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## LETTER TO THE EDITOR

## Eosinophilic myocarditis and heart transplantation: context, clinical condition and importance

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In Brazil, the patient with severe heart failure listed in transplant row is maintained with inotropic drugs, in special the dobutamine. Different from developed countries where there are mechanical assistance devices to assist in the treatment of these patients along with this type of drug.

The use of dobutamine correlates with the presence of Eosinophilic Myocarditis (EM), a rare disease in which infiltrate eosinophilic occurs. It is mainly related to hypersensitivity reaction and hematological diseases. For present nonspecific signs, it is rarely diagnosed antemortem<sup>1</sup>. The studies indicate an incidence of 0.5% in autopsy series and 23% in explanted hearts after cardiac transplantation<sup>2,3,4</sup>. According to a study that evaluated the relationship of drugs with EM, 86% of patients with Eosinophilic Myocarditis received dobutamine<sup>3</sup>. Being the drug more involved with this entity, which explains the difference in the incidence.

Clinical manifestation is very ranging, from asymptomatic cases to conditions as cardiogenic shock and

sudden death from ventricular arrhythmias. The nonspecific signs are cardiac chest pain, dyspnea, fatigue, palpitations and syncope. Furthermore, allergic manifestation such as fever, rashes and blood eosinophilia may occur<sup>5</sup>. However, symptoms and signs of hypersensitivity are not present in all patients<sup>6</sup>. And there is no consistent association between these and the severity of myocardial involvement<sup>7</sup>.

Moreover, the eosinophilic myocarditis, at the time of transplantation, correlates with highs rejection rates. Which coincides with the reduction of immunosuppressive drugs<sup>8</sup>.

Thus, the patient may have its clinical condition aggravated by this disease. Considering that the average waiting for a transplant is 45 days for a patient Intermacs 3, with an inotropic dependence<sup>9</sup>, to understand this entity is fundamental because it interfere directly with the patient's life in row.

Few studies in the literature correlate Eosinophilic Myocarditis and the use of inotropes. And in our service,

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the use of dobutamine is more prolonged and the etiologies are different. As chagasic disease for which there is no data in the literature correlating with ME.

Thus, our study presented at the XXXVI COMU, with the title "Assessment of the impact of eosinophilic myocarditis in patients submitted to heart transplant in

use of inotropic drugs", consists in a database survey of patients submitted to heart transplant, where we evaluated the prevalence of this entity, clinical and laboratory markers and correlations with mortality and rejection. The results of this work may guide the detection of the problem and allow new approaches, propitiating a better state to the patient that is waiting for the transplant.

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