

**Metastatic Subpleural Lymph Node: How Should It Affect TNM Staging of Nonsmall Cell Lung Cancer?**

**To the Editor:** We report the case of a 67-year-old woman with adenocarcinoma in the upper right lobe and an endothoracic goitre causing tracheal compression.

A total thyroidectomy was first performed by a cervical approach, but lung surgery had to be postponed because the patient developed a dental abscess during recovery from the first operation. Eighty days after the adenocarcinoma had been staged as T2 N0 M0 (stage IB), thoracotomy was performed with the intention to cure. During the procedure the disease was seen to have progressed considerably and paravertebral invasion at the D3 level was noted; also observed were enlarged mediastinal and hilar nodes and a 5-mm subpleural node in the middle lobe—all related to the neoplastic process. It was decided to end the procedure, accepting surgical failure. The pathologist diagnosed the node from the middle lobe as subpleural metastasis from an adenocarcinoma.

The first observation in light of the events is clearly the advisability of restaging the cancer after a prolonged delay of thoracotomy.

## LETTERS TO THE EDITOR

However, the reason for this letter is related to current definitions for the definitive pathologic TNM staging of non-small cell lung cancer, about which questions have been raised without their receiving much coverage in international publications. Should subpleural node involvement be interpreted as an N or M factor in the classification? If it is relevant to N, and if the node involvement is in the other lobe, what grade should be assigned? Given the possibility of retrograde lymphatic spread and skip metastases, could lymphatic spread be ruled out and the node be considered M owing solely to its distance from the primary tumor?

According to the most recent (1997) revision of the International System for Staging Lung Cancer, "intrapulmonary nodes involved by direct extension of the primary tumor" are considered N1, while "separate metastatic tumor nodule(s) in the ipsilateral nonprimary-tumor lobe(s)" are M1.<sup>1</sup> It is not clear how to consider intrapulmonary nodes present in other lobes. Nor can such nodes be included in other staging categories. It is not specified whether intrapulmonary nodes should be included in the category of tumor nodules.

Recent studies on the structure of lymph vessels have put an end to the simplistic concepts of former anatomical descriptions and have

described far more complex paths of lymphatic spread, such as skip metastasis, and the double communication of lymph node stations with the thoracic duct and the circulatory system. For example, based on findings by gallium lymphoscintigraphy,<sup>2</sup> these studies even put forth the possibility of spread across the fissure or to a new lobe. Spread across a fissure may add even more confusion to the phrase in the descriptor for stage N1: "intrapulmonary nodes involved by direct extension."

We have found no reports of cases that resemble the present one: metastatic involvement of subpleural intrapulmonary nodes present in a lobe other than that of the primary tumor.

Attempts have been made to establish diagnostic criteria for interpreting tomographic images with the aim of distinguishing between benign intrapulmonary lymph nodes and metastatic ones<sup>3</sup>; enlarged benign subpleural nodes (but without node metastases) have been described in the context of lung cancer.<sup>4</sup>

A finding of metastasis to a subpleural node is exceptional and, therefore, prognostic implications are unlikely to appear in statistical studies. Our patient's unfavorable prognosis was further complicated by the T4 stage. At any rate, for academic purposes, we believe that we

were faced with a case that is not well defined in the literature.

**Carlos Alberto Rombolá,  
Pablo León Atance,  
and Antonio Honguero Martínez**

Servicio de Cirugía Torácica,  
Complejo Hospitalario Universitario  
de Albacete, Albacete, Spain

1. Mountain CF. Revisions in the system for staging lung cancer. *Chest*. 1997;111:1710-7.
2. Riquet M. Direct lymphatic drainage of lung segment to the mediastinal nodes. An anatomic study on 260 adults. *J Thorac Cardiovasc Surg*. 1989;97:623-32.
3. Hyodo T, Kanazawa S, Dendo S, Kobayashi K, Hayashi H, Kouno Y, et al. Intrapulmonary lymph nodes: thin-section CT findings, pathological findings, and CT differential diagnosis from pulmonary metastatic nodules. *Acta Med Okayama*. 2004;58:235-40.
4. Oyama S, Murayama T, Bando K, Hasegawa Y, Taniguchi M, Nakata M, et al. Three cases of small intrapulmonary lymph nodes coincidental with primary lung cancer. *Nihon Kokyuki Gakkai Zasshi*. 2001;39:434-7.