



An Ectopic Cortisol-Producing Adrenocortical Adenoma Masquerading as a Liposarcoma in the Pararenal Space

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A 58-year-old man complained of abdominal distension and a moon-shaped face that had lasted for 3 years. The patient had been diagnosed with diabetes mellitus and hypertension 5 years ago. Biochemical tests revealed adrenocorticotrophic hormone (ACTH)-independent Cushing syndrome. However, a computed tomography (CT) scan showed bilateral adrenal gland atrophy and a liposarcoma-like mass in the right pararenal space, and the irregularly enhanced mass was deeply surrounded by fat. Needle biopsy indicated an eosinophilic epithelioid cell tumor. The patient underwent surgical removal of the tumor through laparotomy. Microscopic examination favored ectopic adrenocortical neoplasm with a low risk of malignancy (Weiss score 1) and the immunohistochemical stain of the tumor was positive for Melan A and inhibin α , which are positive in over 80% of adrenal cortical tumors [1,2]. The patient's blood pressure and glycemic control improved after surgery. His serum cortisol levels decreased, but the patient has been taking steroids due to postoperative adrenal insufficiency.

Ectopic adrenocortical adenoma is rare, and most of these tumors are located along the pathway of embryonic migration within the urogenital tract [3]. Ectopic ACTH-secreting tumors are not uncommon, but ectopic cortisol-producing tumors, especially in the pararenal sinus, are extremely rare [4]. Our case

presented typical features of Cushing syndrome, but CT images suggested the presence of liposarcoma. This finding could lead to misdiagnosis and radical resection of the tumor, including radical nephrectomy [5]. Moreover, if clinicians are not prepared for postoperative adrenal insufficiency, patients can experience adrenal crisis.

In cases of ACTH-independent Cushing syndrome without mass-like lesions on both adrenal glands, clinicians should suspect a cortisol-producing adrenal rest tumor.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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