

RENAL ONKOSİTOMA: BİR OLGU RAPORU VE LİTERATÜRÜN GÖZDEN GEÇİRİLMESİ

RENAL ONCOCYTOMA: CASE REPORT AND REVIEW OF THE LITERATURE

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Özet

Renal onkositoma, böbreğin nadir bir benign tümörüdür. İncidental olarak tanı konulan bir renal onkositoma olgusu rapor edilmiş ve literatür ışığında tartışılmıştır.

Anahtar kelimeler: *Renal onkositoma*

Summary

Renal oncocytoma is a rare benign neoplasm of the kidney. A case which incidentally diagnosed was reported and discussed under the light of literature.

Key words: *Renal oncocytoma*

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Introduction

Although progress in the diagnostic procedures renal oncocytoma rarely could be diagnosed preoperatively and usually diagnosis can be done by histopathologic examination of the kidney after nephrectomy (1-3). Oncocytomas primarily occurs in glandular organs such as parotids, thyroid gland, adrenals, liver and pancreas. Renal oncocytomas is very rarely (2). Renal oncocytoma accept as benign neoplasm because of its small volume, limited and localised in one pole of the kidney. If the tumor greater than 10cm and shows capsular and vascular invasion it may be malignant (1,3,4). Immunohistochemical diagnosis valuable because of this benign neoplasm if could be diagnosed preoperatively can be treated without organ loss by alternative treatment technique (5-8).

Case Report

Sixty-eight years old male admitted to hospital because of prostatism symptoms. TA was 160/90mmHg. In the physical examination there weren't any pathologic finding except grade-2 benign prostatic hyperplasia(BPH grade-2). Laboratory examinations were normal except pyuria. Left kidney was afunctional in the intravenous urography. Ultrasonographic and retrograde pyelographic diagnosis was pyonephrosis. Left radical nephrectomy was performed. The kidney was very big in size, its parenchyma was very thin and filled with purulent material. In histopathologic examination, it was 120g weigh, 10x5x3cm in diameter dark-brown surrounded with adipose tissue macroscopically. In cross-cut surface its cortex was 3mm and there was well shaped nodular white-grey 2.5cm diameter mass in upper pole. Light microscopic examination showed large

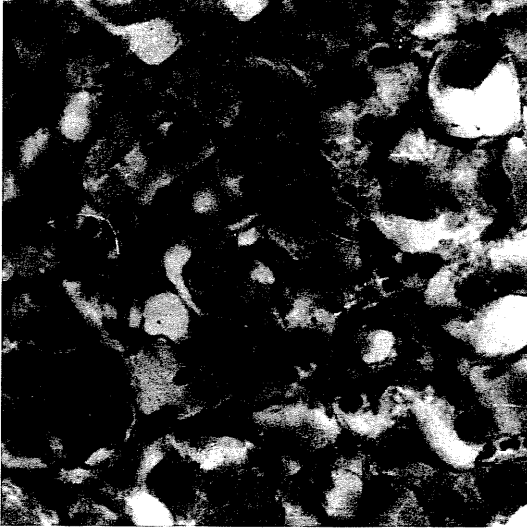
eosinophilic granular cytoplasmic tumor cells (oncocytes) with round ovoid nucleus. Cells showed alveolar and solid arrangement. (Fig.1:Large eosinophilic granular cytoplasmic tumor cells (oncocytes) with round ovoid nucleus). The mass was surrounded by a capsule and there weren't capsular and vascular invasion. According to these findings the diagnosis was oncocytoma. There weren't any recurrences in 3 years follow-up.

Discussion

Renal oncocytoma usually unilateral, small, limited and localized in one pole of the kidney. Tumors which greater than 10cm and show capsular and vascular invasion accepted as malignant (1,2). It was showed that in cytogenetic studies changes in 1st and Y chromosomes related with malignity (9). Tumor typically characterized with polygonal shape and large eosinophilic cells with granular cytoplasm. Mitosis is rare. Cellular ultrastructure is characterized with a lot of mitochondria. Electron microscopy shows a lot of golgi apparatus all mitochondria with endoplasmic reticulum. According to these findings it differs from low grade renal cell carcinoma. Sometimes renal cell carcinomas show typical oncocytic changes. But renal oncocytomas are tumors which contain high grade differentiated eosinophilic granular cells or oncocytes (10). Klein and Valensi reported that oncocytomas originated from proximal tubular epithelium. But later structural and immunohistochemical studies were showed that this tumor originated from distal tubular or collecting duct epithelium (1). Because of good prognosis oncocytomas evaluated in different category among renal tumors. Preoperative diagnosis is important almost it is difficult. Oncocytomas haven't specific clinical findings and radiographic appearance so that diagnosis can be done after nephrectomy. Nevertheless in this case the patient

admitted to hospital because of prostatism symptoms. And diagnosis of the oncocytoma could be done after nephrectomy because of pyonephrosis.

Fig.1. *Large Eosinophilic Granular Cytoplasmic Tumor Cells(oncocytes) with Round Ovale Nucleus (Hematoxylin and Eosin x 200).*



Flow-cytometry is usefull in early diagnosis (1,5,6,7,8,9). If the diagnosis could be done preoperatively it can be treated with partial nephrectomy or only follow-up in elderly patients. In the same tumor oncocytes and malignant cells can be found together so that radical nephrectomy is a safe treatment if there isn't any contrendications such as solitary kidney or impaired renal functions (9).

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