Serological and Epidemiological profile of patients with megaesophagus followed up in a reference center in Bahia

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Chagas disease (CD), caused by Trypanosoma cruzi (T. cruzi), remains a significant public health challenge in Latin America, affecting over 70 million people. In Brazil, around 300,000 individuals present with chagasic megaesophagus and/or megacolon. Identifying T. cruzi infection in individuals with digestive manifestations is crucial for appropriate treatment and improving living conditions. This study aims to characterize individuals with megaesophagus, assess their risk history for T. cruzi vector transmission, and determine the seroprevalence of anti-T. cruzi antibodies.

This cross-sectional, descriptive study was conducted in a Gastroenterology Ambulatory Care at a Referral Hospital in Bahia, Brazil, using a convenience sample. Data collection included a pretested questionnaire and blood sampling for immunological analysis. Among 358 individuals diagnosed with megaesophagus, the majority were female (61.2%), of Black or mixed racial background (90.2%), and had incomplete primary education (50.7%). Despite exposure history, 94.5% recognized the triatomine bug, 87.3% had lived near forested areas, 72.3% had resided in mud houses, and 51.1% reported a family history of CD, primarily in siblings (64.3%). The seroprevalence of anti-T. cruzi antibodies was 61.9%.

The socioeconomic characteristics of the study population suggest conditions of poverty, reinforced by their residence in forested regions and substandard housing. The high prevalence of infected siblings strongly suggests vector-borne transmission through triatomine exposure. These findings underly the urgent need for

improved housing conditions, enhanced healthcare access, and strengthened public health policies to prevent and mitigate CD transmission. Addressing these determinants could significantly reduce the epidemiological and social burden of CD, ultimately improving patient outcomes and contributing to disease control efforts.

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