



CASE REPORT

A GIANT RETROPERITONEAL LIPOMA: A CASE REPORT

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ABSTRACT

A case of retroperitoneal lipoma is reported. The patient was admitted to our hospital complaining of an abdominal mass. Intravenous urography and Magnetic Resonance Imaging (MRI) revealed a large mass of fat density displacing the ipsilateral kidney superomedially. The pathological finding was benign lipoma.

Keywords: Lipoma, Retroperitoneum, Surgery

DEV RETROPERİTONEYAL LİPOM: OLGU SUNUMU

ÖZET

Abdominal kitle şikayeti ile başvuran retroperitoneyal lipom olgusu sunuldu. İntravenöz ürografide ve magnetik rezonans incelemede, böbreğin yağ dansitesinde kitle tarafından süperomediale itildiği saptandı. Patolojik inceleme sonucu benign lipom olarak rapor edildi.

Anahtar Kelimeler: Lipom, Retroperitonyum, Cerrahi

INTRODUCTION

Primary retroperitoneal lipomas are rare benign tumors that usually present as an abdominal mass or with patient complaints of pressure symptoms to adjacent organs. Histologically, lipomas originate from mature adipose tissue of the retroperitoneum, mesentery, or the gerota fascia.^{1,2} Retroperitoneal lipomas must be carefully differentiated from liposarcoma of low-grade malignancy, in order to provide the correct treatment and postoperative follow-up³. A low grade liposarcoma is difficult to differentiate from a benign lipoma based solely on CT scan or MRI findings, but heterogeneity, areas of enhancement or necrosis, and irregular margins are often seen on the CT scan of a liposarcoma.⁴

The objective of the present is to describe a case of retroperitoneal lipoma in a 61-year-old patient treated via surgical excision, who does

not present any signs of relapse 24 months after the intervention.

CASE REPORT

A sixty-one year old otherwise healthy woman presented with persistent left flank pain of one year duration. She also reported a vague sensation of an abdominal mass. She had no history of weight loss, fever, gastrointestinal symptoms, or change in bowel habits. Her past medical history was significant only concerning hypertension, and a cholecystectomy 20 years previously. Physical examination findings revealed fullness in her left lower quadrant. Abdominal ultrasonography (USG) revealed the presence of voluminous hypoechoic homogenous retroperitoneal tumor that displaced the left colon anteriorly and medially. Intravenous urography showed a homogenous radiolucent mass in the left upper quadrant, which displaced small bowel loops and the left kidney (Fig. 1). A magnetic resonance

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Marmara Medical Journal 2005;18(3);140-142



imaging (MRI) of the abdomen and pelvis demonstrated a large, well-circumscribed, homogeneous mass anterior to the left iliopsoas muscle extending from the inferior pole of the left kidney to the pelvis (Fig. 2). The left colon and small bowel were displaced medially.



Fig. 1: Intravenous urography demonstrates a homogenous radiolucent mass filling the left side of the abdomen and displacing the left kidney superiorly



Fig. 2: MR imaging reveals a solid, fat-density mass displacing the colon and left kidney

The patient underwent exploration through a left flank incision. The mass was encapsulated and found to be loosely adherent to the left iliopsoas muscle. The tumor did not invade contiguous structures and was removed en

bloc. The patient recovered uneventfully and was discharged home on postoperative day 6.

Grossly the mass was 30x26x17 cm and weighed 3490 gr (Fig. 3). On cut section, lipomatous areas with focal hemorrhage were detected. The cut surface of the tumor was almost completely uniform light-yellowish color. The histopathological examination showed typical adipose cells of mature appearance, laid out in a compact arrangement, sometimes with intervening septa of vascular collagen tissue, without signs of malignancy (Fig. 4).



Fig. 3: Retroperitoneal lipoma with cut sections after fixation

A



B



Fig. 4: A, Thin encapsulation in lipoma (arrow). B, Lipoma consisting of mature fat cells and distinctive capillary network (H&E, reduced from $\times 20$)



DISCUSSION

Lipomas are the most common benign tumors of the adipose tissue among adults.⁵ According to histopathological findings, they are subclassified into conventional lipoma, fibrolipoma, angioliipoma, fusiform cell lipoma, myelipoma and pleomorphic lipoma.⁵ Retroperitoneal lipomas are extremely rare, slowly growing benign tumors of adipose tissue. Microscopically, lipomas consist of multivacuolated cells, small eosinophilic cells, and univacuolated adipocytes.⁶ Classic lipomas have CT and MRI signal characteristics similar to subcutaneous fat (between -65 and -120 Hounsfield units).² Magnetic resonance imaging will reveal an intense signal on T1-weighted images.⁷ Previous use of angiography for lipomas showed the tumors to be hypovascular.⁷

Although retroperitoneal lipomas are relatively more common in adults, they can occur in infants and small children.⁸ They may affect both sexes, but there is a greater predisposition for females.

Differential histopathological diagnosis with liposarcoma may be problematic, especially for tumors with grade 1 malignancy, which are denominated lipoma-like.⁹ Pathological examination for mitotic activity, cellular atypia, necrosis, and invasion allows for a definitive diagnosis.

Almost all reported retroperitoneal tumors were easily and completely resected, without any invasion of adjacent structures. Total excision is the treatment of choice.

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