30th ESTS MEETING



O-053

ONCOLOGICAL OUTCOMES OF UPFRONT SURGERY IN PATIENTS WITH "OCCULT" PATHOLOGICAL N2 NON-SMALL CELL LUNG CANCER: AN INTERNATIONAL MULTICENTRE STUDY

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OBJECTIVES

The role of surgery in the multimodality treatment stage IIIa/N2 NSCLC remains controversial. To assess the oncological outcomes of upfront lung resection and potential prognostic factors, we examined a subset of patients diagnosed with 'occult' pN2 NSCLC.

METHODS

Multicentre retrospective analysis of the clinical records of patients who underwent upfront major lung anatomical resection and ipsilateral hilar-mediastinal lymphadenectomy for 'occult' pN2 NSCLC at three European centres.

'Occult' pN2 disease was defined as neoplastic involvement of mediastinal lymph nodes that was not disclosed by routine preoperative imaging (cN0-N1 tumours).

Single station pN2 NSCLC was defined as the neoplastic involvement of one mediastinal station.

Skip-N1 NSCLC was defined as pN2 disease without neoplastic involvement of hilar lymph nodes.

Clinical and pathological staging were performed according to the 8th edition TNM classification.

Exclusion criteria were: sublobar or non-anatomical resections, pneumonectomies, neoadjuvant treatments for NSCLC, R1/R2 surgery, cTNM/pTNM stages higher than IIIA.

RESULTS

We included 138 patients with 'occult' pN2 NSCLC. The mean age was 64.0 ± 8.9 years; male/female ratio was 1.1. The most common histology was adenocarcinoma (92.0%), the most frequent cTNM stage was IA (48.6%). Minimum follow-up time was 30 months. There were no statistically significant differences in baseline preoperative characteristics among the three centres (Table).

Median OS and recurrence-free survival (RFS) were 71 months (95%CI: 46-90 months) and 26 months (95%CI: 21-58 months), respectively (Graphic).



OS and RFS were not significantly affected by single-station pN2 disease (p=0.21 and p=0.67), skip-N1 disease (p=0.58 and p=0.92) and adjuvant chemotherapy (p=0.43 and p=0.20), respectively.

In patients who underwent adjuvant radiotherapy, RFS was significantly longer (p<0.0001), while OS was not significantly influenced (p=0.13).

CONCLUSIONS

Our analyses suggest a protective effect of adjuvant mediastinal radiotherapy on recurrence; the number (single vs. multiple station) and location (hilar/mediastinal) of involved lymph nodes do not affect survival.

Disclosure: No significant relationships.

Keywords: NSCLC, N2, Stage IIIa, Lung Cancer, Upfront Surgery.

| Variables | Centre A (n=48) | Centre B (n=45) | Centre C (n=45) | p-value |
|---|---|---|---|---------|
| Age (mean ± SD), years | 65.1 ± 8.7 | 61.9 ± 8.5 | 64.9 ± 9.5 | 0.17 |
| Male gender, n (%) | 27 (56.3) | 18 (40.0) | 28 (62.2) | 0.43 |
| Histology, n (%) - Adenocarcinoma - Squamocellular - Large cell - Adenosquamous - Sarcomatoid | 47 (97.9) 1 (2.1) 0 0 | 41 (91.1) 4 (8.9) 0 0 | 39 (86.7) 3 (6.7) 1 (2.2) 1 (2.2) 1 (2.2) | 0.88 |
| cTNM stage, n (%) - IA - IB - IIA - IIB - IIIB | 25 (52.1) 9 (18.8) 1 (2.1) 13 (27.1) | 15 (33.3) 7 (15.6) 5 (11.1) 16 (35.6) 2 (4.4) | 27 (60.0) 9 (20.0) 3 (6.7) 6 (13.3) | 0.73 |

SD: standard deviation, cTNM: clinical TNM classification, 8^{th} edition

