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**Case Report** 

# Metastasis and Recurrence Retroperitoneal Angiomyolipoma: a Case Report

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# **Abstract:**

Introduction: Angiomyolipoma (AML) is often a benign tumor found in the kidney.

**Case presentation:** We report a very rare case of retroperitoneal AML with two relapses and metastasis that presented with complaints of abdominal pain.

**Discussion:** Extrarenal angiomyolipoma (ERAML) is a very rare tumor, often benign, and mostly found in the liver and then in the retroperitoneal area. Diagnosis of retroperitoneal AML is very difficult, and the best imaging is CTA and CT. We found only a few reports of metastasis and recurrence in the publication.

**Conclusion:** retroperitoneal angiomyolipoma (RAML) often behaves benignly; according to several studies of metastasis and recurrence, it shows the need for frequent follow-ups after surgery.

Key words: gelatin fibers; zno particles; antibacterial activity

# Introduction

Angiomyolipoma (AML) is a benign mesenchymal-neoplasm that contains smooth muscles, fat (adipose), and thick wall vessels [1-4]. AML is more commonly located in the renal than the extrarenal, and renal AML has a more common relapse [2]. In this paper, we describe the first case of ERAML that has two consecutive recurrences.

### **Case Report**

A 45-year-old female with a history of two resection surgeries for retroperitoneal AML, the first time was 5 years ago; the patient underwent resection surgery but did not consent to radiotherapy, and the second turn was last year with a complaint of abdominal pain and a recurrence of RAML that underwent resection surgery. In an article, we reported the recurrence of RAML last year, which has now presented to our hospital with abdominal pain. In examination, she had minimal tenderness in the right lower side of the abdomen without gardening, rebounding, or shifting and did not have dyspnea, chest pain, vomiting, or diarrhea. She did not have a particularly social or family history.

The abdominopelvic computed tomography (CT) with contrast revealed a cystic mass with a thick enhanced wall and enhanced solid components seen in the root of mesentery in the left part of the abdomen.

According to the patient's history and CT report, a diagnostic laparotomy was performed through a midline incision. The cystic mass in the retroperitoneum at the root of the mesenchymal of the small intestine was separated, which contained fluid, and the tissue was removed, and the small intestine anastomosis was performed.

The patient suffered from dyspnea during admission, and with suspicion of PTE, a CTA was requested for the patient. In the CTA, numerous round and solid nodules were found in the parenchyma of the lobes of both lungs, and the appearance of the nodules suggested metastasis. The pathology laboratory shown in Table 1.

Block summary Pathologic diagnosis

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Red blacking tissue	Angiomyolipoma, epithelioid type, recurrence tumor involved subserosa
measuring 12*8*7 cm	with extension to submucosa of small intestine
50 cm of intestinal	Greatest tumor size: 12 cm
50 cm of mesunar	Surgical margins are unremarkable reactive lymph nodes identified 9
	Surgical margins are unremarkable reactive lymph hodes identified 9

#### Table 1: pathology finding

Reference

### Discussion

Diagnosing ERAML is a challenge due to its similarity to benign and malignant tumors in this area, such as lipoma, leiomyoma, adrenal adenocarcinoma, renal cell carcinoma, and retroperitoneal liposarcoma [5]. The best imaging for diagnosing renal angiomyolipoma is CT and CTA [3.6] In Wang et al.'s study, CT features for differentiating RAML from liposarcoma, such as intratumoral linear vessels, aneurysmal dilation of intramural vessels, beak signs, hematomas, and discrete internal and intrarenal fatty tumors, are mentioned [7]. An MRI with CT can also help in diagnosing the connection of renal vessels with ERAML [8].

According to the study by Anthony Kodzo et al. in 2016, the clinical symptoms seen in ERAML cases include: random radiological findings; abdominal pain; recent weight gain; a feeling of fatigue and fullness in the epigastrium; abdominal distension; pain and bleeding; hematuria; vomiting or constipation; and weight loss [9]. Our case presented the most common complaint (abdominal pain).

There is no specific laboratory test for the exam, but a coagulation test, complete blood count, liver and renal function test, and serum glucose are performed as a basis [9].

Recommended treatment for small and asymptomatic retroperitoneal mass, frequent follow-up of patients in case of bleeding, recommendation for emergency arterial embolization, and if the patient is stable and symptomatic, recommendation for surgery to remove the mass and frequent follow-up of the patient [10].

Although retroperitoneal AML is classified as a benign tumor [4,9], a few rare cases have been reported in which the patient returned with recurrence [4] and metastasis a few years after tumor removal surgery [11,12]. Our case is a retroperitoneal AML that had two recurrences and metastasis, and the interval between the two recurrences of the patient was less than one year, according to These findings suggest that retroperitoneal AML patients should undergo frequent radiological follow-up.

### Conclusion

RAML is classified in the category of benign tumors, but according to the reports of metastasis and recurrence in several cases, frequent follow-up is required.

- Fejes Z, Sánta F, Jenei A, Király IE, Varga L, Kuthi L. Angiomyolipoma of the kidney—Clinicopathological analysis of 52 cases. Pathology and Oncology Research. 2023;28:1610831.
- 2. Hyams ES, Provet J. Angiomyolipoma of the left ureterovesical junction. Reviews in Urology. 2007;9(2):84.
- 3. Park BK. Renal angiomyolipoma: radiologic classification and imaging features according to the amount of fat. American Journal of Roentgenology. 2017;209(4):826-835.
- 4. Mohammadzadeh N, Kohansal S. Recurrent retroperitoneal extra-renal angiomyolipoma: A case report and review of literature. Annals of Medicine and Surgery. 2022;81:104230.
- Thakur B, Hiwale K. Intricacy in the Diagnosis of Retroperitoneal Angiomyolipoma: A Rare Case. Cureus. 2023;15(3).
- Minja EJ, Pellerin M, Saviano N, Chamberlain RS. Retroperitoneal extrarenal angiomyolipomas: an evidencebased approach to a rare clinical entity. Case Reports in Nephrology. 2012;2012.
- Wang X-J, Qu B-Q, Zhou J-P, Zhou Q-M, Lu Y-F, Pan Y, et al. A non-invasive scoring system to differential diagnosis of clear cell renal cell carcinoma (ccRCC) from renal angiomyolipoma without visible fat (RAML-wvf) based on CT features. Frontiers in Oncology. 2021;11:633034.
- 8. Thiravit S, Teerasamit W, Thiravit P. The different faces of renal angiomyolipomas on radiologic imaging: a pictorial review. The British Journal of Radiology. 2018;91(1084):20170533.
- 9. Venyo AK-G. A review of the literature on extrarenal retroperitoneal angiomyolipoma. International journal of surgical oncology. 2016;2016.
- 10. Kervancioglu S, Yilmaz F. Urgent arterial embolization of ruptured renal angiomyolipoma. Open Medicine. 2015;10(1).
- 11. Gupta C, Malani AK, Gupta V, Singh J, Ammar H. Metastatic retroperitoneal epithelioid angiomyolipoma. Journal of Clinical Pathology. 2007;60(4):428.
- 12. Lau SK, Marchevsky AM, McKenna Jr RJ, Luthringer DJ. Malignant monotypic epithelioid angiomyolipoma of the retroperitoneum. International Journal of Surgical Pathology. 2003;11(3):223-228.



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