Prevalence and clinical-epidemiological profile of Chagas Disease in individuals with indication for artificial cardiac stimulation in a tertiary service in Rio Grande do Norte (RN)

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Introduction: When analyzing the most diverse etiological factors of cardiac arrhythmias, we can highlight Chagas Disease (CD) as one of the leading causes of infectious origin. Since the pacemaker or cardioverter-defibrillator has become a highly relevant agent for treating these arrhythmias and Brazil has endemic areas for this infectious disease, the need to investigate its correlations becomes undeniable. This work aims to evaluate the prevalence and clinicalepidemiological profile of CD in individuals needing artificial cardiac stimulation in a tertiary service. Methods: Crosssectional observation study with 65 patients undergoing the device implantation procedure at Hospital do Coração de Natal [Heart Hospital from Natal (RN - Brazil)], from July 13/2022 to March 31/2023. The variables gender, age, origin, clinical conditions, knowledge about Triatomineus, and Anti-Trypanosoma Cruzi IgG antibody results were used to characterize the studied population. Data were collected using a specific form previously authorized by the Ethics Committee and with informed consent. Results: It was observed that 56% of those interviewed were elderly, and 18% were under 60 years of age. 69% come from the east zone of Rio Grande do Norte (RN), followed by users from the central region (12%), rural (12%) and western (6%) of Rio Grande do Norte (RN), with only 1% from other states in Brazil. Regarding the associated pathologies of this group of patients, 64.6% of those interviewed were hypertensive (SAH), 27.6% are or were smokers and 24.6% had Diabetes Mellitus (DM). Regarding the diagnosis, 86% was demonstrated by electrocardiogram, in which 50.7% presented total atrioventricular block (CAVB). In addition, 05 patients (7.7%) had reactive anti-Trypanosoma Cruzi IgG antibodies, 02 of which were under 60 years of age. 02 patients came from the west zone of Rio Grande do Norte, 02 from the east zone and 01 from the central zone of RN. From this perspective, 33.8% of those interviewed stated that they had already had contact with this insect, while 66.2 had not. Conclusion: The clinical-epidemiological profile was men, elderly, from all over RN, smokers and /or people with DM and or SAH, with an electrocardiographic diagnosis of atrioventricular blocks, predominantly AVB. Furthermore, a low prevalence of Chagas disease was observed in these patients, as well as little self-declared contact with the triatomine. However, we live in an endemic area, and considering this user profile, it is crucial that health services act in the screening and provisional intervention process, avoiding worsening. At the same time, the patient does not receive definitive treatment.