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10th International Workshop on Surgical Exploration of the Mediastinum and Systematic Nodal Dissection
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3rd Joint Meeting of the Spanish Society of Thoracic Surgery (SECT)
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THORACOTOMY VS VATS FOR LUNG CANCER RESECTION : IMPACT ON SURVIVAL. RESULTS FROM SPANISH VIDEO-ASSISTED THORACIC SURGERY GROUP

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Lung cancer is one of the most prevalent cancers worldwide and causes the highest number of cancer-related deaths. Approximately 20% of diagnosed patients can eventually undergo curative surgical treatment (1). Over the last few years, lung cancer surgery has evolved significantly, primarily due to minimally invasive surgical techniques.

Available evidence suggests that the VATS (Video-Assisted Thoracoscopic Surgery) approach is associated with better pain control, earlier recovery, shorter hospital stays, lower readmission rates, and similar long-term outcomes compared to open surgery (2-6).

In this study, we report survival results in the cohort of patients from the Spanish Group of Video-Assisted Thoracoscopic Surgery (GeVATS) who underwent anatomical lung resection for de novo lung cancer.

Materials and Methods: We included all GeVATS cohort patients with long-term follow-up (>24 months), excluding cases with a history of other primary lung tumors, pneumonectomies, and extended resections (n=2634, 40% open surgery, 60% VATS). To account for differences in baseline patient characteristics and adjust for the effect of the surgical approach on patient prognosis, we created a propensity index based on predicted probabilities of receiving VATS or open surgery, considering patient characteristics, tumor location, cN status, and neoadjuvant therapy. A p-value less than 0.05 was considered statistically significant.

We used the teffects and stteffects packages in Stata v17 for our analyses.

Results: The excess mortality at 30 days, 90 days, and the readmission rate was higher by 2.28%, 3.94%, and 4.64%, respectively, in cases of open surgery vs VATS ($p<0.001$). In the long term, there were no differences in time to death from any cause between the two surgical

approaches, nor in cancer-specific mortality. However, disease-free survival was longer in the minimally invasive approach (SHR 1.30; CI: 1.05-1.62) within the open surgery group.

Conclusion: In the GeVATS cohort, a minimally invasive approach is associated with lower early mortality and readmission rates. Although disease-free survival is superior for the VATS approach, overall and cancer-specific survivals are similar in the long term.

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