Suspected Huntington's Disease complicated by bilateral subdural hematomas presenting as first-episode psychosis

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Introduction

A significant number of clinical and research evidence has found gaps in the medical care of psychiatric patients. Medical needs of psychiatric patients are often significantly underserved or underdiagnosed. In a study of 100 psychiatric outpatients, half were found to have a concurrent medical illness. Two-thirds of this population were not sufficiently diagnosed and half were not diagnosed at all prior to their referral to psychiatry. In many of these instances it was found that the unsuspected physical illness was the exclusive cause of the patient's emotional condition.

Case

37-year-old Female with no formal pmhx and a pphx of MDD and ADHD admitted to psychiatry for first episode psychosis.

On her presentation to the hospital the patient was noted to be displaying choreiform movements of all extremities and was manic with a tangential thought process and significant paranoid delusions. She was a poor historian and guarded about her family medical history as she denied any hx of neurological or movement disorders in herself or her family.

Most information gathered was obtained via collateral from her mother who confirmed a family history of Huntington's disease in patient's father and brother. Of note, the patient had been refusing genetic testing for HD for herself for many years.

The patient had been living alone with her brother and sister-in-law living next door. She had graduated medical school approximately 6 years earlier but never completed the required tests needed to obtain her provisional medical license.

Several months prior to the patient's admission she started to act unusually. Her house was noted to be increasingly unkempt and messy, resulting in her mother hiring a professional cleaning crew to remove the large amount of accumulated clutter. The patient was not taking care of her personal hygiene and had left the stove on during multiple occasions. Eventually, she had been found sleeping outside the house by police and was subsequently brought to the hospital on an involuntary psychiatric commitment for 'inability to care for self'.

Imaging

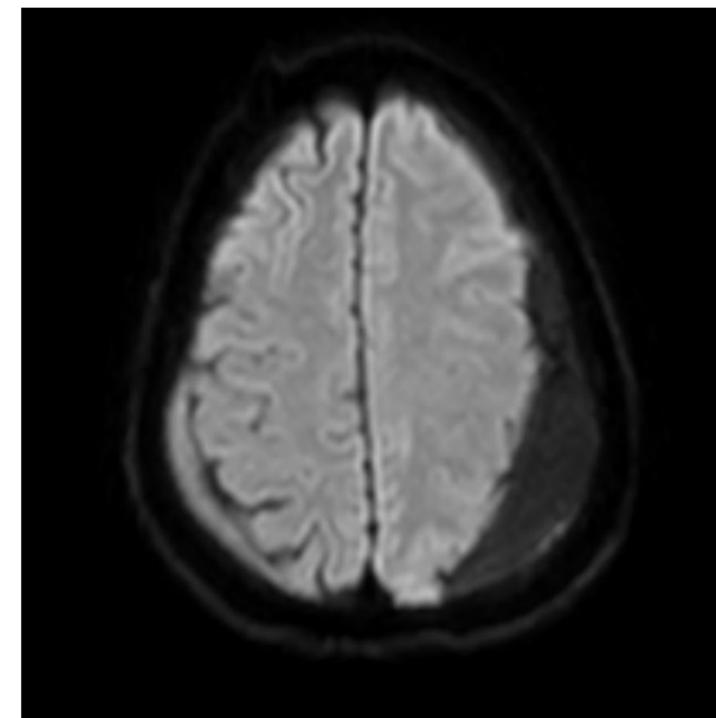

Figure 1: Admission day 2 MRI scan with bilateral hematomas

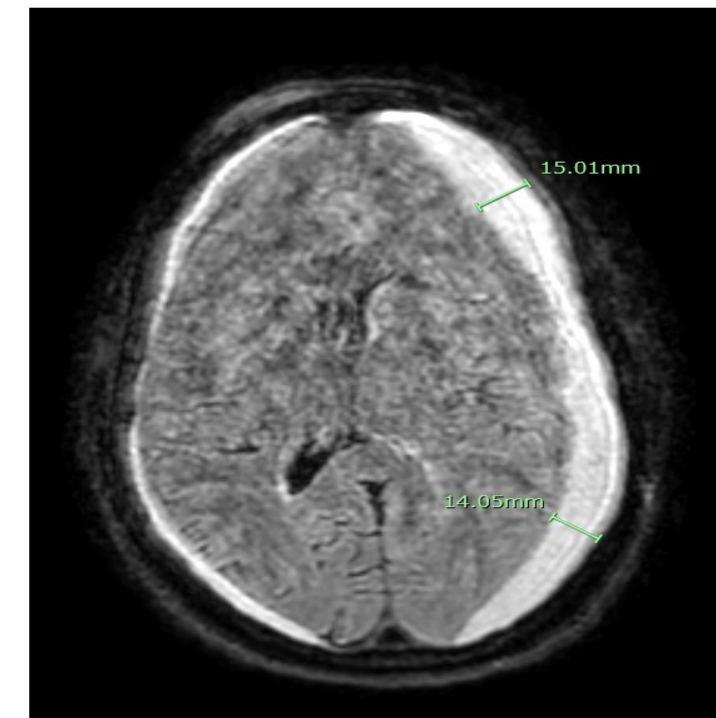

Figure 2: Admission day 2 CT scan with bilateral hematomas

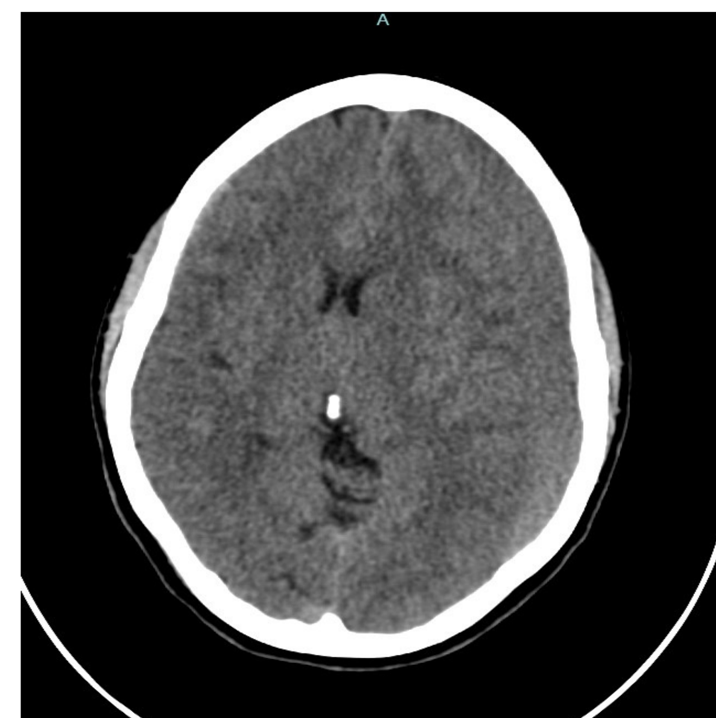

Figure 3: Admission day 2 CT scan showing midline shift

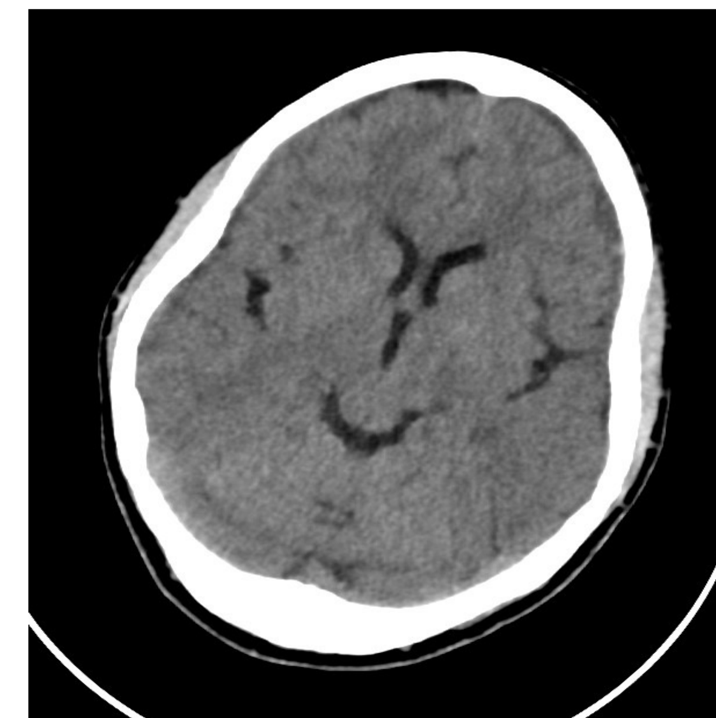

Figure 4: Admission day 10 CT scan with resolution of hematomas after surgical intervention

Subdural Hematomas and Huntington's Disease

Neurological diseases represent a population at increased risk of developing chronic subdural hematomas without an inciting event.

In particular, patients with Huntington's disease are at an increased risk of developing acute and chronic subdural hematomas both from underlying neurologic pathology and an increased risk of injury due to hyperkinesia.

While chorea is a hallmark of Huntington's disease, choreiform movements may also be a manifestation of chronic subdural hematomas causing midline shift.

Limited case reports also describe psychosis or cognitive impairments as manifestations of chronic subdural hematomas.

Treatment

The patient was initially transferred to the CRC where her petition for an involuntary psychiatric commitment was upheld and she was admitted to inpatient psychiatry. As part of her workup for first-episode psychosis the patient obtained an MRI which showed bilateral subdural hematomas. She was then transferred to the intensive care unit under the management of neurosurgery where she received two left sided burr holes and a middle meningeal artery embolization.

After surgical intervention, the patient had resolution of all her psychiatric symptoms without the use of any antipsychotic medications and was discharged home.

Discussion

Patients with Huntington's Disease are at increased risk of developing subdural hematomas which can present with psychosis.

While psychosis could be a manifestation of Huntington's disease, presentations of psychosis are more typically seen in advanced disease of patients who were clinically diagnosed with Huntington's at a younger age, have a lower number of CAG repeats or have a history of depression.

Symptoms of chorea, cognitive impairments, or psychosis may represent sequela of chronic subdural hematomas.

Patients with a history of neurological disorders and atypical or first episode presentations of psychosis should be considered for head imaging as part of initial work up.

References

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