

Skin Tumors Revealing Highly Metastatic Squamous Cell Lung Cancer

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Abstract

Case Report

Lung cancer stands as a leading cause of cancer-related mortality globally, with its late-stage diagnosis presenting significant challenges. This case report delves into the case of a 57-year-old chronic smoker diagnosed with advanced non-small cell lung cancer (NSCLC) characterized by multiple cutaneous metastases, a rare manifestation. Despite the rarity, these skin lesions offer a valuable diagnostic avenue, albeit often indicating a grim prognosis, especially when coupled with other distant metastases and inoperable primary tumors. Through an exploration of the presented case, we underscore the importance of astute physical examination and heightened clinical awareness in detecting these elusive lesions. By enhancing early detection strategies and understanding the molecular underpinnings of metastatic spread, we aspire to improve diagnostic accuracy, treatment efficacy, and ultimately, the overall outcomes for patients facing this challenging condition.

Keywords: Lung cancer, Metastasis, Skin Metastasis.

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INTRODUCTION

Lung cancer has been the most common cancer overall for several decades and is the most common cause of death from cancer worldwide. Whilst screening still remaining in development, and given the insidious character of the disease, most patients seek medical attention only after reaching stage IV disease. The liver, brain, bone, adrenal glands, hilar nodes, and liver are common metastatic sites. Skin metastases are rare and typically indicate a poor prognosis. (Falbo *et al.*, 2022).

Here, we describe the case of a 57 years old chronic smoker with several skin lesions.

CASE REPORT

A 57 year old patient, working in construction, chronic smoker 10 pack-year and quit 5 years earlier. He was admitted for assessment of chronic exertion dyspnea with deteriorating general condition. The physical examination revealed multiple cutaneous swelling, fixed, red, painful with some ulcerated. (Figure 1)

Thoracic chest X ray revealed an apical opacity heterogenous with attraction of mediastinum to pathological side. CT scan reported right upper lobe superior lesion with necrosis invasive of the pulmonary artery, superior pulmonary vein, thoracic aorta, right main bronchus with costal lysis measuring 12cm in long axis. Multiple Mediastinal lymphadenopathies were noted. (Figure 2)

Biology analysis denoted, biological cholestasis with multiple hepatic nodules on abdominal ultrasound. A Cutaneous incisional biopsy was realized, and pathology revealed: carcinomatous proliferation with immunohistochemistry in favor of squamous cell carcinoma with negative TTF1 and positive p40. (Figure 3)

Staging was denoted as a Stage IV NSCLC highly metastatic (skin, adrenal gland, hepatic, supratentorial and subtentorial). Cardiorespiratory evaluation was correct. Patient was addressed to oncology for additional support, refusing any treatment. We deplore the death of the patient 9 months after diagnosis.



Figure 1: Skin lesions

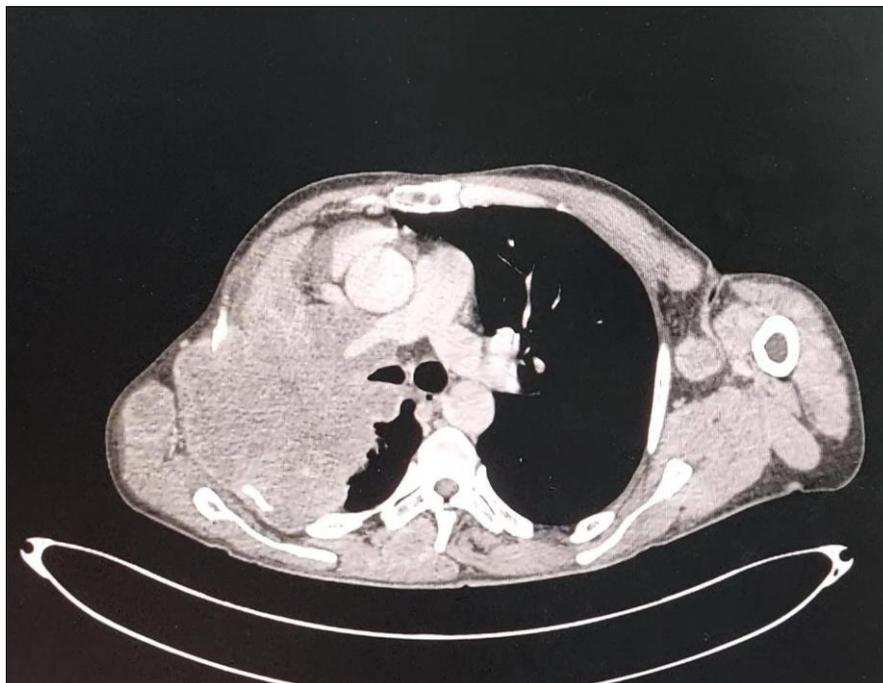


Figure 2: CT-Scan of lung tumor

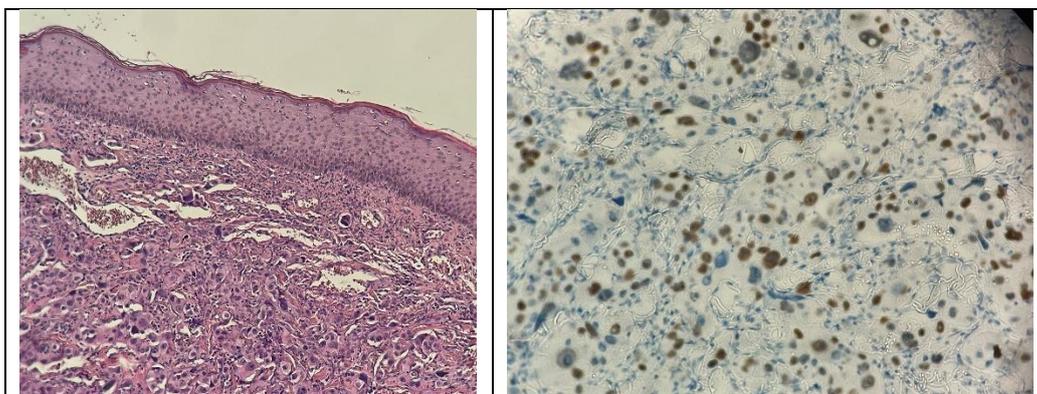


Figure 3: Pathology of cutaneous incisional biopsy

DISCUSSION

Lung cancer remains the main cause of death by cancer worldwide. Skin metastases of lung cancer are rare. Malignancies from the lung, breast, melanoma, oral

cavity, colon, kidney, ovary, and stomach account for 80 percent to 90 percent of all cutaneous metastases in adults. Previous literature shows that in men with skin metastases, the lung is the most common primary site

(24%), followed by colorectal cancer (19%), melanoma (13%), and the oral cavity (12%). (Mollet *et al.*, 2009)

Skin metastasis from lung cancer have various presentations, solitary or multiple, with or without pain, mobile or fixed. They may also be ulcerated as in our case. (Dreizen *et al.*, 1986). Patients that present with skin metastases earlier during the disease course, have poorer prognosis compared to those with later developed metastases. The prognosis is poorer in cases where except cutaneous metastases there are extracutaneous metastases also. Non-operable primary tumor or small-cell carcinoma is another poor prognostic indicator. Our patient had three poor prognostic indicators: primary micro-cellular inoperable tumor, multiple cutaneous metastases and other distant metastases. (Ambrogi *et al.*, 2001; Schoenlaub *et al.*, 2001).

Despite the poor prognosis of these lesions. Their presence allows a lesser invasive diagnosis, thus requiring physicians to be made aware of their detection and a thorough physical examination. (Detterbeck *et al.*, 2013).

CONCLUSION

In summary, the presented case underscores the diagnostic challenge posed by skin metastases in the context of advanced non-small cell lung cancer. Despite being a rare manifestation, these cutaneous lesions can provide valuable diagnostic clues, enabling a less invasive diagnosis. As we continue to unravel the complexities of cancer metastasis, it is imperative to emphasize the importance of vigilant physical

examination and interdisciplinary collaboration among healthcare professionals.

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