

# Renal Oncocytoma in a Patient with Non-Hodgkin Lymphoma in Remission

## Remisyonadaki Non-Hodgkin Lenfomalı Hastada Renal Onkositoma

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### SUMMARY

Renal oncocytoma is a relatively rare neoplasm of the kidney. A few reports have described renal oncocytomas in patients with previously diagnosed non-Hodgkin lymphoma (NHL). In the present report, a NHL patient diagnosed as renal oncocytoma is presented. A 36-year-old female patient applied to our clinic with complaints of side pain and dysuria for two days. She had been diagnosed with NHL 15 years ago and had received eight cycles of chemotherapy. She was in remission for the last 10 years. Her physical examination was normal. Both renal ultrasonography and abdominal tomography demonstrated a solid mass, measuring 2.5x3 cm, in the right kidney. A Tru-cut biopsy was performed, and the pathological examination of the biopsy specimen revealed oncocytoma. As renal functions were normal and the tumor size remained stable, surgical intervention was not considered, and a conservative approach was used. Renal oncocytoma is a benign solitary neoplasm of the kidney. Local invasion and metastases have been reported in a few cases in the literature. The patients with renal oncocytoma can apply with nonspecific complaints. Unless the patients are symptomatic, or the tumor shows a rapid growth, these patients should be monitored under conservative therapy.

**Key words:** Conservative therapy; lymphoma; oncocytoma.

### ÖZET

Renal onkositoma göreceli olarak böbreğin nadir görülen neoplazmadır. Literatürde çok az vakada öncesinde non-Hodgkin lenfoma (NHL) tanısı ile izlenen bir hastada renal onkositoma tanımlanmıştır. Bu yazıda NHL tanısı ile izlenirken renal onkositoma tanısı konulan bir hasta sunuldu. Otuz altı yaşında kadın hasta polikliniğimize 2 gündür olan yan ağrısı ve dizüri yakınması ile başvurdu. Hasta 15 yıl önce NHL tanısı ile 8 kür kemoterapi almış, halen son 10 yıldır remisyonunda olarak izleniyordu. Fiziki muayenesi normaldi. Hem renal ultrasonografide hem de abdominal tomografide sağ böbrekte 2.5x3 cm boyutunda solid kitle tespit edildi. Renal tru-cut biyopsi sonrasındaki patolojik değerlendirmede onkositoma tespit edildi. Tedavi olarak konservatif yaklaşım uygulandı ve hem renal fonksiyonları hem de tümör sonucu stabil olduğundan cerrahi tedavi uygulanmadı. Renal onkositoma genellikle soliter formda olan böbreğin iyi huylu tümörüdür. Literatürde çok az vakada lokal invazyon ve metastaz rapor edilmiştir. Renal onkositomalı hastalar nonspesifik şikayetlerle başvurabilirler. Bu hastalar semptomatik olmadıkça veya ani büyüme ile başvurmamakça konservatif tedavi yapılmalıdır ve takip edilmelidir.

**Anahtar sözcükler:** Konservatif tedavi; lenfoma; onkositoma.

### INTRODUCTION

Renal oncocytoma is a relatively rare neoplasm of the kidney. The incidence of oncocytoma is not clearly known, but the tumor accounts for approximately 3-7% of all renal neoplasms.<sup>[1]</sup> Oncocytomas

rarely occur as multiple tumors in the same kidney, and these few reported cases, have been termed “renal oncocytosis”.<sup>[2,3]</sup> About 2-12% of oncocytomas are multifocal, and 4-14% are bilateral.<sup>[4,5]</sup> Oncocytomas are usually slow-growing tumors and they are

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not considered to possess any malignant potential. Local invasion and metastases have been reported in a few cases in the literature.

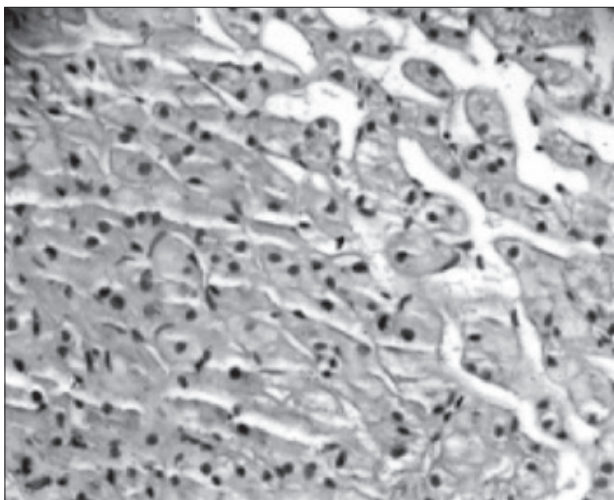
The patients with renal oncocytoma can present with nonspecific complaints. Clinically, oncocytoma may be asymptomatic, but symptomatic patients may present signs of hematuria, flank pain or have a palpable mass.

A few reports have described renal oncocytomas in patients previously diagnosed non-Hodgkin Lymphoma (NHL).<sup>[6,7]</sup>

A NHL patient diagnosed with renal oncocytoma was presented in the current report.

### CASE REPORT

A 36-year-old female patient was admitted to our clinic with flank pain and dysuria for two days. She was diagnosed with NHL 15 years ago, and received eight cycles of chemotherapy. She was in remission for the last 10 years. Her physical examination was normal. Blood urea and creatinine levels were within the normal range. In urinalysis, Ph was 6, urine density was 1020 and protein was negative. Urine sediment revealed numerous leukocytes. The patient was considered as cystitis and empirical antibiotic therapy was initiated. Plain abdominal X-ray was normal. Urinary ultrasonography demonstrated a solid mass, measuring 2.5x3 cm in the right kidney.



**Fig. 1.** Tumor cells with large eosinophilic cytoplasm and small round nucleoli are shown.

The lesion was confirmed by abdominal tomography. The tumor markers were normal. A tru-cut biopsy was performed. The tumor cells had large eosinophilic cytoplasm and small round nucleoli (Fig. 1). Pathological examination of the biopsy specimen revealed oncocytoma. No metastasis was detected.

As renal functions were normal and the tumor size remained stable for the last six months, surgical intervention was not considered, and a conservative approach was applied.

### DISCUSSION

The patients with renal oncocytoma can apply with nonspecific complaints. The reported incidence rate of oncocytomas varies from 3.2% to 7%.<sup>[8]</sup> In 2004, the World Health Organization (WHO) classified renal oncocytomas as benign neoplasms. While some oncocytomas present as multicentric lesions, a few may occur bilaterally. Renal oncocytoma has a peak incidence in the sixth decade of life. These tumors are more common in males.

The widespread use of imaging methods, such as ultrasound and CT scans and modern imaging techniques have led to a more frequent detection of small renal tumors.<sup>[9]</sup> The diagnostic accuracy of core biopsies has been shown to be superior to that of fine needle aspiration (FNA) biopsies in solid renal tumors, especially in the evaluation of tumor grades and histological subtype. Also, the rate of insufficient samples was found to be higher in aspiration biopsy (11%) than in core biopsy (3%).<sup>[10]</sup>

Local invasion and metastases have been reported in a few cases in the literature.<sup>[1]</sup> To our knowledge, there is only one documented case of liver metastasis in literature. However, oncocytomas may occasionally involve fat tissues in up to 20% of cases and lymph vascular structures in up to 5%.<sup>[1]</sup>

A few reports in the literature described renal oncocytomas in patients previously diagnosed with NHL.<sup>[6,7]</sup> Two cases, with simultaneous occurrence of oncocytoma and small B-cell lymphoma in the same kidney, were reported.<sup>[6]</sup> In addition, an elderly patient who presented with concomitant bilateral perinephric diffuse large B-cell lymphoma and oncocytoma in

the same location was reported.<sup>[7]</sup> Renal oncocytoma is a benign neoplasm, characterized by slow-growth and excellent prognosis after surgery. Unless these patients are symptomatic, or the oncocytoma shows a rapid growth, these patients should be monitored under conservative therapy. Nephron sparing techniques may be adequate for tumor removal.<sup>[8]</sup> If technically feasible, nephron-sparing surgery for benign tumors seems feasible even for tumors >4 cm.<sup>[11]</sup>

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