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Photo Clinic

Erythematous Violaceous Nodule as a Diagnostic Key of a Mucinous Lung Adenocarcinoma

Gimeno Castillo Javier[1]*, Pérez-Rodriguez Álvaro[2], De la Torre Gomar Francisco Javier[1]*

[1]Department of Dermatology, Hospital Universitario Araba, Vitoria, Spain
[2]Department of Pathology, Hospital Universitario Araba, Vitoria, Spain
*These authors contributed equally to this work.

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**Corresponding author:*
Francisco Javier De la Torre Gomar, MD;
Department of Dermatology,
Francisco Leandro de Viana Street, 1,
Hospital Universitario Araba, Vitoria,
Spain
Tel: +34 615198858
Email: fjtogo@gmail.com

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A 76-year-old man with a past history of smoking referred to the dermatology department for an erythematoviolaceous, painful, indurated nodular lesion which had appeared since two months ago (Figure 1A). The lesion was fixed to the adjacent tissues. It was located on the right buttock measuring 4×4×1 cm. He was being followed for the last two years for a consolidation in the superior lobe of the left lung detected on chest CT-scan. It was stable in the follow-up scans, and results of the bronchial fibroscopy in two occasions did not show any evidence of malignancy. Cultures for mycobacteria and QuantiFERON-TB blood test were negative. Even though the etiology of the pulmonary lesion was not confirmed, malignancy was yet suspected.

Fungal and mycobacterial culture of the skin lesion was performed which was inconclusive. A cutaneous biopsy of the nodule was performed which showed an atypical epithelial tumor invading the whole thickness of the dermis. Pseudoglandular structures located in mucin lakes were identified (Figure 1B). Immunohistochemistry was

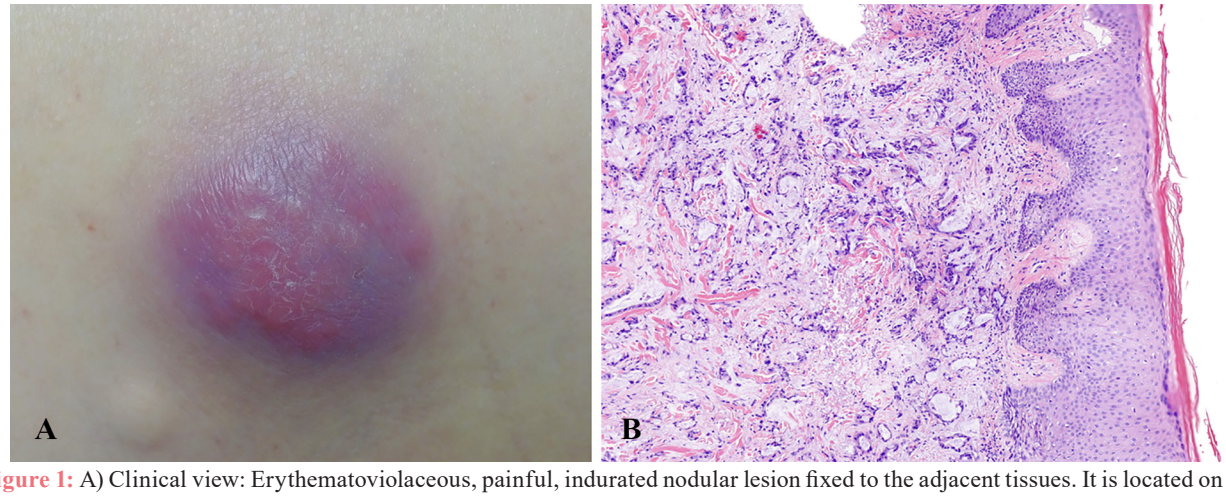

Figure 1: A) Clinical view: Erythematoviolaceous, painful, indurated nodular lesion fixed to the adjacent tissues. It is located on the right buttock measuring 4×4×1 cm of diameter. B) Hematoxylin and eosin 9.5x: Histological section showing epidermal hyperplasia. An atypical epithelial tumor is present and invades the whole thickness of the dermis. Pseudoglandular structures located in mucin lakes are identified on this section.

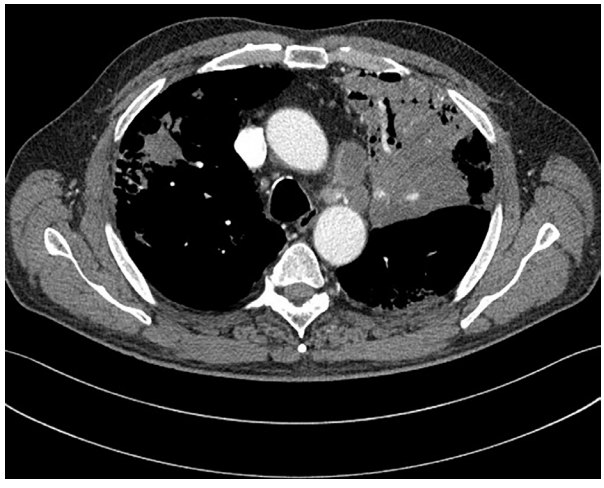

Figure 2: Thoracic CT-Scan: Pathological lymphadenopathies suggestive of malignancy are identified mainly in the subaortal group. Its density and size (up to 15 mm). Bilateral pulmonary consolidations are also evidenced.

positive for CK7 and CDX2, while thyroid transcription factor-1 (TTF1), Napsin A and CK20 were negative. Accordingly, metastatic mucinous adenocarcinoma was diagnosed for the patient. Analysis for EML4-ALK translocation was found to be negative. Moreover, the results for BRAF, NRAS and EGFR mutations were all negative.

Expression of the programmed death-1 (PD-1) ligand 1 (PD-L1) on the neoplastic cells was negative. Thereafter, a thoracic and abdominopelvic computed tomography scan was performed to characterize the primary tumor (Figure 2). We found that the already known consolidation of the left superior pulmonary lobe had progressed in size. Ipsilateral mediastinal lymph nodes measuring up to 15 mm were identified. The immunohistochemistry of the skin nodule along with the imaging findings, oriented the skin lesion as a metastasis from a pulmonary mucinous adenocarcinoma. Chemotherapy with Pembrolizumab, Carboplatin and Pemetrexed was started for the patient.

The development of cutaneous metastasis from the lung adenocarcinoma may concur or even precede the diagnosis of the primary tumor.[1, 2] Skin metastases have heterogeneous presentations, nevertheless they are often described as indurated and fixed nodules. Its diagnosis should rely on histology and immunohistochemistry. Cutaneous metastasis must be considered in a patient developing skin lesions, with a history of tobacco exposure and lung masses. Even, the skin lesions may be the first manifestation of an underlying lung carcinoma.[1, 3]

Conflict of Interest: None declared.

References

1. Mollet TW, Garcia CA, Koester G. Skin metastases from lung cancer. Dermatol Online J. 2009;15(5):1. PubMed PMID: 19624579.
2. Liao Y, Zhou L, Li M, Yu S, Zhou Y, Xie L. Cutaneous metastasis from lung adenocarcinoma presenting before discovery of the primary malignancy: a case report. Int J Clin Exp Pathol. 2019; 12(2): 657–63. PubMed PMID: 31933871. PubMed Central PMCID: PMC6945094.
3. Pajaziti L, Hapçiu SR, Dobruna S, Hoxha N, Kurshumliu F, Pajaziti A. Skin metastases from lung cancer: A case report. BMC Res Notes. 2015;8:139. doi: 10.1186/s13104-015-1105-0. PubMed PMID: 25889083.