Correspondence

Complete endosonographic staging of lung cancer

With great interest, I read the article by Kang and colleagues in which they performed a randomised comparison between EBUS-centred versus EUS-centred mediastinal nodal staging of lung cancer. As expected, no difference in diagnostic values between the two groups was found. A minimal diagnostic gain of the addition of EUS to EBUS was reported in contrast to a significant diagnostic benefit of the addition of EBUS to EUS. Strikingly, there was a high false-negative rate of EUS regarding the subcarinal station — a station that is perfectly accessible by EUS — as nodal metastases were missed in seven patients (four assessed by EBUS, three at thoracotomy). This might be due to the protocol followed where the secondary procedure in each staging arm was only used to sample nodes that were inaccessible or difficult to assess by the first procedure as opposed to perform an optimal second staging procedure as well. First, the mean time spend on EUS (following EBUS) was only 6 min during which only one or two aspirations of a single node was performed. Second, although a similar number of different nodal stations were evaluated during an EBUS-centred (n=3) and EUS-centred (n=2.5) approach, twice as many samples were taken during EBUS (n=8) vs EUS (n=4), indicating that limited EUS sampling could also account for the relatively high false-negative rate found. Of key importance — not mentioned in the ‘Methods’ section — is the need to switch needles in case during the second procedure a higher nodal station is targeted to prevent upstaging.

Endosonography — instead of mediastinoscopy — is the current staging test of choice as it results in improved staging, reduction of unnecessary thoracotomies and is additionally cost effective. A recent meta-analysis demonstrated that combined staging by EBUS and EUS results in more sensitive nodal staging than either EBUS or EUS alone, and now the current study by Kang demonstrates that we should start with EBUS. Another reason to start with EBUS instead of EUS — and not the other way around — is to prevent the introduction of bacterial flora from the ‘dirty’ oesophagus into the ‘sterile’ lower airways. I would suggest that during EBUS the initial focus should be on the right-sided nodes (generally out of reach of EUS) before evaluating left-sided or subcarinal nodes as they can be reached by both approaches. In case of extensive cough, an early switch to an oesophageal approach can be made without sacrificing a thorough complete mediastinal nodal evaluation by endosonography.

Jouke T Annema
Correspondence to Dr Jouke T Annema, Department of Respiratory Medicine, AMC, Meibergdreef 9, P.O. Box 22660, Amsterdam 1100 DD, The Netherlands; j.t.annema@amc.nl

Competing interests None.

Provenance and peer review Not commissioned; internally peer reviewed.

To cite Annema JT. Thorax 2014;69:675.
Accepted 20 December 2013 Published Online First 15 January 2014

REFERENCES