



**CASE REPORT: GIANT ADRENAL MYELOLIPOMA**

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**ABSTRACT**

**Background:** Adrenal myelolipoma is a rare, benign neoplasm that is usually asymptomatic, unilateral and nonsecreting. It develops within the adrenal gland and is composed of mature adipose tissue with elements of the hematopoietic series. They are usually identified in adults, either incidentally or if complicated by hemorrhage. There is no gender predilection. We present case of a giant adrenal myelolipoma found in a patient who initially presented with abdominal pain. **Case presentation:** A 45 year old male patient presented with abdominal distension and pain from about a month. There were no other associated symptoms. On physical examination, he was in good general condition with palpable abdominal mass in left hypochondrium. Abdominal CT showed retroperitoneal lesion arising from the left adrenal gland with predominance of fatty tissue, measuring 22.8 x 14.6 x 20.3 cm, suggestive of giant adrenal myelolipoma. No abnormalities in laboratory tests, as well as in hormonal investigation for adrenal masses were found (non-secretory neoplasia). **Conclusion:** Adrenal myelolipomas are rare, benign neoplasms of the adrenal gland with varied clinical presentations. This case presents a diagnosis of giant unilateral adrenal myelolipoma presenting with distension of abdomen

**KEYWORDS:** Adrenal myelolipoma, non functional incidentaloma, retroperitoneal haemorrhage.

**BACKGROUND**

Myelolipoma is a rare, benign neoplasm composed of mature adipocytes and hematopoietic tissue. Most lesions are asymptomatic and may be discovered incidentally when the region is imaged for other reasons (i.e. an incidentaloma). Larger lesions (typically over 4 cm in size) can present with acute retroperitoneal hemorrhage, and still others (especially when very large) with vague mass-related symptoms and abdominal distension. After surgical excision, these lesions generally do not recur. They are generally nonsecreting, although an overproduction of adrenal hormones is described in some cases. Here we describe a case of giant non functional adrenal myelolipoma

**CASE PRESENTATION**

A 45 year old patient presented with abdominal distension for 1 month and underwent ultrasound abdomen for the above complaint. Ultrasound abdomen showed large predominantly hyperechoic mass occupying left hypochondrium and extending inferiorly. Contrast enhanced CT abdomen was done to further evaluate the mass. CT abdomen showed a well defined large mixed density mass having multiple internal areas of fat attenuation (CT value upto – 120 HU), measuring 22.8x14.6x20.3 cm. It was arising from left suprarenal gland with displacement of left kidney inferiorly. It was

seen extending into left subphrenic space lesser sac, left anterior pararenal and perirenal space, anteriorly extending into the left subhepatic space, spleen was displaced superolaterally, pancreas, splenic vessels and stomach were displaced anteriorly. Further MRI abdomen was done with limited sequences (T1 and T1 FAT SAT) to exclude any internal haemorrhage within the myelolipoma. On MRI no hyperintense signal was seen on T1 FATSAT thus excluding any internal haemorrhage.

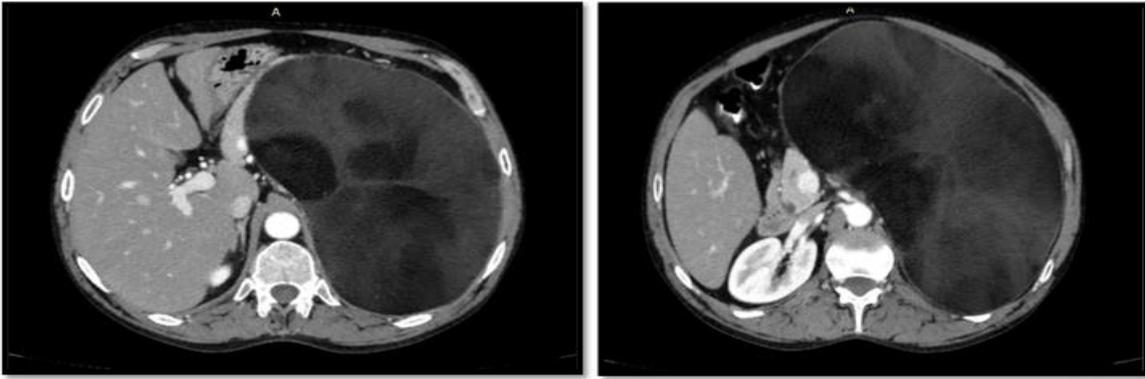


Fig. 1,2: Axial CECT images showing fat attenuation left suprarenal mass causing mass effect on pancreas.

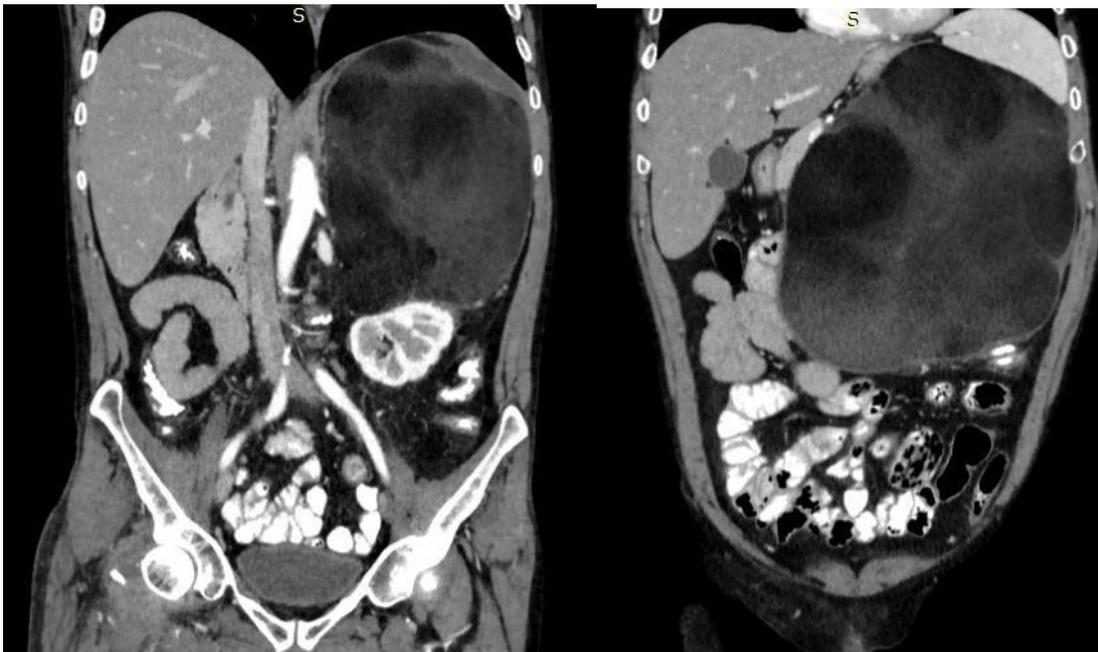


Fig. 3,4: Coronal CECT images showing left suprarenal origin mass displacing left kidney downwards with spleen displaced superolaterally.

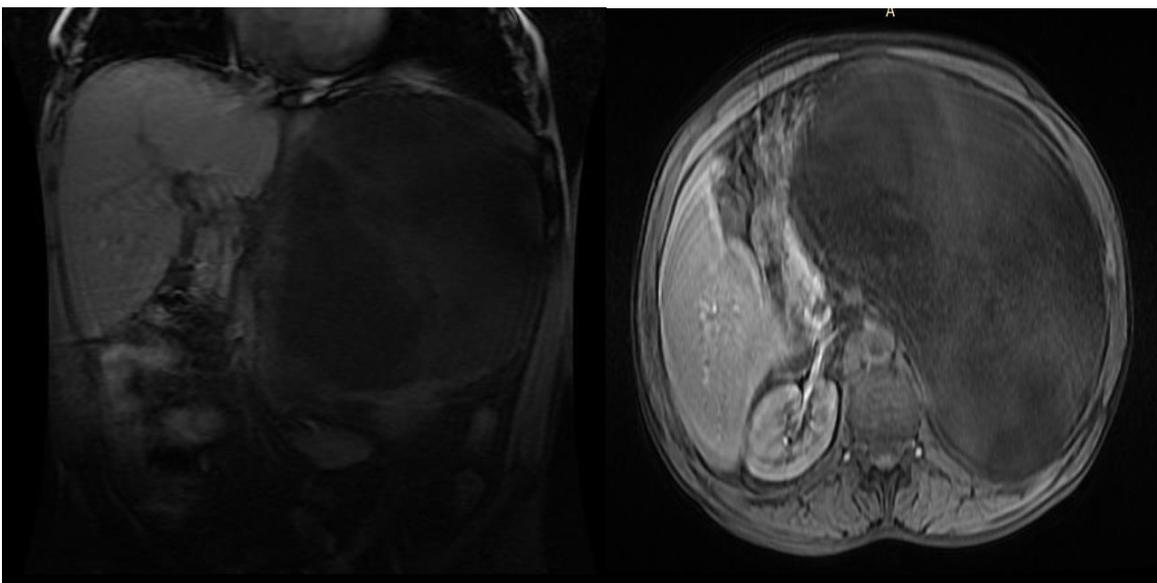


Fig. 5,6: coronal and axial T1 FATSAT images showing no internal haemorrhage within the myelolipoma.

## DISCUSSION

Adrenal myelolipoma is often an "incidentaloma," since its diagnosis is frequently based on autopsic findings or upon diagnostic imaging examinations performed for reasons unrelated to its presence. These tumors are rare, although they are increasingly being detected because of wider use of diagnostic imaging techniques. They are benign and nonfunctional tumors composed of mature adipocytes and active hematopoietic elements. Myelolipomas are relatively slowly growing tumors and tumors exceeding 10 cm in diameter are called giant myelolipomas. Big tumors can become symptomatic. Symptoms may include nonspecific abdominal pain, constipation, vomiting, or renovascular hypertension because of intratumoral hemorrhage or compression of peritumoral tissue. They have been associated with overproduction of adrenocorticotrophic hormone as in Cushing disease and same cases of Congenital adrenal hyperplasia. Acute hemorrhage, although rare, is the most significant complication especially in large myelolipomas, and it can be manifested with pain in the back, epigastrium, or flanks, associated with nausea, vomiting, hypotension and anemia. Surgical resection is recommended in these cases. Transarterial embolization with polyvinyl alcohol (PVA) particles or gelatin sponge particles could be used for successful hemostasis before adrenalectomy in patients with retroperitoneal hemorrhage from adrenal myelolipomas.

## CONCLUSION

Adrenal myelolipomas are rare, benign neoplasms of the adrenal gland with varied clinical presentations. This case presents a rare diagnosis of giant adrenal myelolipoma accompanied by abdominal symptoms. In this particular case, there is lack of hormonal dysfunction. CT and MRI act as adjunct in such cases to demonstrate macroscopic fat and to rule out internal haemorrhage.

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