CASE REPORT

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Abdominal chyloma: Computed tomography findings

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Chyloma is a rare clinical entity that occurs secondary to obstruction of lymphatic flow or leakage from lymphangiectatic vessels, which can be secondary to surgery. Herein, we present the computed tomography findings of this challenging diagnosis in an abdominal chyloma patient with left adrenalectomy.

Key words: Abdominal chyloma, computed tomography, surgery

Batında siloma: Bilgisayarlı tomografi bulguları

Siloma cerrahiye ikincil gelişebilen lenfatik akımda tıkanıklık veya sızıntıya bağlı ortaya çıkan ender bir klinik durumdur. Bu çalışmada, sağ adrenalektomiye ikincil oluşmuş bir batında siloma olgusunun bilgisayarlı tomografi bulgularını sunuyoruz.

Anahtar kelimeler: Batında siloma, bilgisayarlı tomografi, cerrahi

INTRODUCTION

Chyloma is a rare clinical entity that occurs secondary to obstruction of lymphatic flow or leakage from lymphangiectatic vessels, which can be secondary to surgery (1). Herein, we present the computed tomography (CT) findings of this challenging diagnosis in an abdominal chyloma patient with left adrenalectomy.

CASE REPORT

A 58-year-old woman was operated due to right-sided infiltrative breast carcinoma. In the follow-up interval, the patient experienced hypertension, hirsutism, flushing, weight gain, and excessive sweating. Blood laboratory tests showed increase in renin, aldosterone, testosterone, and dehydroepiandrosterone (DHEA) levels. Urine adrenaline and vanillylmandelic acid (VMA) levels were also increased, suggesting a pheochromocytoma accompanied by Cushing syndrome. Contrast-enhanced abdominal CT was performed for further evaluation. On CT, there was a 5x4.5 cm left adrenal mass with liver metastases. The patient underwent laparotomy; left adrenalectomy and left nephrectomy were performed. The histopathology result was adrenocortical carcinoma, and liver lesions were adrenocortical carcinoma metastases. After surgery, chemoembolization of the liver lesion was done. In the interval, the patient's complaints resolved with a prominent decrease in blood hormone levels. Blood pressure and glucose levels returned to normal. In the 3rd month follow-up following the surgery, abdominal CT revealed an 8 cm fat-fluid level containing collection (with a mean density of -45 HU) in the left adrenalectomy region; moreover, the collection had peripheral contrast enhancement with adjacent fat stranding (Figure 1). The liver lesions showed minimal regression with a new infarct area in the sub-diaphragmatic portion of the right lobe secondary to chemoembolization of the superior segment of the

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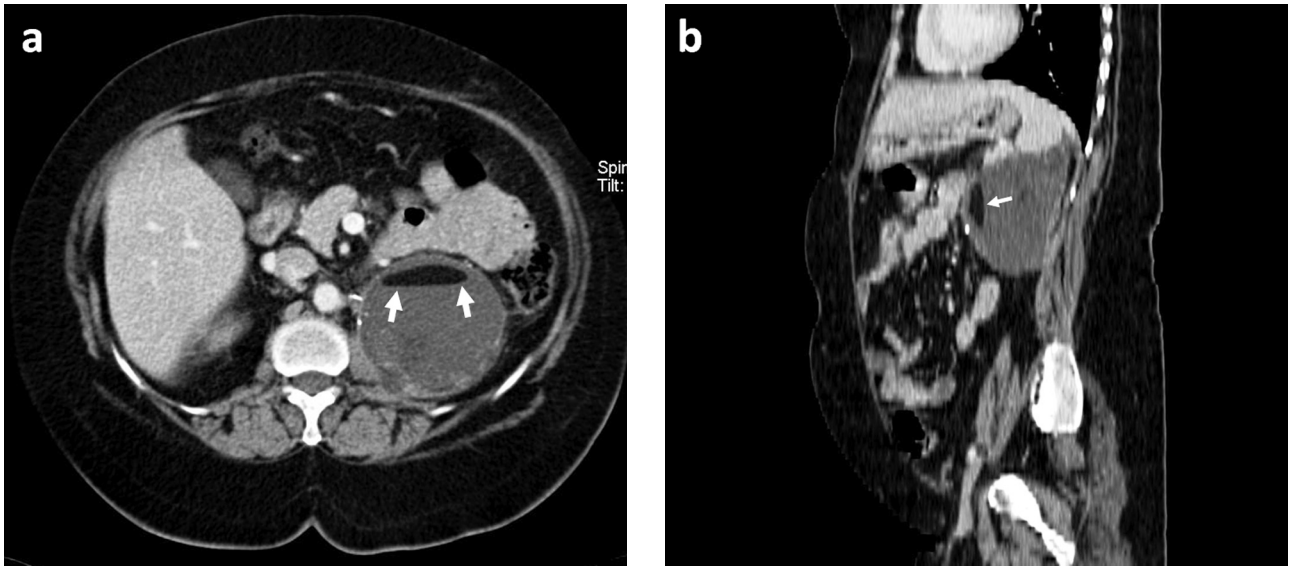

Figure 1. Axial **(a)** and sagittal **(b)** contrast-enhanced computed tomography images demonstrate the collection at the left adrenalectomy site with fat-fluid level anteriorly (arrows). Wall enhancement of the collection and peripheral inflammatory stranding are seen additionally (a).

right portal vein. The findings were consistent with an abdominal chyloma secondary to left adrenalectomy and liver involvement of adrenal cancer. A percutaneous drainage was recommended, but since she was asymptomatic without evidence of septic findings such as fever, etc., the drainage procedure was not considered at that time. Ultimately, the patient died secondary to extensive metastatic involvement.

DISCUSSION

Lymphatics of the adrenal gland are localized in its capsule and within the adventitia of central veins and their major tributaries. There is no lymphatic vessel in the cortical and medullary parenchyma. The ultimate lymphatic drainage of the adrenal gland is to the thoracic duct through regional lymph nodes or directly to the cisterna chyli. Chyloma is a rare entity that occurs secondary to obstruction of lymphatic flow (e.g. compression by a mass) or leakage from lymphangiectatic vessels or after surgery (1-3). Chyloma, chylothorax, chylous ascites, or retroperitoneal chylous collections may occur after adrenalectomy. The main approach for correct diagnosis of chyloma is demonstration of the fat-fluid level within a collection on CT (4,5). Lymphangiography and lymphoscintigraphy may help to evaluate a possible leakage from lymphatic vessels or fistulas (5,6). Treatment with ultrasound or CT-guided percutaneous catheterization and drainage can give good results in symptomatic cases with progressive imaging findings (4). In conclusion, although chyloma is a very rarely observed clinical entity, the typical patchy fat densities and fat-fluid levels within the lesion can help in reaching an accurate diagnosis.

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