

HOSPITALIZATIONS AND MORTALITY FOR MALIGNANT NEOPLASIA OF THE ENCEPHALON IN THE STATE OF PARÁ: AN EPIDEMIOLOGICAL STUDY FROM 2019 TO 2023

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Introduction: Malignant neoplasia of the encephalon, or brain cancer, is characterized by the uncontrolled proliferation of malignant cells originating in the encephalic tissue. Due to the infiltrative behavior of these cells, essential neurological structures can be compromised, affecting vital functions of the central nervous system. Although its incidence is lower than other types of cancer, the high morbidity and potential lethality make this condition a public health challenge. The state of Pará had a higher mortality rate than the national average during the period analyzed, highlighting the importance of understanding the regional dynamics of this disease. **Objectives:** To analyze the epidemiological profile of hospitalizations and relate it to the mortality rate from malignant neoplasms of the brain between 2019 and 2023. **Methods:** This is an epidemiological study with a quantitative, descriptive, and retrospective approach. The data was extracted from the Hospital Information System of the Unified Health System (SIH/SUS), through the Department of Informatics of the SUS (DATASUS). The variables analyzed included: number of hospitalizations, gender, age group, mortality rate, and distribution by municipality, between 2019 and 2023, in the state of Pará. **Results:** In the period analyzed, 1,237 hospitalizations for malignant neoplasms of the brain were recorded in Pará. The municipality of Belém had the highest concentration, totaling 924 hospitalizations, followed by Santarém (159) and Parauapebas (21). The peak number of hospitalizations occurred in 2023, with 303 cases (24.49%), while the year with the lowest number was 2020, with 182 hospitalizations (14.71%). As for gender, there was a higher proportion of hospitalizations among males, accounting for 54.4% (673) of the total. In terms of age group, the highest number of hospitalizations occurred among children aged 5 to 9, with a total of 158 cases (12.77%), followed by the 10 to 14 age group, with 119 hospitalizations (9.62%), showing a predominance among young individuals. With regard to the mortality rate, Pará reached a figure of 16.65%. The worst scenario was observed in 2020, with a rate of 25.27%. Among the municipalities, Conceição do Araguaia recorded the highest mortality rate (100%), followed by Tucuruí (75%). In contrast to the pattern observed in hospitalizations, mortality was higher among females (18.09%) than among males (15.45%). **Conclusion:** The study highlighted that the state of Pará recorded a high number of hospitalizations for malignant neoplasms of the encephalon, with the highest prevalence in Belém and an increase in 2023. There was a predominance of males and of children and adolescents aged 5 to 9 and 10 to 14. The mortality rate was high in the municipalities of Conceição do Araguaia and Tucuruí, mainly in women,

indicating better rates in places with referral hospitals and early diagnosis of this neoplasia. In addition, these findings highlight the need for greater distribution of referral hospitals, since the difficulty of access, due to the size of the state, often obstructs proper diagnosis and treatment.

Keywords: Brain cancer; hospitalizations; mortality