





Hospital Universitari Mútua Terrassa BARCELONA



RADICALITY OF LYMPHADENECTOMY IN LUNG CANCER **RESECTION: VATS VS RATS**

Ricard Ramos Thoracic Surgery. Hospital Clinic. Barcelona

Background: The use of robotic-assisted thoracic surgery (RATS) for major lung resections in early-stage non-small-cell lung cancer (NSCLC) is becoming more common, though its effectiveness has not been completely assessed. This study aims to compare the outcomes of lymph node dissection (LND) performed using RATS with those achieved through Totally Thoracoscopic surgery (TT)

Methods: We conducted a retrospective review of clinical and pathological data from patients with clinical stage N0 NSCLC who underwent pulmonary lobectomy or segmentectomy between June 2010 and November 2022. The comparison criteria were the number of mediastinal lymph nodes and mediastinal stations dissected via RATS versus the four-port TT approach.

Results: A total of 246 pulmonary resections with LND for stage I-II NSCLC were analyzed, of which 85 were performed using TT and 161 using RATS. Both groups had similar clinical characteristics. The RATS group showed a significantly higher number of mediastinal nodes and stations dissected compared to the TT group (TT: mean \pm SD, 10.72 \pm 3.7; RATS: 14.74 \pm 6.3 [p < 0.001]), except in the inferior mediastinal stations. Postoperative complication rates were comparable between the two techniques.

Conclusions: In patients with early-stage NSCLC undergoing major lung resection, RATS provided a superior quality of hilar-mediastinal lymph node dissection compared to the TT approach.