Abstract:

BACKGROUND: It has been estimated that up to a billion people, including many in North America and Europe could be exposed to Zika, a potentially fatal viral disease. There are only a few reports of Zika Myocarditis and long-term follow-up mortality is unknown.

OBJEKTIVE. This study sought to describe the evaluation of patients with Zika Myocarditis.

METHODS. A total of 18 consecutive patients who developed acute Zika Myocarditis within 8 days of disease onset were enrolled in a prospective observational multicenter study. Patients underwent clinical laboratory evaluation including Zika confirmation, ECG, holter, echocardiogram, coronary arteriography (2) cardiac MRI, and clinical and non-invasive cardiology evaluation at 2, 6, 12, 24 and 30 months.

RESULTS. Of the 18 patients 12 were females with a mean age of 52 ± 16 years. A median follow-up period was of 2,7 years. Two of the 18 patients died suddenly during the follow-up. This represents a mortality of 11% within 2,7 years. 7 patients developed heart failure, 6 with reduced ejection fraction (EF) including the 2 cases who died one with preserved EF and moderate to severe pericardial effusion.

Five patients developed acute atrial fibrillation within one week of the disease onset, atrial tachycardia was present in 6 cases. Treatment included sacuril-valsartan or ace-inhibitors, beta-blockers, aldostorone-blockers, cardiovascular rehabilitation after 3 to 6 months of Zika onset, and in one case cardiac resynchronisation therapy plus implanted defibrillators. Acute myocarditis resolves in 9 patients (50%) two cases have persistent atrial and ventricular arrhythmia with normal EF. Altogether characteristic feature of dilated cardiomyopathy developed in 6 patients, two of them died.

CONCLUSION. Dilated cardiomyopathy developed in 33% of patients with Zika Myocarditis, 1/3 of them died. New arrhythmias were detected in 94% of the cases physician should be aware of this possibility of severe disease. More studies are needed to identify the incidence of Myocarditis in Zika, and the evolution of cardiomyopathy and Heart Failure.