Letter to the Editor

Bilateral Adrenal Metastasis from Lung Adenocarcinoma

Dear Sir;

We read with interest the article by Miyoshi et al. [1] on bilateral adrenal metastasis from lung adenocarcinoma, which arose from the wall of a bulla. We would like to share our experience with a patient whose condition was very similar to that reported by Miyoshi et al. [1].

A 69-year-old man was admitted to our hospital because of a 3-month history of severe bilateral back pain. He smoked 30 cigarettes daily for 48 years. He had no medical history. An abdominal CT scan showed bilateral adrenal tumor (6.5 cm and 4.5 cm in left and right adrenals, respectively). The endocrine workup showed that the adrenal tumors were hormonally nonfunctioning. Whole body CT scan and endoscopic examination could not detect any primary lesions causing adrenal metastasis. Positron emission tomography (PET) scan with 18F-2-fluoro-D-deoxyglucose (FDG) was performed. The FDG tracer specifically accumulated at a spot on left lower lung, which was consistent with a lesion of thickened bulla wall observed by chest CT scan. Pathological analysis of resected specimen obtained by video-assisted thoracoscopic procedure exhibited lung adenocarcinoma.

The adrenal gland is a common site for metastases in lung, breast and renal cell carcinomas, melanoma, and lymphoma [2]. In view of autopsy cases, the incidence of adrenal metastases in patients with breast and lung cancer is approximately 39 and 35%, respectively [2]. Adrenal metastasis, however, at the initial diagnosis of non-small cell lung cancer occurs in less than 10% of such patients [3]. The condition of our patient was very similar to that of the patient reported by Miyoshi et al. [1] and we can fully share their observations. The similar points in both patients were as follows: 1) painful large bilateral adrenal metastasis as initial symptom of lung cancer, 2) FDG-PET revealed a hot spot on the primary lesion, 3) small primary lung adenocarcinoma arose from thickened bulla wall, and 4) primary lesion of lung tumor remained unchanged by CT scan. Although lung cancers often originate from bulla wall [4, 5], some of them are difficult to diagnose because of their uncertain appearance. FDG-PET may provide useful information regarding the location of cancer as observed in the patient reported by Miyoshi et al. [1] as well as our patient. Although very rare, the cases reported by Miyoshi et al. [1] and ourselves suggested that there may be a certain type of adenocarcinoma which originates from a thickened bulla wall that metastasizes to the adrenal glands bilaterally.

References