

Confirmación diagnóstica de las metástasis pleurales y pulmonares en pacientes con antecedentes de cáncer primario conocido

Diagnostic confirmation of pleural and pulmonary metastases in patients with a history of known primary cancer

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Mr. Editor:

After a pleasant reading of the article “Pulmonary and pleural metastasis in penile cancer, an infrequent pathology” (1) I decided to write this letter to the editor in order to participate in the discussion. Malignant pleural effusion (MPE) is a common complication of advanced malignancy, the incidence is estimated at over 150,000 cases, of which lung cancer, breast cancer and lymphoma are the most common causes, although it has been reported that most malignant tumors cause MPE; usually in affected patients, survival after diagnosis varies from 3 to 12 months and depends on the type of underlying malignancy and its characteristics (2). Despite this, pleural neoplastic lesions can also be primary, being the most studied the malignant mesothelioma, also highlight 3 other groups of lesions such as: fibroblastic tumors (solitary fibrous tumor and its malignant counterpart; calcifying fibrous tumor and desmoid-type fibromatosis; vascular tumors (epithelioid hemangioendothelioma and angiosarcoma) and tumors of uncertain differentiation (synovial sarcoma and desmoplastic small round cell tumor) (3).

It is important to make an accurate characterization of the neoplasm under study in patients with malignant pleural effusion, this through immunohistochemical studies that determine its histological origin, since it can be primary or secondary; Within the secondary origin the main organ that produces pleural metastasis is the lung, currently in patients with advanced small cell lung cancer (category that includes primary lung squamous cell carcinoma) the characterization of IGF1R, HER2, EGFR and PD-L1 receptors has shown promising results when initiating focused chemotherapy (Pembrolizumab, anti PDL-1), with improvement in the global survival of the patients (4).

In their case report (1), Ortiz et al, mention important epidemiological and clinical history of their patient, including a history of heavy smoking, chronic exposure to biomass smoke and moderately differentiated unifocal large cell

squamous cell carcinoma of the glans penis with invasion of the corpus spongiosum, albuginea, caverns, penile urethra and vascular and perineural invasion, diagnosed two years ago; in the approach to the patient it is considered that he presents a malignant pleural effusion of metastatic origin in the penis but there is no histological confirmation of this condition, which rules out a primary lung involvement considering the epidemiological history of the patient and the infrequency of pleuropulmonary metastases of squamous cell carcinoma of the penis (1). Dixit et al. (5) made a case report of a 41 year old patient with squamous cell carcinoma of the penis metastatic to the lung which was confirmed by biopsy of the lesion, in the article by Ortiz et al. (1) made a review of the cases present to date of pleural metastases from this anatomical site, only five cases including the one of the authors were described and in all cases histological characterization was considered essential for an accurate diagnosis and clinical decision based on it (5).

The differential diagnosis between a primary squamous cell carcinoma of the penis versus a squamous cell carcinoma of pulmonary origin is complex and cannot be made through routine stains, so immunohistochemical studies are necessary to achieve an accurate diagnosis; It is noteworthy that both lesions share findings in their immunophenotype (positive labeling for p40, p63 and CK5/6), the most accurate markers for their distinction include p16 in penile squamous cell carcinoma due to its association with HPV and TTF1 for squamous cell carcinoma of the lung (6).

Analyzing the impact of precision diagnosis in the clinical behavior of patients with pleural effusion of neoplastic origin, the study of pathological anatomy and the use of immunohistochemistry techniques are considered mandatory, which make an adequate characterization of the lesions, in order to establish a joint oncological management that improves patient survival; if we take into account the multiple advances in focused chemotherapy that are available nowadays (4).

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