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Pulmonary puzzle

ANSWER

From the question on page 193.

A CT-guided biopsy of the right lung tumour revealed adenocarcinoma with a positive stain of thyroid transcription factor-1. A complete staging investigation composed of CT scans of the head and the chest including the upper abdomen and a whole body bone scan revealed T2N0M0 stage IB disease. An episode of pre-core mutant hepatitis B flare developed. Lamivudine was initiated. Right upper lobe lobectomy was postponed for 3 months after the recovery of liver function. Unfortunately, postoperative pathology staging revealed T2N2M0 stage IIIA disease. The patient is currently receiving adjuvant chemotherapy.

Synchronous primary pulmonary MALToma and adenocarcinoma are extremely rare. There is only one case reported in the English literature.[1] Primary pulmonary non-Hodgkin's lymphoma is rare and accounts for 3.6% of all extranodal lymphomas; of these, 69–78% are MALTomas.[2] The aetiology of synchronous malignancies is unclear, with environmental and genetic factors playing a part.[1] Patients with lymphomas have a higher risk of developing other cancers.[3] However, most of the reported case series demonstrate the role of *Helicobacter pylori* in the development of gastric MALToma and second primary gastric cancers.[3] In the scanty literature related to our case, an abnormality on chromosome 3 has been reported in MALToma[4] and non-small cell lung cancers.[5] Further study is needed to evaluate its implications.

According to the treatment course in our case, the unresolved residual lymphoma might explain the persistent right upper lung tumour after the six cycles of chemotherapy, but a timely diagnostic procedure should have been performed to elucidate the causes in differing treatment responses. Tissue biopsy, though invasive, is crucial in making a correct diagnosis, particularly when the result could be a curable disease entity. In such a scenario, pulmonary adenocarcinoma could have been diagnosed at stage IB. Moreover, the patient could have been prevented from suffering the rituximab-related pre-core mutant hepatitis B flare and the delay in curative treatment for lung cancer.

This case highlights the importance of critical thinking on synchronous pulmonary malignancies and a timely diagnostic procedure to clarify the ambiguous clinical situations, especially when treatment discloses differing responses.

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