Variable definitions of “unresectable” stage III NSCLC among lung cancer specialists

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Objectives

Stage III non-small cell lung cancer (NSCLC) is a heterogeneous disease that often elicits differing opinions regarding what is “unresectable”, depending upon the specialist and the treatment setting. Using survey data, we sought to characterize opinions regarding the resectability of stage III NSCLC.

Methods

A blinded, web-based survey was conducted by the Association of Community Cancer Centers with questions regarding resectability protocols, presence of multidisciplinary clinics, and determinants of resectability. Thoracic surgeons, medical oncologists, and pulmonologists were asked whether the following scenarios were unresectable:

-”Suspected mediastinal nodal metastases”
-”CT or PET/CT evidence of mediastinal nodal metastases”
-”Mediastinal nodal metastases confirmed by biopsy”
-”Low volume single nodal station ipsilateral nodal metastases”
-”Bulky multi-station ipsilateral mediastinal nodal metastases”
-”Contralateral mediastinal nodal metastases”

Association of Community Cancer Centers

Results

Overall, 639 respondents from 160 cancer programs (44 states) completed the survey, including 72 (11.3%) thoracic surgeons (TS), 114 (17.8%) medical oncologists (MO), and 57 (8.9%) pulmonologists (P). Most TS, MO, and P (n=163) practice at community, integrated, hospital-associated, or free-standing cancer programs (CP), while the remainder (n=80) practice at academic or NCI designated programs (AP). Among all respondents, 378 (59.2%) reported that they believed that a multidisciplinary clinic led to consensus-based care.

Regarding scenarios for stage III NSCLC, variability existed in whether each scenario was “unresectable” (Figure 1A). Respondents were least likely (12.3%) to describe “low volume single station ipsilateral nodal metastases” as unresectable and most likely (65.4%) to describe “contralateral mediastinal nodal metastases” as unresectable. MO were more likely to answer that “mediastinal nodal metastases confirmed by biopsy” were unresectable than were TS/P (64.9% vs. 48.6%/45.6%, p=0.021). No differences were apparent between all respondents from CP vs. AP (Figure 1B). Practitioners (n=142) from urban areas were more likely to answer that “suspected mediastinal metastases” were unresectable (28.2%) than were practitioners (n=101) from rural/suburban areas (11.9%, p=0.002).

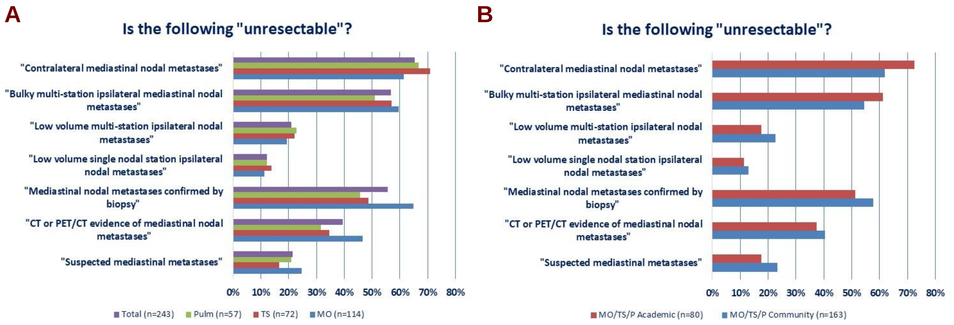

Figure 1. Survey responses to whether the posed clinical scenario represents “unresectable” stage III NSCLC, comparing responses between practitioner types (A) and practice setting (B).

Among TS, 35 (48.6%) practiced at AP, while the remainder practiced at CP. AP surgeons were more likely than CP surgeons to describe several scenarios as unresectable, although with low numbers this did not meet statistical significance (Figure 2).

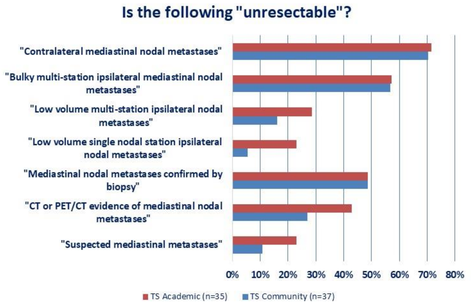

Figure 2. Survey responses to whether the posed clinical scenario represents “unresectable” stage III NSCLC, comparing responses among thoracic surgeons by practice setting.

Conclusions

The presentation of stage III NSCLC is quite heterogeneous. Most TS, MO, and P do not consider CT or PET/CT evidence alone or low volume mediastinal disease to be unresectable, although a majority do consider mediastinal nodal metastases confirmed by biopsy, bulky nodal disease, or contralateral disease as unresectable. Some differences exist based upon specialty or practice setting. Efforts by national organizations to standardize practice approaches and definitions of unresectability in stage III NSCLC may optimize care in this setting.