Case Report

ASYMPTOMATIC ADRENAL MYELOLIPOMA: A CASE REPORT

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ABSTRACT:
Adrenal myelolipoma is a rare benign tumor of adrenal gland. We report a case of 54 years old female, who presented in the urology department of Sheikh Zayed Hospital Lahore, having incidental finding of right supra renal mass on Ultrasound KUB (Kidney, Ureter and Bladder). The abdominal CT showed a 9.0x6.0cm well marginated right adrenal mass, composed predominately of fat. The mass was removed surgically and the specimen was sent to the Histopathology department. On the basis of morphological features, it was diagnosed as myelolipoma of right adrenal gland.

Key Words: *Myelolipoma, Adrenal Gland, Adrenalectomy*

INTRODUCTION:

The myelolipoma is a rare and benign neoplasm that is composed of hematopoietic tissue and mature adipocytes. It was first described by Gierke in 1905 and was further elaborated by Oberling in 1929, who used the term "myelolipoma" for this benign tumor[1]. In the past, it was very difficult to find adrenal lesions. Only it was made possible by autopsy or by clinical sympyoms, related either to altered hormone production or to the massive growth of the gland. Now a days, these tumors are diagnosed incidentally because of the wide use of diagnostic imaging methods, such as ultrasonography (USG), computed tomography scan (CT Scan) and magnetic resonance imaging (MRI)[2]. Although the true incidence of these benign tumors is unknown. However, it is thought to be between 0.08% and 0.4%. There is no gender difference as men and women seem to be equally affected by these tumors. Adrenal myelolipoma is most commonly found in old age, between the fifth and seventh decades of life[3]. They are usually unilateral lesion, but bilateral myelolipoma have also been described in literature[4].

CASE REPORT:

A 54 years old female patient, that was a known case of HCV, presented on January 2015 Sheikh Zayed Hospital Lahore, with hematemesis in gastroenterology department for which upper GI endoscopy and band ligation was done. She was also known case of carries spine, for which she took ATT for 8 months, 4 years back.

The abdominal ultrasound scan demonstrated a 7.1x8.0 cm hyperechoic involving upper part of right kidney. The patient shifted to urology department for further management. There was no history of weight loss, loss of appetite fever, generalized weakness or hypertension. On general physical examination, her vital signs were normal. Abdominal examination revealed mild tenderness in right flank. Both kidneys were not palpable. On investigation CBC, renal function test, liver function test and bleeding profiles were within normal limits.

Serum cortisol level was 9.92 ug/dl, AFP 4.22 IU/ml and 24 hours urine VMA was 1.43 mg/24hr.

The abdominal CT showed a 9.0x6.0cm well marginated right adrenal mass, composed predominately of fat causing anterolateral displacement of Right kidney and is abutting IVC and Right crus of diaphragm.

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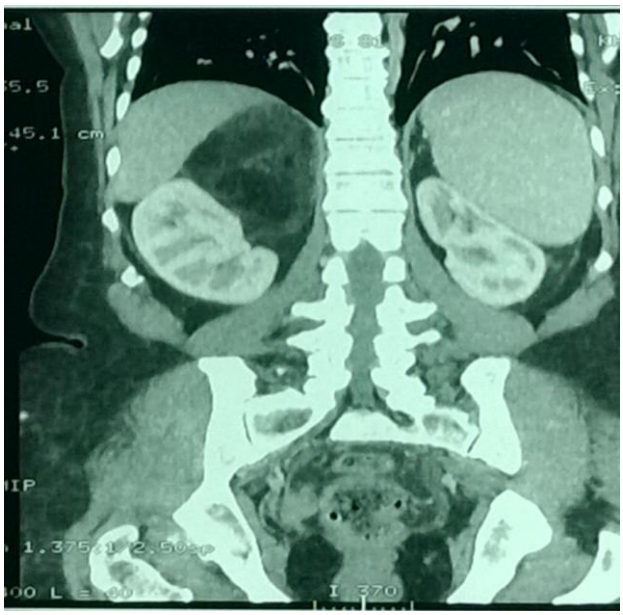

Figure 1. CT-scan KUB showing soft tissue mass overlying the right kidney.

Peroperatively adrenal mass measuring 10x8 cm was found occupying the whole of right adrenal gland and completely separable from the upper pole of right kidney Right adrenelectomy was performed.
Gross weight of specimen was 550 grams. Histopathology report reveals section of adipose tissue containing mixed population of erythroid ,myeloid cells and adequate number of megakaryocytes, at periphery benign tissue identified with no evidence of malignancy .

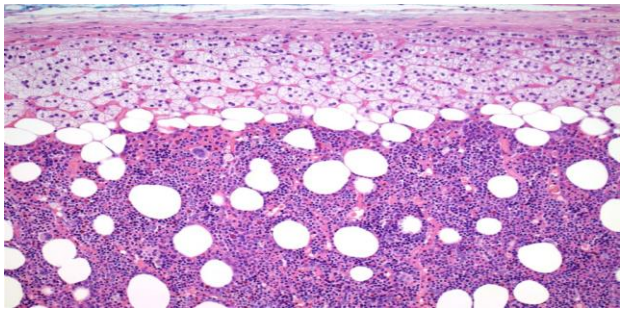

Figure 2. Showing the histopathology slide of adrenal lipoma with adrenal tissue,

DISCUSSION:

The first ever case of a giant myelolipoma was reported in 1979 by Boudreaux and his coworkers. The tumor, resected en bloc with the kidney and retroperitoneal soft tissues and weight of specimen was about 5.9 kg. However, actual tumor weight was not reported. Akamatsu and colleagues from Japan reported the largest resected adrenal myelolipoma and weight was 6 kg[5]. While in Pakistan, Safdar Shah and clleague reported a case of adrenal lipoma and weight of adrenal lipoma was 200 grams[6]. A three case series was reported by Narjis Muzaffar et al showing tumor size 10x8x6 cm, 9x12x9cm and 5x7.5cm[7] Most of the time, adrenal myelolipomas are asymptomatic. Symptoms of adrenal myelolipomas may be abdominal pain, haematuria and constipation. However very large tumors may cause traumatic rupture of the adrenal gland that may lead to hemoperitoneum or spontaneous hemorrhage. For diagnostic purpose, fine needle aspiration cytology is usually recommended. The aspirate is cellular and shows mature adipose tissue fragment with many trilineage haematopoietic cells and with a bloody background. This appearance is similar to red bone marrow specimens[8].
Management of myelolipoma may vary from case to case. Those patients, having lesions <10 cm on imaging procedures, should be observed close follow up for 1-2 years. If patient remains asymptomatic and there is no progression of tumour, then the follow up can be done at increasing time intervals. However, in this case, the follow-up will be lifelong because interval growth has been reported in literature. If patient becomes symptomatic or there is progression of tumour, then surgery is recommended.
It is recommended that, large asymptomatic tumours >10 cm found incidentally, surgical excision should be considered due to risk of life threatening shock secondary to retroperitoneal haemorrhage. There are different studies showing that, after resection of the primary lesion, patients may develop contra lateral myelolipoma. Therefore, follow up after adrenalectomy for unilateral myelolipoma is recommended[9].

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Submitted for publication: 02-12-2015

Accepted for publication: 12-06-2016

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3	Prof Muhammad Muzammil Tahir	Article writing supervision