

PROGNOSTIC IMPACT OF LYMPHADENECTOMY IN PATIENTS UNDERGOING GASTRECTOMY FOR GASTRIC ADENOCARCINOMA: A RETROSPECTIVE STUDY IN A REFERRAL HOSPITAL

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Introduction: Gastric cancer is the fifth most common malignancy worldwide and one of the leading causes of cancer-related mortality. This study aimed to evaluate the prognostic impact of the extent of lymphadenectomy in patients undergoing gastrectomy for gastric adenocarcinoma, with emphasis on the correlation between clinical variables and survival. **Methods:** This was a retrospective, observational study based on the analysis of 200 medical records of patients treated between 2019 and 2024 at a university hospital in the state of Pará, Brazil. Sociodemographic, clinical, histopathological, and surgical data were collected. Statistical analyses included Student's *t*-test, Mann–Whitney U test, chi-square test, Spearman's correlation, and Kaplan–Meier survival analysis. **Results:** The mean age of patients was 60.1 years, with 64.5% being male. Most underwent total (50.5%) or subtotal (48%) gastrectomy. According to Lauren's classification, the intestinal type was the most frequent (52.5%). The mean number of resected lymph nodes was 23.53 (± 11.09), with a mean of 5.55 (± 8.05) metastatic nodes. Patients with up to two affected lymph nodes had better survival, whereas those with more than 21 positive nodes did not survive beyond two years. The overall five-year survival rate was approximately 50%. A significant correlation was found between the lymph node ratio and mortality ($p = 0.041$). Neoadjuvant treatment was administered in 56.5% of cases and was associated with lower mortality ($p = 0.003$), especially among patients with moderate nodal involvement. The platelet-to-lymphocyte ratio (PLR) was also significantly associated with mortality ($U = 3887$, $p = 0.041$). A strong correlation was observed between Lauren and WHO classifications ($r = 0.90$), while clinical variables showed weak associations with the extent of lymphadenectomy. **Conclusion:** The extent of lymphadenectomy and the number of metastatic lymph nodes are relevant prognostic factors in gastric cancer. Adequate lymph node dissection contributes to more accurate staging and may improve oncological outcomes. Neoadjuvant chemotherapy showed a positive impact on survival in selected subgroups. The inclusion of hematological markers such as PLR may also aid in risk stratification.

Keywords: Gastric neoplasm; Lymphadenectomy; Prognosis;