

Perspective and clinical relevance of intrapulmonary lymph node retrieval: response to the editorial by Tantraworasin and colleagues and the editorial by Marc Riquet and colleagues

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Response to: Tantraworasin A, Taioli E, Siwachat S, *et al.* Role of intrapulmonary lymph node retrieval for pathological examination in resectable non-small cell lung cancer. *J Thorac Dis* 2017;9:4280-2.

Riquet M, Pricopi C, Mangiameli G, *et al.* Pathologic N1 disease in lung cancer: the segmental and subsegmental lymph nodes. *J Thorac Dis* 2017;9:4286-90.

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Academic discussion about clinical relevance of intrapulmonary lymph node retrieval will help the community to increase the awareness of this easy-to-be-neglected area in our practice. Dr. Tantraworasin *et al.* (1) and Dr. Riquet *et al.* (2) both contribute their thoughts on this important topic. As they mentioned in the editorials, these lymph nodes deserve special attention because they occupy a unique place not only with regard to the prognosis of the NSCLCs when they are metastatic but also because of their anatomical and pathogenic characteristics (2). These comments will surely encourage more and more investigation around this topic.

The current situation is quite challengeable, for intrapulmonary lymph node collection is not a routine procedure for many centers and most of the large clinical trials have not set the standard or illustrate the procedure of harvesting intrapulmonary lymph node as baseline quality requirement. According to our data (3) and data from Osarogiagbon *et al.* (4), an average of five nodes from level 13 to 14 might be collected for staging. This number is quite significant, if we consider a previous study (5), published in the *Journal of Clinical Oncology*, and has demonstrated that 16 nodes should be set as the threshold to evaluate the quality for node negative patients. Although that study did not specifically point out how

many N1 levels were reported in the pathological report, this number of five nodes should be seriously considered as important part of the quality assessment of lymph node dissection.

Intrapulmonary lymph node retrieval may benefit not only the quality evaluation on patients with pathological N0 status, but also the understanding of distribution of metastatic patterns for the pN1 group. Thereafter we can explore the necessity of adjuvant treatment if involved nodes are only limited to the intrapulmonary area, which accounted for 36% of our pN1 cohort according to our unpublished data. If these so-called “occult” positive nodes were not harvested and reported in the final pathological report, this group might be down-staged to pN0 status and the following treatment might be omitted based on the current recommendation. Moreover, even if those patients were diagnosed as pN1 (metastatic nodes only found in level 13–14), the evidence is scarce to draw a conclusion whether to prescribe adjuvant chemotherapy for this specific group. Our unpublished data also suggest the potential survival benefit for these patients if adjuvant therapy is administered, but the prerequisite condition should be that all three levels of N1 nodes from level 10–12 were collected individually and no spreading was found in these nodes.

Again, systematic 5-level N1 node dissection should be the base-line structure for further quality evaluation.

Several questions remained unanswered. How far to go when a surgeon or pathologist grossly dissects the tiny bronchus tree? There are many levels of bronchi and we don't have a consensus so far. Another question involves the microscopic examination of intrapulmonary nodes, as described by Dr. Ramirez *et al.* (6). No doubt, it's a superb procedure to recover those nodes inside the lung tissue. But we must consider the labor cost and outcome of different procedures to balance cost and efficacy. It deserves more investigation in this field to standardize a protocol for doctors and researchers.

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Footnote

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