A 69 YEAR OLD BLIND FEMALE WITH VISUAL HALLUCINATIONS AS THE PRESENTING COMPLAINT OF CHRONIC SECONDARY ADRENAL INSUFFICIENCY

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Introduction:

Chronic secondary adrenal insufficiency typically presents with vague symptoms that can make the diagnosis challenging; moreover, the psychiatric manifestations of the condition, though well described in the literature, are often overlooked in the clinical setting.

Clinical Case:

A 69 year old blind female developed progressive visual hallucinations three months prior to presentation. Initially she noted insects on her body, but the hallucinations became increasingly complex, with animals walking in the apartment and later, three men entering her apartment by a window. One day, one of the men attempted to set her house on fire. Due to her distress, her daughter brought her to the emergency department. At the onset of symptoms, an EEG at another facility showed cerebral dysfunction. She was started on quetiapine, but as her hallucinations progressed, she was admitted to that hospital where her quetiapine was changed to haloperidol. At age 38, she underwent a partial resection of a suprasellar meningioma, which was complicated by central hypothyroidism, central diabetes insipidus and permanent optic nerve damage causing complete blindness.

On examination at our facility, her pulse was 68 beats/min, blood pressure 167/80 mmHg, weight 59 kg. She appeared well nourished and comfortable. There were right fronto-temporal scars. She was alert and fully oriented, GCS 15/15, normal muscular tone, full power and intact sensation throughout. She had no light perception to both eyes, horizontal nystagmus and optic nerve pallor bilaterally. Laboratory results showed normal electrolytes, undetectable TSH <0.07 mIU/L, normal free T4 (1.44 ng/dL) and T3 (168 ng/dL) levels. Her fasting glucose levels varied from 60-72 mg/dL. Morning cortisol level was low at 1.6 µg/dl with a minimal rise to 2.14 µg/dl one hour after administration of cosyntropin 250 mcg IM, and plasma ACTH was inappropriately normal at 7.15 pg/mL. CT head showed a remote right frontal craniotomy, right frontotemporal craniectomy with post-aneurysmal clipping, a partially calcified multi-lobulated mass in the suprasellar cistern measuring 3.1 x 1.7 x 3.5cm, but no acute hemorrhage or infarct. Once secondary adrenal insufficiency was identified, she was started on hydrocortisone 10mg in the morning and 5mg in the evening.

Follow Up:

At outpatient follow-up visits, the patient and her daughter reported the hallucinations to be resolving and of a much less distressing and intrusive tone.

Conclusions:

Owing to the often non-specific presenting symptoms, high index of suspicion for chronic adrenal insufficiency is paramount, especially in patients with prior pituitary surgery, no matter how remote. In this patient, visual hallucinations seemed to be the only symptom of secondary adrenal insufficiency. She had been prescribed multiple ineffective anti-psychotic regimens before ultimately the correct diagnosis was made.