Case Report

CUSHING’S SYNDROME PRESENTING AS TREATMENT RESISTANT BIPOLAR DISORDER

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ABSTRACT
Cushing's syndrome results from chronic hypercortisolemia of any cause. Most patients present with classical clinical features like centripetal obesity, proximal myopathy, bone fractures, glucose intolerance, hypertension, and mood disturbances such as depression and psychosis. While the classical features are relatively easy to recognize in clinical practice, more subtle manifestations of Cushing’s syndrome are difficult to diagnose, particularly in the setting of concomitant psychiatric conditions.

Keywords: Cushing’s Syndrome, Bipolar Disorder, Treatment Resistance

CASES
A 20 year old male patient presented with complaints of increased speech, increased goal directed activity, decreased sleep, irritability and behavioral problems against family members. Patient had an episode of low mood, motor retardation, tiredness, auditory hallucinations three years ago and was treated with Fluoxetine. He had a relapse of similar symptoms after 1 year and was treated with divalproex sodium and olanzapine but continued to have dysphoric mood and weight gain. He was started on Lithium. He had good symptomatic improvement on lithium and completed his higher secondary. Patient developed severe acne form eruptions while on Lithium. Hence lithium was stopped and was started on Carbamazepine. Maniac symptoms improved but continued to have depression.

After 5 months he presented with similar clinical picture. On examination he was found to have central obesity, hyperglycemia, resistant hypertension, severe acne and abdominal striae, hence cushing’s syndrome was suspected.

Cortisol levels were not suppressed following overnight dexamethasone and low dose dexamethasone suppression test. Serum ACTH levels were elevated pointing towards ACTH dependent cushing’s syndrome. MRI pituitary scan did not show any pituitary lesion suggesting ectopic ACTH secretion. CT chest and abdomen did not reveal the ectopic source for ACTH production. Hence patient was commenced on oral ketoconazole to reduce the cortisol levels and is being regularly followed up with serial imaging to find the ectopic source. Following ketoconazole therapy cortisol levels reduced and psychiatric manifestations improved and psychiatric medications were slowly tapered.

DISCUSSION
Patients with Cushing's syndrome patients rarely may present with primary psychiatric manifestations (Krystal et al., 1990). Patients with long-term cured Cushing’s syndrome show an increased prevalence of psychopathology and maladaptive personality traits. These observations suggest irreversible effects of previous glucocorticoid excess on the central nervous system rather than an effect of pituitary tumors and/or their treatment in general (Tiemensma et al., 2010). It is reported that there are patients with recurrent mania without depressive episodes who were subsequently diagnosed as cushing’s disease. Diagnosis of cushing’s syndrome can be easily missed in patients who present with primary psychiatric manifestations (Reed et al., 1983). Clinical decision making for patients with suspect hypercortisolism involves a complex diagnostic assessment. Occasionally patients with severe depression without cushing’s syndrome may have cushingoid features and screening tests for cushing’s syndrome may be falsely positive. Such patients are termed as Pseudo cushing’s disease. Combined Dexamethasone CRH test would help to differentiate Pseudo cushing’s from cushing’s syndrome. Chronically elevated levels of...
cortisol have been associated with changes in cognitive functioning and brain morphology. Treatment of underlying cushings have been associated with improved psychiatric outcomes (Hook et al., 2007). Very rarely patients with cushing’s syndrome can present with primary psychiatric symptoms. This case report highlights the importance of meticulous clinical examination in patients presenting with psychiatric illness. Diagnosis and treatment of underlying cushing’s syndrome would result in improvement or complete resolution of psychiatric manifestations. Hence high index of clinical suspicion is required to diagnose underlying endocrinological conditions in patients presenting with psychiatric symptoms.

REFERENCES