RENAL LIPOSARCOMA

DIOGO A.L. BADER, LUIS A.B. PERES, SÉRGIO L. BADER

West Paraná State University, UNIOESTE, Cascavel, Paraná, Brazil

ABSTRACT

Introduction: Liposarcoma is a malignant mesenchymal tumor frequently located in the retroperitoneum and rarely presenting an isolated lesion in the kidney.

Case Report: Female, Caucasian, 49-year old patient, with family history of renal polycystic disease, was selected for organ donation. During preoperative examinations a renal pleomorphic liposarcoma was detected. She was treated with radical nephrectomy and remains asymptomatic, without evidences of recurrence in control ecographic examinations after a 4-year follow-up.

Comments: Renal liposarcoma is a rare tumor. We report one case incidentally diagnosed during a routine pre-transplantation assessment in a renal donor.

Key words: kidney; kidney neoplasms; liposarcoma

INTRODUCTION

Liposarcoma is a malignant mesenchymal tumor frequently located in the retroperitoneum (1). Isolated lesion in the kidney has rarely been described (2). We present a case of renal liposarcoma incidentally diagnosed during the assessment of a candidate to renal donation for transplantation.

CASE REPORT

Female, Caucasian, 49-year old patient, with family history of renal polycystic disease, was selected for organ donation. During preoperative examination a rounded, heterogeneous, well-defined mass with a solid aspect was detected by renal ultrasonography, adjacent to the lower pole of the left kidney. A computerized tomography was performed, showing an expansive, solid, heterogeneous lesion with -38 UH attenuation, poorly defined in the lower third’s external edge, measuring 3.8 x 3.8 cm and with preservation of perirenal fat. There was no contrast medium impregnation in the tumoral lesion during the late phase (Figure-1). The angiography showed a hypovascularized and hypodense mass. The intravenous urography was normal. Radical nephrectomy was performed following the intraoperative freezing diagnosis of malignant lesion. The pathological examination revealed a brownish nodular structure with 4.8 cm in diameter, and the microscopy detected neoplastic tissue of mesenchymal origin, spindle and oval cells with abundant cytoplasm, hyperchromic nuclei and intense pleomorphism (Figure-2), characteristic of a renal pleomorphic liposarcoma. The patient has been followed up for 4 years and remains asymptomatic, without evidence of recurrence on control ecographic examinations.

COMMENTS

Renal liposarcoma is a rare tumor. There are few well-documented reports in the literature, many of those are associated with tuberous sclerosis and probably correspond to angiomylipomas. The majority of published cases refer to well-differentiated tumors, with dimensions greater than 5 x 5 x 4 cm...
RENAL LIPOSARCOMA

and presenting symptoms such as pain, hematuria, abdominal mass or loss of weight. The liposarcoma
is classified according to the histological type, in well-differentiated, myxoid and pleomorphic. The myxoid
type occurs in 60%, the well-differentiated in 25% and the pleomorphic in 10% of the cases. The pleo-
morphic type is highly aggressive with high rates of metastases (2). We describe an incidentaloma of the
pleomorphic type with 4.8 cm in diameter.

Perirenal localization is often observed in such tumors, which can mimic renal cystic tumor. The
differential diagnosis must include renal cell carcinoma or atypical angiomyolipoma. Some features in
the computerized tomography, such as linear vascularization, aneurismal dilatation, hematoma and presence of tissue with fat attenuation speak for angiomyolipoma. Frequently the definitive diagno-
sis is achieved only through the pathologic examination (3).

The prognosis of liposarcomas depends on the degree of differentiation, size, histological type
and tumor staging. The total surgical resection with free margins offers a good probability of cure (2). The
standard treatment has been radical nephrectomy, associated or not with radiotherapy. Clinical follow-
up is important to monitor tumor recurrence. There is a report of recurrence 13 years after the initial sur-
gery (2). The case we described here was treated with

radical nephrectomy, presenting a 4-year follow-up, without evidence of recurrence to this moment.

Dr. José R. L. Ferreira and Dr. Alexandre Galvão Bueno assisted in preparing the images and the histological material.

REFERENCES


Received: September 29, 2003
Accepted after revision: January 21, 2004

Correspondence address:
Dr. Diogo Alberto Lopes Bader
Praça Getúlio Vargas, 55 / 10
Cascavel, PR, 85801-220, Brazil
E-mail: diogobader@hotmail.com