

Adrenal Myelolipoma an Unusual Finding in a Patient of Major Depressive Disorder with Somatic Symptoms – A Case Report

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Abstract: Major depressive disorder & somatic pain are commonly associated and frequently presented in Psychiatry outpatient department. Proper treatment of depression leads to simultaneous relief of somatic pain. Here we report a case presented with features of moderate depressive episode with vague somatic pain at multiple sites. Antidepressant and psychotherapy helped the patient to recover from depressive symptoms and most of the somatic pain, but the pain in right flank persisted. On imaging a rare, large, non secreting adrenal tumor i.e. adrenal Myelolipoma in the right side was found. This rare tumor was the underlying etiology of the right flank pain which was mistakenly thought to be somatic pain initially.

Keywords: Major Depressive episode, Somatic symptoms, Adrenal Myelolipoma

INTRODUCTION

The term *depression* was derived from the Latin verb *deprimere*, "to press down"[1]. Depression is a huge global burden now a days. WHO projects major depressive disorder (MDD) or unipolar depression to be the second leading causes of disability and global burden by the year 2020.

WHO ICD10 describes features of depression as Low mood, loss of interests in pleasurable activity that are normally pleasurable, decrease energy are core symptoms as well as loss of self confidence, sleep disturbances, negative thinking, forgetfulness, recurrent suicidal thoughts, diminished ability to think ,change in appetite (increase or decrease) etc. Symptoms should be sustained minimum of 2 weeks or more .

Depressive disorder often present with both painful and non-painful somatic symptoms. A patient presenting with somatic symptom is a diagnostic challenge and may be seen in cases of depression, anxiety, somatoform disorders, and medical conditions which frequently coexists. Severe depression has a higher risk of early relapse, suicidal tendency or attempt, or severe degree of somatic symptoms.

Adrenal Myelolipoma is a rare tumor and was initially described by Giercke in 1905, and 24 years later, Oberling coined the term 'Myelolipoma' [2]. They are composed of mature adipocytes and normal hematopoietic tissue [2-4]. The incidence of adrenal Myelolipoma is reported as being 0.08 to 0.4% at

autopsy [5, 6]. In the past, this tumor was primarily detected on autopsies [7] Lately, due to widespread use of radiological studies such as ultrasonography, CT, and magnetic resonance imaging (MRI), incidental discovery of indolent adrenal Myelolipoma has become more common [8].

CASE REPORT

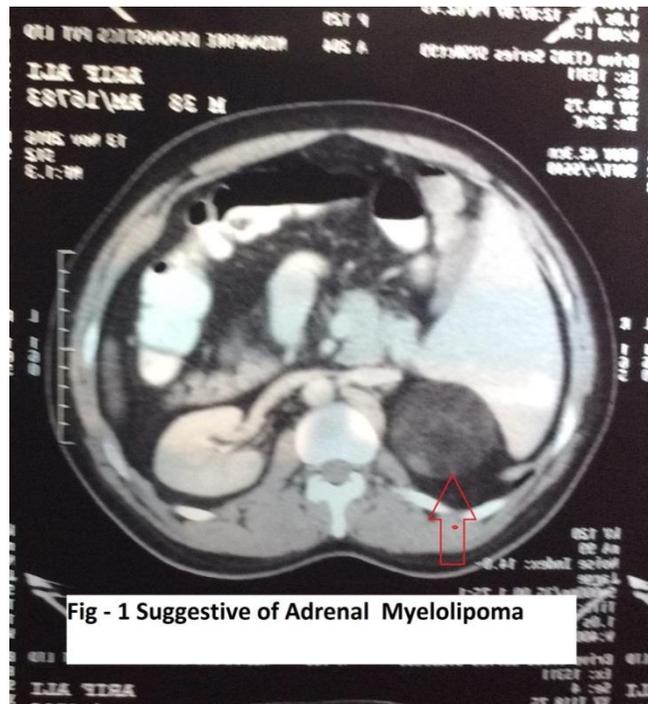
A 38yr old, married, Muslim, male, shopkeeper by profession belong to lower socioeconomic status from rural area of North 24 parganas, West Bengal presented to our Psychiatry Out Patient Department with the chief complaints of weakness, easy fatigability, lack of interest in pleasurable activity, forgetfulness, early morning awakening, suicidal thoughts. He also had ideas of hopelessness, helplessness associated with burning sensation over the scalp, palm & sole for last 5-6 months. He felt vague pain over the both knee joints, thigh, back, bilateral flank pain specially right flank for the same duration. For last 2-3 months he had bilateral shoulder joints pain, occasional calf muscle pain. The pains over multiple sites he felt were non radiating with no such aggravating or relieving factors. He was passing through significant psychosocial stressors for last 1 year, had a great monetary loss in his business as well as marital discord.

He was non-diabetic, normotensive, euthyroid. On Physical examination all the system were within normal limit except on deep palpation of the right flank

of abdomen there was a feeling of some underlying swelling.

In the Psychiatry outpatient department he was treated with Tab Amitriptyline (started with 12.5 mg, gradually increased up to 50mg /day), Tab Clonazepam 0.5 mg at night on s.o.s basis for first 3 weeks. He was also prescribed Tab Pantoprazole+ Domperidone combination, Diclofenac 100mg B.D for 5 days. He was send to our hospital psychologist for psychotherapy.

After 3 weeks of therapy the depressive symptoms were improved, burning sensation disappeared. Pain symptoms decreased mostly except a vague pain of the right flank. Surgical consultation was done. Imaging study was advised. In USG – “heterogeneously hyper echoic SOL in the right suprenal area (5.8 x 6 cm)- suspected Myelolipoma.” CECT abdomen done – Diagnosed as right adrenal Myelolipoma (SOL size 5.9x5.9x5.7 cm) (Fig 1).



His routine haematological investigations mostly normal. Some hormonal laboratory investigations were done before surgery for preanaesthetic routine check up as well as to rule out other causes (Table 1). Blood cortisol higher normal level and we don't know the baseline cortisol level of the patient. This Cortisol assessment was done almost

4-5 months after the development of depressive symptoms.

Patients underwent right adrenalectomy with sub costal incision (Fig- 2, Fig-3), Histopathological examinations confirms adrenal Myelolipoma.





Fig 3 Adrenal Myelolipoma vicera after operation.

INVESTIGATIONS

Table 1: Haematological investigations

Test	Patient's value	Reference value
Hb-	13.9gm/dl	13- 17 gm/dl
WBC	- 10.6x10 ³ /Micro	4-11 x 10 ³ /micro L
RBC	5.11X10 ⁶ /MicroL	4.5 – 5.5 X 10 ⁶ / micro L
Platelet –	Platelet – 329x10 ³ / Micro L	150- 450 X 10 ³ / Micro L
Differential count –	N72,L20,M04,E04,B0	
ESR	49mm/hr	0 - 20
PCV-	41.3%,	
MCV-	80.8fl	
MCH-	27.2 pg	
MCHC-	33.7gm/dl	
RDW(Red Cell Distribution width)	14.9	11.6 – 14%
PDW(Platelet Distribution width)	17.3,	8.3 – 27 fl
MPV(Mean Platelet volume	12.6	7.5- 11.5 fl
FBS-	101,	70-110
PPBS-	118.	75-140
Blood cortisol,morning-	16.71Microgrm/dL	(6.2 – 19.4)
Serum creatinine	0.87	0.6-1.1
Blood urea nitrogen (BUN)	9.08	7.9- 20
BUN/Serum Cr Ratio	10.44	9:1 - 23:1

Liver Function Test-Bilirubin –Total 0.4mg/dl,Direct- 0.1,Indirect- 0.3,SGPT- 45,SGOT- 32,Alkaline phosphatase- 128,Total protein- 8.5,Alb-4.6,Glob-3.9,AG Ratio- 1.18.

Chest X-ray PA view – Normal study. Serology – HbsAg ,HCV,HIV - I, HIV - II :- Non Reactive.

Table 2: Urine Catecholamine

Catecholamine	Spot sample	24 hr urine sample	Normal Referencevalue
Adrenaline (Epinephrine)	2.46	13.53	<20
Nor adrenalalin (Nor-epinephrine)	14.4	79.2	<90

DISCUSSION

Adrenal Myelolipoma is a rare benign, asymptomatic, non secreting, unilateral, usually small tumor. It is mostly found as an incidentaloma during autopsy. The detection frequency increased with widespread use of cross-sectional imaging such ultrasonography and computed tomography (CT). The most consistent complaint is abdominal pain caused by haemorrhage in the tumor when the lesion became larger than 5 cm. The tumor is usually unilateral and rarely exceeds 4 cm. However, very large and bilateral myelolipoma have been reported [9].

Adrenal Myelolipoma is asymptomatic but often may present as acute haemorrhagic rupture surgical emergency with fatal outcome. More awareness regarding the benign tumor with fatal complications and its treatment protocol toward medical professionals as well as patient is required.

Antidepressant therapy and proper psychoeducation, couple therapy helped the patient to recover from depression and painful somatic symptoms. Surgical removal of the large adrenal myelolipoma saved the patient from acute surgical emergency and also the somatic symptoms in right flank reduced significantly. Liaison between psychiatry and general surgery helps the patient to recover as a whole.

CONCLUSIONS

Patient presenting with somatic symptoms may have some underlying organic etiology. A Clinician should always keep in mind the organic causes of any symptoms or disorders. As in this particular case after meticulous examinations and investigations we diagnose a rare adrenal tumor in a patient who was also suffering from Major Depressive Disorder with somatic symptoms.

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