

NODAL UPSTAGING IN EARLY STAGE NSCLC

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Hiliar (pN1) and mediastinal lymph (pN2) nodal upstaging after surgery for early stage (< IIB) non-small cell lung cancer (NSCLC) is a quality marker of surgical lymphadenectomy. It has been suggested that Video-Assisted Thoracoscopic Surgery (VATS) may result in suboptimal lymphadenctomy because nodal up- staging was lower than after open thoracothomy (THO). We sought to: (1) compare the prevalence of nodal upstaging after VATS and THO in NSCLC < IIB; (2) investigate potential risk factors of nodal upstaging; and, (3) assess the impact of nodal upstaging on survival.

METHODS: Retrospective analysis of all anatomical resections for NSCLC < IIB in our center (n = 323) from 2011 to 2017. The surgical procedure [THO (60.4%) or VATS (39.4%)] was chosen by the surgeon on the basis of experience and tumor characteristics (centrality and size).

RESULTS: Baseline characteristics were similar between the two groups except for larger and more central tumors in THO (p < 0.05). The prevalence of pN1 upstaging was higher after THO (20.5%) than after VATS (8.6%, p < 0.05), but that of pN2 was similar in both groups (6% (THO) and 6.5% (VATS). Tumor centrality was an independent risk factor for pN1. Survival after THO or VATS was similar, irrespectively of nodal up- staging.

CONCLUSIONS: In conclusion, VATS is as useful as THO to detect upstaging. Lower upstaging after VATS is attributable to bias selection. Central tumors are more often approached by thoracotomy and centrality is a risk factor for hiliar upstaging.