

## EPIDEMIOLOGICAL PROFILE OF BLADDER CANCER AMONG ADULTS FROM THE NORTHERN REGION OF THE PARÁ STATE

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**Introduction:** Bladder cancer (BC) is one of the most common neoplasms of the urinary tract and has a multifactorial etiology, involving both environmental and genetic factors. It is characterized by the disordered growth of transitional epithelial cells, which can give rise to tumors with varying degrees of aggressiveness. Studies indicate that the *PI3K/AKT/mTOR* signaling pathway plays a significant role in the progression of urothelial carcinoma, with its dysregulated activation — caused by *PTEN* loss of function, increased *AKT* expression, and *PIK3CA* mutations — being associated with tumor growth, cell survival, and invasiveness. In Brazil, particularly in the Northern region, urothelial carcinoma has an estimated incidence rate of 0.69 cases per 100,000 inhabitants, ranking 11th in regional cancer incidence. Moreover, the disease predominantly affects males, occurring three times more frequently in men than in women. **Objectives:** This study aimed to analyze the epidemiological profile of bladder cancer among adults living in the state of Pará, with an emphasis on distribution by sex, age group, and the evolution of cases over the past decade. **Methods:** This is a retrospective, descriptive, and quantitative study based on secondary data from cases recorded between 2014 and 2024. Information was extracted from the DATASUS Oncology Panel, considering the variables of sex, age group, year of diagnosis, and clinical evolution. The data were organized and tabulated using Microsoft Excel and subjected to descriptive statistical analysis. The results are presented in absolute and relative frequencies. **Results:** The analysis by age group revealed a higher proportion of cases among individuals aged 60 to 64 years (12.93%). Among men, the age groups of 65 to 69 years and 75 to 79 years showed the highest proportions, each accounting for 25.87% of cases. Among women, the age group with the highest incidence was 55 to 59 years, representing 19.87% of cases. **Conclusion:** The epidemiological profile of bladder cancer in the state of Pará indicates a predominance among males, particularly in the 65 to 69 and 75 to 79-year age groups. These findings reinforce the importance of implementing screening and early diagnosis strategies targeting the elderly population, especially men. Furthermore, the need for regional public policies that consider the epidemiological specificities of the Amazon region of Pará is highlighted, aiming to promote preventive actions and ensure timely and equitable access to healthcare services.

**Keywords:** Bladder cancer; Epidemiology; Pará; DATASUS; Public health

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