Cardiac diastolic function in pediatric AIDS/HIV-carriers: Assessment, treatment and prevention of future cardiovascular diseases

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The cardiac abnormality most commonly seen among HIV-infected children is dilated cardiomyopathy. Mild depression of left ventricle (LV) and LV mass were risk factors for death, independent of age, duration of illness, CD4 count, HIV-1 viral load, neurologic disease or malnutrition. Subclinical cardiac abnormalities develop early in HIV-infected children, even among those with asymptomatic HIV disease and those who are asymptomatic for cardiac dysfunction. In a research conducted at our Institution, among 94 patients, fifty (54.3%, 95% CI, 44.1% to 64.5%) children showed diastolic dysfunction. Left ventricular dysfunction occurred in 38.7% (95%CI, 28.8% to 48.6%) of the children, and the prevailing dysfunction type was decreased myocardial compliance. Right ventricular dysfunction was apparent in 29.4% (95%CI, 20.1% to 38.7%) of the children, and on this side, the abnormal relaxation type was most prevalent. Simultaneous biventricular dysfunction occurred in 14.1% (95%CI, 7.0% to 21.2%) of children. Ventricular dysfunction was not associated with the immunological status of the children. So, cardiac diastolic dysfunction occurs in children with selected characteristics and is not associated with immunological status. The myocardial compliance impairment was the most common dysfunction occurring on the left side, and abnormal relaxation was the most common dysfunction occurring on the right side.

Biography

Mauricio Laerte Silva has a Master Degree in Medical Sciences, and in Epidemiology. He attended a Post-Doctoral Fellowship in Perinatal Research in the USA, where his focus was the fetal cardiac function. Nowadays he is completing his Doctorate Course. His research field is on cardiovascular risk factors in diseases like AIDS and others with systemic inflammatory response, analyzing the cardiac and endothelium functions by means of ultrasonography. Dr. Silva served his Presidency of the Pediatric Society of Santa Catarina and concurrently was an effective member of the Scientific Department of Pediatric Cardiology of the Brazilian Society of Pediatrics in 4 periods.

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