

LETTERS TO THE EDITOR

Vocal Cord Paralysis and Staging Bronchogenic Carcinoma

To the editor: Bronchogenic carcinoma is the most common neoplasm and the leading cause of cancer deaths in men.¹ At present, the histology and staging of the tumor, or its classification of spread based on tumor–node–metastasis (TNM)

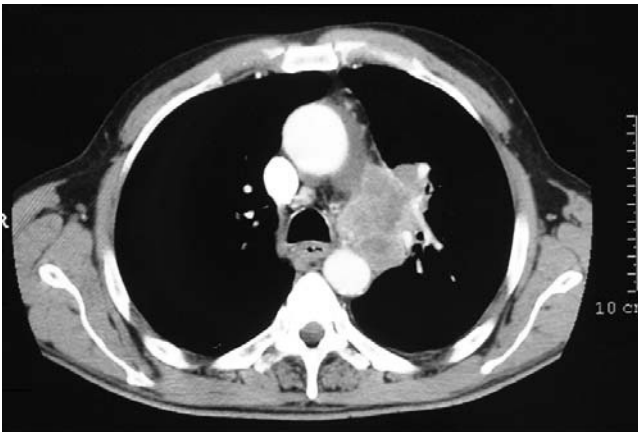


Figure. Computed tomography scan of the thorax, where a left hilar mass with signs of infiltration are observed.

assessment, are the criteria most often used to determine the patient's treatment plan and prognosis.¹ Non-small cell lung cancer classification was internationally unified more than 15 years ago and the latest revision in 1997 addressed problems with classifying the initial stages and stage IIIA. There are special cases, such as the one we report, that remain undefined by the TMN staging system or whose classification is controversial, and these should be taken into consideration in future revisions.

A 69-year-old man, an ex-smoker (20 pack-years) with no relevant medical history, complained of increased coughing. Symptoms included weight loss of 7 kg accompanied by dysphonia over the previous 15 days as a result of complete left vocal cord paralysis. The rest of the examination revealed the patient to be in good general health without palpable lymph nodes and with a Karnofsky index of 80%. Heart and lung sounds were normal. A chest x-ray showed a left hilar mass. A computed tomography scan (Figure) revealed an extended area of the mass to lie in contact with the mediastinum, along with small ipsilateral nodes. Consistent with clinical stage IIIB (cT4NXM0), no signs of infradiaphragmatic involvement were found. A hemogram and the coagulation and biochemical profile were normal. An electrocardiogram, abdominal ultrasound and pulmonary function test were also normal. Bronchoscopy revealed mucosal infiltration in the left superior lobe and at the bifurcation with the inferior lobe. The cytology and biopsy were positive for squamous carcinoma.

Mediastinal infiltration was suspected and in order to determine the pretreatment stage, a mediastinoscopy and biopsies of accessible lymph nodes were performed with negative results. An exploratory thoracotomy was therefore carried out, with a posterior left pneumonectomy and ganglion resection without complications. The stage was finally determined to be pT3N2M0 without confirmation of infiltration of the recurrent nerve. Subsequently, the dysphonia disappeared and the patient's voice returned to normal.

Bronchogenic carcinoma causes up to 43% of cases of unilateral vocal cord paralysis. Therefore, it is advisable to rule out the presence of bronchogenic carcinoma in all such cases.³ When unilateral cord paralysis presents with pulmonary carcinoma classified as T4 (stage IIIB), surgery is usually ruled out from

the start.^{1,2} Cord paralysis in this situation is the result of the direct infiltration of the recurrent laryngeal nerve by a locally spreading tumor, of metastasis, or of neighboring lymph node involvement. However, vocal cord paralysis can arise simply because of intrathoracic compression by the tumor or displaced structures or as a result of neuromuscular inactivation, without actual infiltration—a clinical picture which can be difficult to discern by computed tomography alone. Unilateral cord paralysis can be the initial reason for suspecting lung cancer or for reconsidering the diagnosis of patients who are initially classified as T4N0M0 and who might then have a better prognosis and the possibility of surgical treatment.^{2,4-6}

These findings have caused our committee on lung cancer to consider the need to assess these patients more thoroughly, without initially ruling out surgery, but rather stressing the importance of more invasive exploration in order to come to a more accurate anatomical classification in cases involving vocal cord paralysis.

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