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CASE REPORT-MYELOLIPOMA OF ADRENAL GLAND

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ABSTRACT

Myelolipoma is a rare, benign, silent lesion arising primarily from adrenal gland. Composed of mature adipose tissue and trilineage hematopoietic elements. They are incidentalomas most of the times. Extra adrenal myelolipoma - thoracic, presacral, pelvic. Myelolipoma possesses tissue components identical to healthy bone marrow. Incidence of adrenal myelolipoma is 0.1%. Asymptomatic myelolipoma are treated conservatively. Surgery-excision of myelolipoma is done for symptomatic lesions.

Keywords: Adrenal Myelolipoma, incidentalomas, adrenal adenoma

INTRODUCTION

Adrenal myelolipoma are rare, benign, metabolically silent lesions that arises primarily from adrenal gland in all age groups.It results from clonal stem cell proliferation composed of mixture of adipose tissue and hematopoietic elements. There is excessive proliferation of megakaryocytes.

CASE REPORT

A 34 year old female presented with complaints of abdominal discomfort and abdominal distension for 6 months. No history of hematuria, burning micturition. No history of vomiting, constipation.No history of palpitation. Not a known case of hypertension, diabetes mellitus. Nil surgical

history. Married with Normal menstrual history with one child - normal delivery.

On examination patient is well built and vitals stable. Pallor, jaundice absent.

Systemic examination

Per abdomen - A mass felt in right hypochondrium region, umbilical region, right iliac fossa.

Moves with respiration.

Abdominal distension present. No Tenderness.

No guarding, rigidity. No free fluid.

All baseline investigations were done and found within normal limits.urea-18mg/dl, creatinine -0.6 mg/dl.CECT abdomen showed large well defined encapsulated predominantly fat attenuating retro-peritoneal lesion with mild soft tissue attenuating areas, septations visualised in suprarenal region on the right side - 20.2x15.4x12.8 cms. Adrenalmyelolipoma/ angiomyolipoma. Inferomedial displace-ment of right kidney by the mass lesion visualised. Significant extraneous imping-ement on inferior hepatic surface. Extraneous compression of IVC. Mild extraneous impingement on renal vein and artery.

Patient was planned for excision, under general anesthesia, right loin incision was made, through 11^{th} rib excision retroperitoneum was entered.

Intraoperative Findings - A large oval shaped encapsulated mass of size about 15 x 20 cms arising from right adrenal extending above upto the inferior surface of liver, medially up to IVC behind the mass, displacing right kidney medially and inferiorly. Mass was mobilised from adjacent structures, and total removal of mass along with adrenal gland was done. Hemostasis was achieved and wound closed in layers. Specimen was sent for histopathological examination.

Figure 1: CT showing retroperitoneal mass

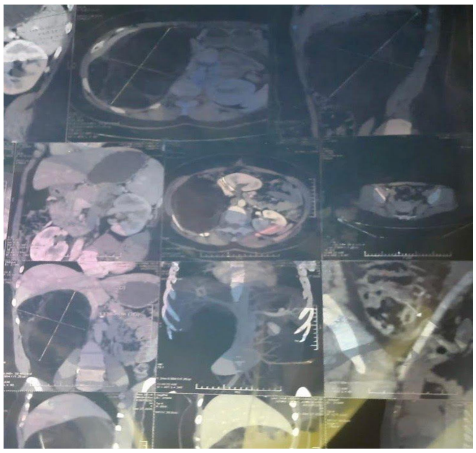

Figure 2

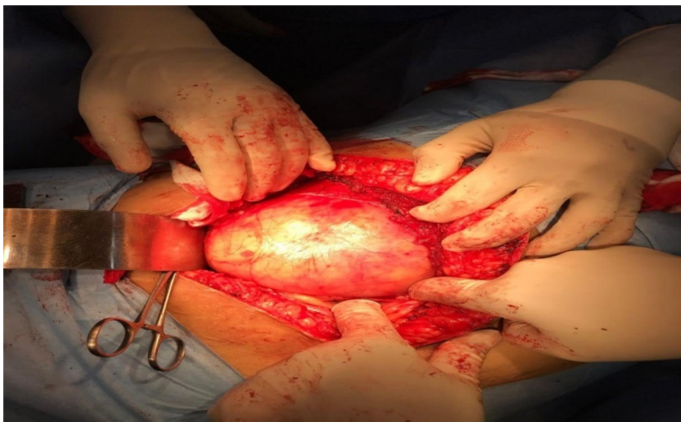

Figure 3: Intraoperative picture of the mass

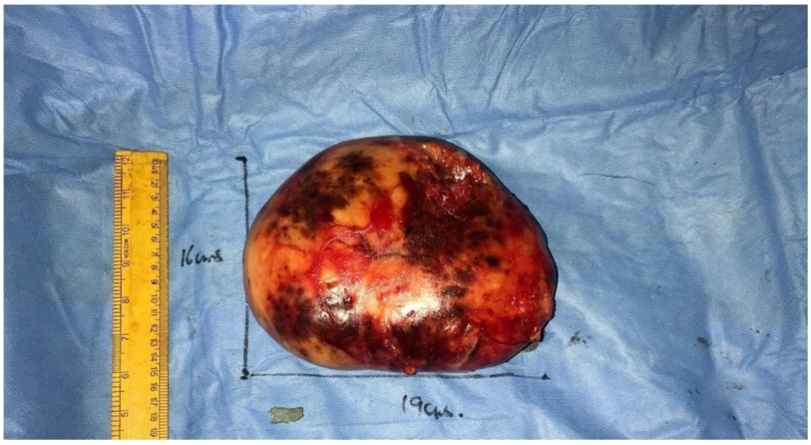

Figure 4: Specimen sent for histopathological study

Postoperative period was uneventful. Histopathological report showed a mixture of mature adipocytes and areas of hemorrhage containing islands of hematopoietic cells, showing trilineage hematopoiesis with few megakaryocytes. A

periphery shows fibrosis with normal adrenal tissue. No evidence of malignancy. Suggestive of myelolipoma of adrenal gland.

DISCUSSION

Myelolipomas are rare, benign lesions arising from adrenal gland. They are the result of an adrenal stress response. Incidence in male and female are equal. They are incidental finding in imaging in 8 percent of the cases **[1, 2]**. Adrenal gland is seen in patient with congenital adrenal hyperplasia, massive proliferation of adrenocortical cells are seen **[3]** and it can be seen in association with Cushing syndrome. Spontaneous rupture occurs when it exceeds 10 cms.

They are metabolically non- functional tumours, but sometimes they are associated with metabolic overactivity like hypercortisolemia - pheochromocytoma, adrenal adenoma. Diagnostic test are CT abdomen shows well circumscribed adrenal lesion with varying density ofmature adipocytes integrated with high density myeloid components which enhance on contrast.Areas of calcification and hemorrhage seen.MRI shows presence of macroscopic fat in adrenal mass is virtually diagnostic.Differential diagnosis are Upper pole renal angiomyolipoma, Liposarcoma - irregular border, infiltrate surrounding tissues. Percutaneous biopsy helps to differentiate. Adrenal metabolic workup to be done if there suspicion of concomitant metabolically active tumour.

Treatment

Asymptomatic patients-conservative (4) and review with regular CT reports. Symptomatic or extremely large myelolipoma - surgery- excision **[4, 5]** can be done, with laparoscopic adrenalectomy **[6, 7]**. In our case, it was diagnosed as retroperitoneal mass, but in intraop it was found to be arising from adrenal gland.

CONCLUSION

Adrenal Myelolipomas are very raretumours, only few requiring surgical management based on their symptoms and they follow a benign course. They are composed of hematopoietic and mature adipose tissue. Myelolipoma can be differentiated from other conditions by histopathological examination. Reccurence after excision is rare, however regular follow-up is necessary.

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