

## COMPARATIVE ANALYSIS OF HOSPITALIZATIONS AND MORTALITY RATE IN TOTAL AND PARTIAL NEPHRECTOMIES IN ONCOLOGY IN BRAZIL: FROM 2019 TO 2024

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**Introduction:** Malignant renal neoplasms are conditions in which kidney cells grow uncontrollably and are harmful to human health. The main type of primary kidney tumor is Clear Cell Renal Carcinoma (ccRCC), accounting for 70 to 80% of cases in Brazil, followed by Papillary Carcinomas, responsible for 10 to 15%; finally, the other types represent 5 to 10% of occurrences. The treatment of these cancers is usually done through total or partial nephrectomies, depending on the size of the tumor and its stage of progression. **Objectives:** This study aims to perform a comparative analysis of hospitalizations and mortality rates for total and partial nephrectomies in oncology in Brazil, with a time frame from 2019 to 2024. **Methods:** This is a descriptive, cross-sectional and quantitative study based on secondary data from the SUS Hospital Information System (SIH-SUS) available in DATASUS, seeking variables for indicators of hospitalizations and mortality rates of the procedures. The distribution of nephrectomies by region, the year in which they were processed, the average length of hospitalization, and the deaths caused were taken into account. **Results:** Between 2019 and 2024, Brazil presented 14,479 hospitalizations for total nephrectomy surgeries and 8,219 for partial nephrectomy, both in oncology. The Southeast region had the highest concentration of both operations in question, with 7,516 total nephrectomies performed and 4,624 partial ones, representing approximately 51% and 56% of the national total, respectively. On the other hand, the Central-West region had the lowest numbers of complete kidney removals, with only 767 procedures (5% of the total), while the North performed the least partial ones, with 303 surgeries (3% of the total). In addition, there was an increase in the performance of both procedures, going from 2,214 for total and 1,247 for partial in 2019, to 3,035 total and 1,762 partials in 2024, representing approximately 37% and 41% increase in hospitalizations. The mortality rate for both surgeries decreased during these years, starting at 2.64% for total surgeries and 1.12% for partial surgeries, and ending at 2.54% and 0.96%, respectively. In addition, a decrease in the average length of stay of patients in hospital was also observed, going from 6.0 to 4.8 days for total surgeries, and from 4.9 to 4.3 days for partial surgeries. **Conclusion:** The study demonstrated that most nephrectomies performed in Brazil are total, possibly evidencing failures in the early diagnosis of these tumors, since there was greater renal impairment. However, the notable reduction in the

direct mortality rate for surgery and in the average length of hospitalizations may represent an improvement in surgical practice, since survival after the procedure was shown to be greater and recovery more effective, accelerating the discharge of patients. Thus, new studies are needed in the area to confirm these findings and, therefore, plan the best actions for national health.

**Keywords:** Surgery; Oncology; Nephrectomies.