

# RETROPERITONEAL LIPOMA WITH INGUINAL HERNIATION "A RARE ENTITY"

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## ABSTRACT

Primary retroperitoneal tumors are very rare and predominantly malignant in nature. A benign retroperitoneal lipoma is extremely rare and debulking is the major therapeutic option. We present a case of middle age male with huge retroperitoneal mass which was turned out to be lipoma on histopathology.

## Introduction

Primary retroperitoneal tumors represent about 0.2% of all neoplasms.<sup>1</sup> Out of these about 80% of the tumors are malignant neoplasms. Retroperitoneal lipomas are extremely rare, and represent about 2.9% of all primary retroperitoneal tumors.<sup>2</sup> When lipomas affect retroperitoneum, they attain considerable dimensions.<sup>3</sup> Surgery is the only treatment for giant lipoma. Attempt should be made for complete excision of the giant lipoma. If it is not possible debulking of lipoma should be done as far as possible. Retroperitoneal lipomas are known for their rarity and varied presentations. This is a case report of giant retroperitoneal lipoma with inguinal herniation.

## Case Report

A 50-year-old gentleman came in the emergency department with severe right sided lower abdominal pain. On physical examination, the abdomen was slightly obese. Mild right sided inguinal bulge was appreciated which was soft on palpation. Tenderness was present in the right lower abdomen extending into inguinal region. Patient also complains of increase frequency of urine with on and off dysuria. Ultrasound

examination was done to rule out acute appendicitis or obstructed hernia that was normal. Then, CT Scan KUB was performed to look for any ureteric stone and incidentally a large right sided retroperitoneal fat attenuation mass lesion was seen with herniation into right inguinal canal representing a large retroperitoneal lipoma. It was measuring 17.6 x 10.1cm. Mild stranding is seen within it representing inflammation (Fig. 1). It is causing displacement of adjacent structures and iliac vessels (Fig. 2). Mild compression of right ureter and right lateral wall of urinary bladder was also observed causing urinary symptoms. The patient was then referred to the general surgeon and surgical excision of the lipoma was performed. Histopathological examination revealed a benign lipoma without evidence of malignancy.

## Discussion

Lipomas are benign variant of liposarcoma located in the peritoneal cavity and especially in the retroperitoneum. They have been reported very rarely in

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**Figure 1:** CT Scan abdomen without contrast showing a large retroperitoneal lipoma with inguinal herniation. Mild fat stranding seen within it representing inflammation.



**Figure 2:** Retroperitoneal lipoma displacing adjacent structures.

medical literature including journals.<sup>3,4</sup> These tumors are typically described as asymptomatic, slow-growing masses that are soft and mobile.<sup>5</sup> Retroperitoneal lipomas with inguinal herniation has been an exceedingly rare entity and in a literature review, only one case has been reported.<sup>6</sup> They are characterized by slow growth and a tendency to exert pressure on the retroperitoneal or pelvic organs, displacing intestinal loops and the blood vessels adjacent to them. At the

time of diagnosis, they are generally quite large. Occasionally, the presentation is acute with substantial abdominal pain caused by bleeding or infection. Secondary changes in lipoma occur as the result of impaired blood supply or traumatic injury. Prolonged ischemia may lead to infarction, hemorrhage and calcification and may terminate in cyst like changes. Similarly, infection or trauma may cause fat necrosis and local liquefaction of fat.<sup>7</sup>

On ultrasound, lipomas appear as oval masses with well-defined regular margins and a hyperechoic echo structure. Thin fibrous septa may be present within the lesion, and the color Doppler examination shows no intra or perilesional vascularization. Another typical characteristic of lipomas is their mobility when pressure is exerted on the abdomen with the US transducer.<sup>8</sup> To ensure proper treatment and followup, lipomas must be differentiated from liposarcomas, which account for 45% of all retroperitoneal malignancies. CT findings that are indicative of malignancy are rapid growth, thick intralesional septa (>2mm), and solid components. Lipomas are characterized by slow growth, but in some cases histological examination is necessary to differentiate these lesions from well-differentiated liposarcoma. Magnetic resonance imaging is superior to CT for assessing the vascular aspects and adipose content of the lesion.<sup>9,10</sup>

## Conclusion

Lipomas are known to recur and undergo malignant transformation, subjects with resected retroperitoneal lipomas must have careful follow-up. Retroperitoneal lipomas must be carefully differentiated from liposarcomas of low grade malignancy in order to provide the correct treatment and post-operative follow up.

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