



**ORIGINAL RESEARCH PAPER**

**Pathology**

**A CASE REPORT OF ELDERLY MALE PATIENT WITH RETROPERITONEAL MASS**

**KEY WORDS:**

Retroperitoneal fibrosis, renal cell carcinoma, FNAC

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**ABSTRACT**

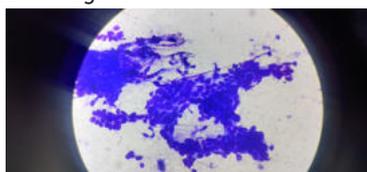
**Introduction:** Retroperitoneal fibrosis (RPF) is a rare condition characterized by inflammation of retroperitoneal soft tissue. **Case report:** A 85yr old male patient presented with right flank pain since 2 months associated with pedal edema. On examination: Patient is having tenderness in right lumbar region. CT scan shows ill-defined heterogeneously enhancing soft tissue lesion involving the right kidney. MRI scan shows right kidney with heterogenous mass, one side attached to kidney and other side encasing the aorta and inferior venacava, possibility of Neoplastic/Retroperitoneal fibrosis to be considered. USG guided FNAC been done. It shows clusters, sheets and papillary fragments of malignant epithelial cells showing coarse chromatin, prominent nucleoli. Final diagnosis of METASTATIC deposit of epithelial neoplasm has been given. **Discussion:** RPF is a rare disease with average incidence of 1 case per lakh population. The exact pathogenesis of RPF is not known. The patient with RPF usually presents with fatigue. Loss of appetite and loss of weight. These patients usually have back ache and abdominal pain of dull type. RPF is most commonly diagnosed on CT scan or MR imaging. The histopathological study plays a final and gold standard test for confirmation of RPF along with IgG4 study. But the retroperitoneal mass also has lot of differential diagnosis which includes, metastatic deposits, soft tissue sarcoma, lymphoma, Teratoma, infectious conditions like tuberculosis, actinomycosis. The cytological / histopathological study only can differentiate and give the final diagnosis of retroperitoneal mass. **Conclusion:** Retroperitoneal mass is a very rare case and has many differential diagnosis to rule out. Hence, proper clinical evaluation in the background of radiological images. However, histopathological study always play a confirmatory role.

**INTRODUCTION:**

Retroperitoneal fibrosis (RPF) is a rare condition characterized by inflammation of retroperitoneal soft tissue. It is characterized by increased proliferation of fibrous tissue in the retroperitoneum<sup>1</sup>.

**Case report:**

A 85yr old male patient presented with right flank pain since 2 months. Flank pain is insidious in onset, continuous, dull aching and mild to moderate degree. It is associated with edema of both lower limbs and tingling and numbness. Pedal edema is of pitting type. Patient also complains of burning micturition, urgency, nocturia for 5-6 times and constipation. No history of hematuria/poor stream of urine. Not a known case of diabetic or hypertension. Patient has significant past history of renal calculi. Patient is known smoker since 30 yrs. On general examination, patient is conscious, oriented with normal vital parameter. On examination: Patient is having tenderness in right lumbar region. Other systems are unremarkable. Lab investigation was done. Complete blood count shows neutrophilic leukocytosis, CT scan shows ill-defined heterogeneously enhancing soft tissue lesion involving the right kidney with features possibly of an infiltrative Neoplasm with enlarged para-aortic lymph nodes. MRI scan shows right kidney with heterogenous mass, one side attached to kidney and other side encasing the aorta and inferior venacava, possibility of Neoplastic/Retroperitoneal fibrosis to be considered. USG guided FNAC been done. It shows clusters, sheets and papillary fragments of malignant epithelial cells showing coarse chromatin, prominent nucleoli. Final diagnosis of METASTATIC deposit of epithelial neoplasm has been given.



**Fig 01:** The image shows tumor cells in clusters with discohesive nature. (Giemsa stain 40x)

**DISCUSSION:**

The French Urologist Albarran for the first time described

about the treatment of retroperitoneal fibrosis. It is characterized by formation of fibrotic tissue in the retroperitoneal region forming a mass. It is of 2 types: 1. Idiopathic 2. Secondary to malignancy, radiotherapy, drugs etc<sup>3,4</sup>.

RPF is a rare disease with average incidence of 1 case per lakh population. It is more commonly seen in males when compared to female patient. It is seen more commonly in the age group of 5<sup>th</sup>-6<sup>th</sup> decade. The exact pathogenesis of RPF is not known. This condition usually involves abdominal aorta, iliac arteries, ureter and soft tissue of retroperitoneum<sup>2</sup>.

The concept of IgG4 has emerged as probable etiology for RPD. The IgG4 plasma cells infiltration into the soft tissue of retroperitoneum, induces fibrosis which encase blood vessel causing obstructive symptoms.

The patient with RPF usually presents with fatigue. Loss of appetite and loss of weight. These patients usually have back ache and abdominal pain of dull type. It usually encase the ureter, causing symptoms mimic like ureteric colic. It also encases the abdominal aorta causing decreased blood supply to distal extremities, causing aneurysm and stenosis<sup>5,6</sup>.

RPF is most commonly diagnosed on CT scan or MR imaging. On CT scan, It shows homogenous plaque with muscle isodense and varying degrees of enhancement. On MRI, it has low intensity of T1 weighted images and variable intensity on T2 weighted images<sup>7,8</sup>.

The histopathological study plays a final and gold standard test for confirmation of RPF along with IgG4 study. But the retroperitoneal mass also has lot of differential diagnosis which includes, metastatic deposits, soft tissue sarcoma, lymphoma, Teratoma, infectious conditions like tuberculosis, actinomycosis. The cytological / histopathological study only can differentiate and give the final diagnosis of retroperitoneal mass<sup>9,10</sup>.

**CONCLUSION :**

Retroperitoneal mass is a very rare case and has many differential diagnosis to rule out. Hence, proper clinical evaluation in the background of radiological images.

However, histopathological study always play a confirmatory role.

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