

EPIDEMIOLOGICAL PROFILE OF EXPLORATORY LAPAROTOMIES WITH TUMOR RESECTION IN ONCOLOGY IN THE NORTH REGION FROM 2018 TO 2024.

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Introduction: Exploratory laparotomy is a surgical procedure involving the opening of the abdominal cavity for the purposes of investigation, diagnosis, and treatment of various pathologies. In the oncological context, this practice is widely used for the partial or total resection of tumors located in abdominal organs, being a procedure potentially associated with epidemiological factors in the North Region of Brazil. **Objectives:** To describe the epidemiological profile of exploratory laparotomies with partial or total tumor resection in Oncology in the North Region of Brazil, in the period of 2018 to 2024. **Methods:** Epidemiological study of a cross-sectional and observational nature based on secondary data. The research was conducted through consultation of the databases of the Department of Informatics of the SUS (DATASUS). The collected data were organized and analyzed according to the following variables: state of hospitalization occurrence, deaths and hospitalizations by year of processing, average duration of hospitalization in days, total annual cost of procedures and mortality rate. The data obtained were analyzed using Microsoft Office Excel 2019. Subsequently, a descriptive and comparative approach to this information was carried out. A Spearman's correlation test was performed to assess a possible relationship between the average duration of hospitalization and mortality rate of hospitalized patients of each state of the North Region. A p-value less than 0.05 ($p < 0.05$) was used as the reference for statistical significance. **Results:** A total of 556 hospitalizations were recorded in the North Region between the years 2018 and 2024. Of these, 257 were registered in Tocantins (46.22%), making it the state with the highest number of hospitalizations, followed by Pará with 160 (28.72%). The year of 2019 had the highest absolute number of hospital admissions in the region, with 119 cases (21.40%), but not the highest number of deaths. Of the 61 total deaths in during the period, 16 (26.22%) occurred in 2020, making it the year with most fatal events. The average length of hospitalizations in the context of exploratory laparotomy was 12.6 days in the North Region, with Acre having the highest average duration (17 days) and Roraima the shortest (4.3 days). The total cost, in Brazilian reais,

of the surgeries across all states during the period was R\$ 3,331,803.19, with 2019 being the year of the highest expenditure (R\$ 672,449.53, accounting for 20.18% of the total). Tocantins was the federative unit with the highest spending (R\$ 1,488,662.80), representing 44.68% of the total amount spent by the states from 2018 to 2024. The average mortality rate during the period was 10.97%, with 2023 being the year with the highest mortality rate (16.95%) and 2024 the lowest (5.88%). There was no statistically significant monotonic correlation between the length of hospitalization and the mortality rate ($p = 0.8191$). **Conclusion:** This study highlights significant epidemiological disparities in exploratory laparotomies for oncological tumor resection in Brazil's North Region. By analyzing variables such as hospitalization rates, mortality, and costs, it provides critical insights into regional healthcare demands, supporting more effective planning and resource allocation in oncological surgery.

Keywords: Epidemiological Profile; Exploratory Laparotomy; North Region.