Masquerading Malignancy: A Case of Primary Pulmonary Adenocarcinoma Mimicking Lung Metastasis

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INTRODUCTION:

In cases of local recurrence of sarcoma, restaging is often performed to rule out systemic spread. When a pulmonary nodule is present, it is commonly assumed to be a lung metastasis.

REPORT:

A 60-year-old man presented with a local recurrence of undifferentiated pleomorphic soft tissue sarcoma in the right thigh, which occurred 7 years after completing treatment. Systemic staging revealed the presence of a single hypermetabolic nodule in the left lung. He underwent a two-stage surgery: first, a wide resection of the primary local recurrence, followed by a wedge resection for lung metastatectomy 6 weeks later.

Histopathological examination confirmed local recurrence with clear margins upon resection. However, the lung sample showed primary adenocarcinoma of the lung with a close margin. He is planned for a left lower lobe lobectomy by the cardiothoracic team.

Upon retrospective review, the CT thorax was re-evaluated. The single lung lesion appears spiculated with the presence of an air bronchogram, suggesting primary lung cancer rather than metastasis, despite its location at the subpleural area of the lower lobe instead of the upper lobe or a more central location.

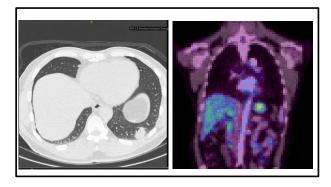


Figure 1: The PET scan revealed a hypermetabolic nodule in the posterobasal segment of the left lower lobe lung, measuring 2.6 x 2.2 cm with an SUVmax of 5.8.

CONCLUSION:

In the case of a solitary lung lesion, especially after 2 years in remission, primary lung malignancy should be considered. Understanding the CT features of primary lung cancer versus solitary lung metastasis may aid in determining appropriate treatment.

REFERENCES:

- 1. Lee JE, Jeong WG, Kim YH. Differentiation of primary lung cancer from solitary lung metastasis in patients with colorectal cancer: a retrospective cohort study. World J Surg Oncol. 2021 Jan 24;19(1):28.
- 2. Callister ME, Baldwin DR, Akram AR, et al.; British Thoracic Society Standards of Care Committee. British Thoracic Society guidelines for the investigation and management of pulmonary nodules. Thorax. 2015 Aug;70 Suppl 2:ii1-ii54.