

# CASE REPORT ON RENAL ANGIOMYOLIPOMA

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## Abstract

A particular kind of kidney tumor is called a renal angiomyolipoma. Nearly 80% of them are benign (non-cancerous), however they can bleed, which can be fatal. When cells grow and divide more frequently than they ought to, a tumor results. Blood arteries, muscle cells, and fat make up a renal angiomyolipoma. A rare solid tumor with benign features is the renal angiomyolipoma, commonly known as renal hematoma. Renal angiomyolipoma has an autosomal dominant inheritance pattern. A number of clinical symptoms and catastrophic consequences could happen if the lesion becomes very large. A 48-year-old female patient was admitted to the urology ward complaining of high-grade intermittent fever up to 102.4 0 F with chills, pain in lumber region since two days ago, nausea, and projectile vomiting. Patient also complaint of incontinence urine with feeling of incomplete voiding, and intermittent hematuria and these symptoms progressively got worse. After undergoing certain specific investigations like CT scan, abdominal ultrasonography, and blood investigation, the patient was diagnosed with renal angiomyolipoma. The primary therapeutic intervention was done on the patient and she was treated with Inj. Piptaz, Inj.Pantoprazole, Inj. Emset, Inj.Neomol, and intravenous fluid during hospitalization.

**Keywords:** Renal angiomyolipoma, perivascular epithelial cell tumor, renal cell carcinoma, fat poor angiomyolipoma, hamartomas, giant kidney tumor, renal tumor.

## INTRODUCTION

A rare type of tumor called a renal angiomyolipoma is composed in varying amounts of mature adipose tissue, thick-walled blood vessels, and smooth muscle.(1) When renal angiomyolipoma is growing up to more than 10cm, they are referred to as giant angiomyolipoma. The most frequent benign kidney tumor is renal angiomyolipoma.(2) Despite being benign, it can cause complications like hemorrhage and manifest other symptoms including abdominal pain. Most of these tumors—about 80%—are sporadic. Sometimes they are linked to pulmonary lymphangiomyomatosis or tuberous sclerosis complex. (3)

There are 270 incidences of sporadic angiomyolipoma in the population under study (184 females and 86 males). This translates to an overall prevalence of 0.44%, with a subpopulation of 0.60% women and 0.28% men. 10.8+-5.8mm was the average tumor size.(4)

43.0% of cases and 57% of cases, respectively, involved the left kidney. Four of the 14 multiple angiomyolipomas that were found in all 270 individuals were bilateral. Over the course of a bilateral, 61 patients were monitored.61 cases were monitored for a minimum of 25 months and showed no appreciable growth in tumor size throughout that time.(5)

## CASE PRESENTATION

A 48-year-old woman arrived at the outpatient clinic and complained of high-grade intermittent fever up to 102.4 0 F with chills. Pain in lumber region since two days ago with feeling of nausea and projectile vomiting.

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The patient also developed incontinence of urine with feeling of incomplete voiding and intermittent hematuria that progressively deteriorate. The physician did all investigations like CT scan, and abdominal ultrasonography, blood investigation, and the patient was diagnosed with renal angiomyolipoma.

The patient was admitted to the urology ward. Initial assessment and investigation revealed that the count of blood report showed increased WBC (21,000/ $\mu$ l) and decreased urea(13mg/dl) and creatinine (0.9 mg/dl). increased ALT (46U/L) & AST (65 U/L), HB 10 gm%, and other blood counts in the normal range. In ultrasonography, Impression shows there is the presence of a Large hyperechoic mass lesion in the right kidney. In CT scan impression shows there is a presence of large exophytic fat -Solid lesion along the posterior aspect of the right kidney with surrounding peripheral mixed density collection and mass effects to be considered are angiomyolipoma with acute Hemorrhage than liposarcoma, Bilateral angiomyolipomas. Hepaticlipoma in vi segments of the right lobe of the liver.

These findings led to a clinical diagnosis of the patient's Renal angiomyolipoma. The patient was treated with Inj. Piptaz 4.5 gm (intravenous TDS), Inj. Pantoprazole 40mg (intravenous once a day). Inj. Emset 4mg (Intravenous three times a day) inj. Neomal 100ml(Intravenous three times a day), Intravenous fluid (Ringer lactate 500ml), Normal saline 500ml. After getting treatment patient's symptom was resolved slowly and the prognosis remains satisfactory.

Physician is planned for further surgical management of selective embolization of the renal artery and surgical removal of the lesion for AML management. Hence patient was discharged with advice to follow up after 2 weeks.

## Discussion:

A benign kidney tumor made up of smooth muscle cells, adipose tissue, and blood vessels is known as a renal angiomyolipoma. Less than 4 cm tumors' do not exhibit any symptoms & tumors are larger than 4 cm, and they can present with shocks as well as symptoms like fever, nauseousness, vomiting, pain, palpable mass, hematuria, anemia, and hypertension. In cases with big tumors, retroperitoneal bleeding may occur in up to 50% of patients.(6-12)

The majority of patients with an acute or potentially fatal bleeding need a complete nephrectomy.(7) If it is investigated, selective embolization can temporize and in many cases prove definitive partial or total nephrectomy, if planned, should be performed within a few days of angioembolization to prevent extensive adhesion. If surgical option is not available, everolimus may be taken into consideration as an alternative therapeutic option.(13-18)

According to Oesterling et al. and Steiner et al. the choice of treatment should be based on both tumor size and symptoms. According to this approach, tumors >4 cm are frequently symptomatic and have a hemorrhagic tendency, and therefore require either selective embolization or surgical treatments such as partial nephrectomy, enucleation or wedge resection ,whereas tumors < 4 cm should be followed up with yearly CT scans or ultrasonography. SAE of renal artery is a safe and effective treatment for symptomatic and large-size AMLS.(9) The therapeutic strategy varies from case to case: selective embolization of the renal artery and surgical removal of the lesion are the pillars of AML management .Alternatively, it is possible to follow the clinical course, with periodic surveillance of the lesion. Nephrectomy can be opted for in more severe cases. In case the aforementioned alternatives cannot be performed, a medical approach with hormonal therapy or with agents such as sirolimus, an inhibitor of the mammalian target of rapamycin (mTOR), can be chosen.(19-22)

## Conclusion

Renal angiomyolipoma is a rare case. Following a correct diagnosis based essentially on radiologic imaging and CT scan, prompt and adequate treatment is indicated to provide analgesia to the patient. In this case the Physician is doing plan for further surgical management of selective embolization of the renal artery and surgical removal of the lesion this is the pillars of AML management .The patient in this instance had renal angiomyolipoma, and his condition got better after receiving treatment.

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