

CHRONIC MYELOID LEUKEMIA IN THE AMAZON REGION: A RETROSPECTIVE EPIDEMIOLOGICAL ANALYSIS IN A REFERENCE HOSPITAL IN NORTHERN BRAZIL

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Introduction: Chronic Myeloid Leukemia (CML) is a hematological neoplasm characterized by the translocation t (9;22), which generates the BCR-ABL fusion gene, resulting in the uncontrolled proliferation of myeloid cells. Representing about 15% of adult leukemia cases in Brazil, CML is more prevalent in males and individuals over 40 years of age. In the state of Pará, according to the National Cancer Institute (INCA), approximately 360 new leukemia cases are estimated annually, about 100 of which occur in the capital, Belém. Between 2000 and 2021, there were 1,226 leukemia-related deaths in the state, highlighting the importance of regional studies addressing the epidemiological profile of these neoplasms. With population growth and increased access to high-complexity healthcare services, it is essential to map CML cases to support prevention actions, early diagnosis, and effective patient follow-up. **Objective:** To determine the prevalence and sociodemographic and clinical profile of patients with CML treated between 2015 and 2022 at Ophir Loyola Hospital, a reference center for oncology in Northern Brazil. **Methods:** This was a cross-sectional, descriptive, and analytical retrospective study. Medical records of CML patients aged between 18 and 90 years were analyzed. Data collection took place in August 2024 through the Medical Records and Statistics Department (CAME). Patients with other leukemias, neurological or infectious diseases, pregnant women, and children were excluded. The study was approved by the Research Ethics Committee (CAAE: 79820024.0.0000.5550 / Approval No. 6.924.784). **Results:** Of the 275 leukemia cases recorded during the period, 132 (48%) were confirmed as CML, indicating that this is the most prevalent form of leukemia at the studied hospital. There was a predominance of male patients (59.9%) and age groups between 41 and 50 years (22.7%), followed by individuals aged 31 to 40 years (21.2%) and 61 to 70 years (20.4%). Regarding place of origin, 69.6% of the patients came from the countryside of Pará, while only 30.3% resided in the capital. Low educational attainment was notable, with 41.6% of patients having only completed or not completed elementary school. The most common marital status was married/stable union (43.3%). The mean age was 50 years, with most patients living in socially vulnerable contexts and

having limited access to information about the disease, which may contribute to delayed diagnoses and low treatment adherence. **Conclusion:** The prevalence of CML among leukemia cases recorded at Ophir Loyola Hospital highlights the significance of this neoplasm in the Amazonian context. The sociodemographic profile points to a predominantly rural population, with low educational levels and of economically active age. These findings reinforce the need for public policies aimed at early diagnosis, decentralization of oncological care, and health education, especially in the rural regions of Pará, improving the survival of CML patients in Northern Brazil.

Keywords: Chronic myeloid leukemia; prevalence; epidemiology