AIDS) in children. Methods. Patients: 51 children, 2-16 years old, with HIV infection/AIDS in various stages of evolution, with diverse symptoms affecting many organs. Evaluation of patients: clinical, ECG, Chest X ray, echocardiography (echo). Staging of HIV infection / AIDS by clinical exam and CD4 lymphocytes values. Result. 60% of patients were included in group P2f clinical staging. Signs of cardiac involvement: heart failure (11 cases), tachycardia (20 cases), deafness of the heart sounds ± gallop rhythm ± systolic murmur of mitral regurgitation (12 cases), dyspnea (14 cases), other non-symptomatic (14 cases) or with signs of others diseases. ECG: disturbances of ventricular repolarisation, sinusal tachycardia. RxCT: cardiomegaly (30% cases) ± aspects of pulmonary infections. Echo exam: cardiac involvement in 66% cases: dilated cardiomyopathy, the most severe changes (14 cases), pericarditis (10 cases), isolated dilation of the left and right ventricle (6 cases), LV diastolic dysfunctional (14 cases), pulmonary hypertension (6 cases). The severity and incidence of cardiac disease was associated with significant reduction of CD4 value < 400/mmc. Histological exam performed in 28 patients died by pulmonary infections: aspects of myocarditis, pericardial and myocardial inflammatory infiltration, necrotic lesions. Conclusion. The high incidence (66% of Cases) and severity of clinical manifestations, cardiac suffering during HIV infection / AIDS is one of the most important problems of these patients. Cardiological evaluation of patients is necessary in all the stages of the infection, even non-symptomatic, for the diagnosis and follow-up of evolution. Echocardiography is the most sensitive noninvasive method useful for highlighting cardiac damage in these patients.