A giant adrenal cyst mimicking hydatic cyst of the liver: a case report

Karaciğer kist hidatiğini taklit eden dev adrenal kist: olgu sunumu

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Özet

Adrenal kistler nadir görülen lezyonlardır. Adrenal kistlerin büyük çoğunluğu tek taraflıdır ve genellikle çapları 10 cm'den küçüktür. Biz bu yazıda, sağ taraflı karın ağrısı şikâyeti olan 28 yaşında kadın hastayı sunacağız. Hastanın ultrasonografi ve bilgisayarlı tomografi inceleme sonuçları, dev boyutlarda karaciğer lokalizasyonlu kist hidatik olarak bildirildi. Laparotomi esnasında kistin sağ adrenal bezde yerleşmiş olduğu ve karaciğerin mediale itilmiş olduğu görüldü. Tek taraflı surrenal bezin de çıkarıldığı tam bir eksizyon uygulandı. Mikroskopik değerlendirmede normal adrenal dokuyu sıkıştıran psödokist formasyonu olduğu görüldü.

Anahtar sözcükler: hidatik kist, adrenal bez, adrenal kist

Abstract

Adrenal cysts are uncommon lesions. Most of adrenal cysts are unilateral and usually has a diameter under 10 cm. Here we report a case of 28 year old woman who presented with right sided abdominal pain. Ultrasonography and computed tomography were reported a giant hepatic cyst hydatic. Laparotomy revealed that the cyst was located on the right adrenal gland, pushed the liver medially. A complete excision with ipsilateral surrenal gland was performed. On microscopic evaluation a pseudocyst formation with compressed normal adrenal tissue was found.

Keywords: hydatic cyst, adrenal gland, adrenal cyst

Introduction

Adrenal cysts are uncommon and mostly silent lesions. Patients usually present with abdominal discomfort and swelling due to their large size. The incidence of autopsy series varies from 0.064% to 0.18%.[1] Adrenal pseudocyst is not limited to a specific age group. Although the highest incidence is in the 5th and 6th decades, it can be seen in all ages. Most of the adrenal cysts are unilateral and are usually located on right adrenal gland.[2] Our case had a giant adrenal pseudocyst mimicking a hepatic cyst hydatic.

Case

A 28 year old woman present with 15 day history of right sided abdominal pain. In physical examination there was no palpable mass. The biochemical examinations were within normal limits. Abdominal ultrasonography (US) revealed a 20x17 cm sized cyst in the right lobe of the liver. We planned an abdominal tomography (CT) and found a 20x16x14 cm sized, regular shaped cyst in the right lobe of the liver, and it was reported as hepatic cyst hydatic **(Figure 1)**. We decided to operate the patient with these findings. Laparotomy revealed that the cyst was located on the right adrenal gland, deplaced the liver medially and had an intact capsule. It was resected en bloc with ipsilateral surrenal gland. It was containing serous fluid. Cyst wall thickness was 0.3 cm. Microscopically the wall was composed of fibrocollogenous tissue. Normal adrenal tissue was compressed. There was no surrounding epithelium seen at the pathological examination **(Figure 2)**.

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Başvuru tarihi | Submitted on: 30.12.2009
Kabul tarihi | Accepted on: 05.04.2010

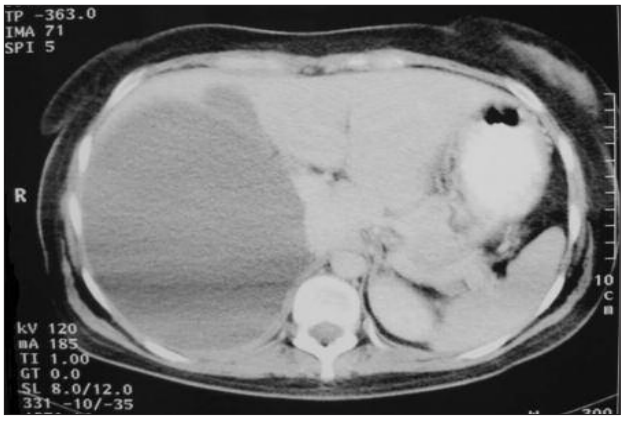

Figure 1. Tomographic view of adrenal cyst

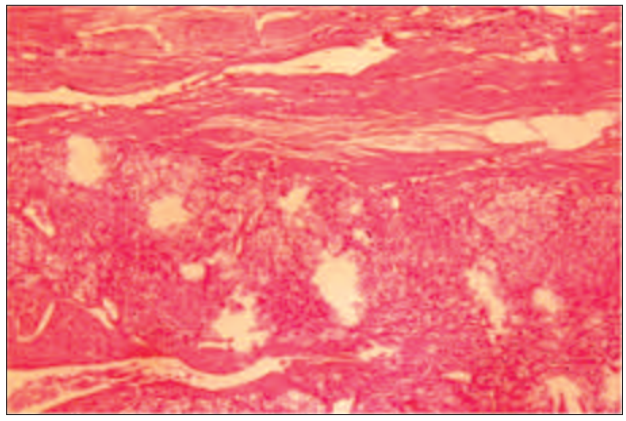

Figure 2. Microscopical view of the adrenal pseudocyst

Discussion

Large cysts of the adrenal glands with a diameter of more than 5 cm are known as rare clinical entityies.[3] But they are diagnosed with increasing frequency because of their incidental discovery by US and/or CT. Adrenal cysts are usually asymptomatic and <10 cm in diameter. There are no characteristic symptoms associated with adrenal cysts. Symptoms are related to size and position of the lesion and can include pain, gastrointestinal disturbances, or the finding of a palpable mass.

Adrenal cysts may occur at any age. They seldom cause adrenal hypofunction. A Cushing-like pathology as well as signs of virilization or feminization was linked to steroid excess syndromes. A production of mineralocorticoids might simulate the clinical characteristics of Conn's syndrome. Increased adrenal excretion of catecholamines can cause clinical characteristics of a pheochromocytoma crisis.[3,4]

The first sign of an endocrine dysfunction is often the onset of arterial hypertension. The most common classification according to Foster subdivides adrenal cystic lesions in real cysts, pseudocysts and parasitic cysts.[5-7] Microscopic evaluation showed us a pseudocyst at our patient. Patients may present with acute abdominal findings if intracystic hemorrhage or rupture occurs. The female:male ratio is 2:1. The pathogenesis of adrenal pseudocyst is unclear. Theories are vascular neoplastic growth, malformation and hemorrhage into the adrenal parenchyma. US and CT can be used for radiological evaluation. The method of choice for evaluation of the adrenal gland is an CT with additional contrast medium.[6,7] Additional information about the cyst and surrounding tissue is available by a magnetic resonance imaging.[7] Although most of the adrenal cysts are functional, hormonal evaluation must be done. Laboratory testing of blood and urine samples should include the complete analysis of cortical and medullary adrenal hormones to exclude hormonal active adrenal carcinomas or pheochromocytomas.[8-10] We did not investigate adrenal hormones, because our patient had no symptoms of adrenal pathologies.

Treatment of adrenal cysts usually depends on size and symptoms related to the mass. Percutaneus aspiration or drainage may be a good initial management strategy. Clear indications for a surgical resection of the adrenal cyst are a clinical pathology, suspected malignancy, progression of the cyst size, and any endocrine activity. An open anterior-transabdominal or posterior retroperitoneal as well as a laparoscopic-transabdominal approach are described.[10] En bloc adrenalectomy with cyst resection should be preferred in comparison to a cystectomy or cyst excision with partial removal of the adrenal parenchyma.[8-10] In our case we found a giant cyst seen in the liver at radiological evaluation. It was symptomatic and not appropriate for percutaneus drainage. We performed a total excision to the cyst with underlying adrenal gland. The pathology of the main specimen was reported as adrenal pseudocyst. This case shows us that cystic lesions of adrenal gland may be misinterpreted as hepatic cyst hydatic.

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