

Supraclinoid Aneurysm Presenting as Late Onset Schizophrenia with Visual Hallucination - Unsolved Mystery

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ABSTRACT

Psychotic disorders are fairly not uncommon in late life. These disorders often have varied clinical presentations, various etiologies and are associated with significant morbidity and mortality among the older adult population. The etiologies for psychosis in late life vary from psychosis in younger individuals, with a greater incidence of secondary causes for psychosis among older adults. Psychosis in late life is associated with higher rates of morbidity and mortality when compared with psychosis in younger adults. The treatment of psychosis is further complicated by the higher incidence of adverse effects when antipsychotic medications are prescribed to older adults than to younger adults. Although differentiating primary from secondary causes of psychosis can be challenging, it can be accomplished by obtaining a thorough history, physical examination, by using neuropsychological assessments, and by the appropriate use of laboratory data. This paper reports a unique case of late onset schizophrenia and presence of unruptured saccular aneurysm and small vessel ischemic changes on neuroimaging.

Key words: psychosis, etiology, antipsychotic, mortality, secondary, neuroimaging.

INTRODUCTION

Schizophrenia has prevalence among older adults of nearly 0.1-0.5%, which contrasts with the overall lifetime prevalence of schizophrenia at about 1%. A aneurysm is a weak, bulging area in an artery. Risk factors for developing intracranial aneurysms include smoking,

alcohol misuse, hypertension, head trauma, polycystic kidney disease and family history of aneurysm. A common location of cerebral aneurysms is on the arteries at the base of the brain, known as the Circle of Willis. Though some studies have looked at CT or MRI findings in patients with first episode of psychosis (FEP) there have been no systematic studies. Contrary to ruptured intracerebral aneurysm, according to our knowledge, not many papers have been published dealing with the relation of psychic/neuropsychological symptoms and unruptured intracerebral aneurysm which can have important clinical implication.

CASE REPORT

An 80 yr married male, educated up to 8th std, right handed, presented to psychiatry OPD with history of decreased sleep since 4months, voicing suspiciousness and fearfulness since 3months, not staying at his home and staying in a lodge since past 4 days. On further interviewing, patient reported that he could hear voices of many men in his neighbourhood discussing about him and planning to harm him which other people at his house where unable to hear, also that neighbours have done black magic on him as they want to conquer his property, also reported that he could see men putting chemical on his head and body, which he could see in his open eyes when he was conscious, it was white and black in colour and had texture of ravagrain and he could feel it falling on his head and on his body

like rain water and it would be very sticky. During interview patient was noticed to rub his body multiple times as he felt there was chemical on his body. Due to this reason patient was staying in the lodge from past 4 days as he thought they would not disturb him there. But when he realised it was continuing even at the lodge he felt distressed and was found to be irritable hence was brought to psychiatry OPD. Patient was diagnosed to have diabetes 8yrs ago and was on regular medication. Patient had no past history or family history of psychiatric illness and was premorbidly well adjusted. On general physical Examination, patient was moderately built with BMI (Body mass index) of 21.5kg/m² and his vitals were stable. There was redness over extremities due to constant rubbing of skin. Systemic Examination was found to be within normal limits. Mental Status Examination revealed him to be conscious and alert, adequately groomed and with normal talk and psychomotor activity and anxious affect. Delusion of persecution, 3rd person auditory hallucination, visual hallucination and somatic tactile hallucination were present. Cognitive functions and memory was intact with MMSE-27/30. Lobe function test was within normal limits.

Routine investigations and serology was normal. MRI brain revealed saccular aneurysm arising from supraclinoid part of right internal carotid artery, chronic lacunar infarcts in bilateral centrum semiovale and small vessel ischaemic changes. Diagnosis of Organic schizophrenia like disorder was made. Patient was started on low dose of Tab Risperidone as antipsychotic agent in view of target symptoms. Doses of medication was adjusted according to symptoms keeping in mind age of the patient and side effects were monitored. In view of sleep disturbance Tab Lorazepam was started. Neurology, ophthalmology and neurosurgery reference was given. Neurology and ophthalmology suggested nil intervention as there was no neurological deficit. Neurosurgery advised surgery but

patient and party refused due to financial constraint and wanted to consider on a later date. Patient's sleep improved and severity of symptoms reduced, Patient started staying at home, although auditory and visual hallucination was still persisting, frequency and intensity reduced and patient is on regular follow up.

DISCUSSION

Was the aneurysm the cause of his psychosis? Based on the presentation, he did not have any neurological deficits on examination. The aneurysm was small and exerted no pressure on important areas of the brain. But the presence of ischaemic changes would have accounted for psychosis. His symptom profile that could probably suggest organic cause was the acute onset, worsening of symptoms and visual hallucination with nil significant past and family history. Still clinicians need to remain vigilant and undertake physical and neurological examination for patients presenting with first episode of psychosis given the observation that most patients who have significant finding on CT/MRI who need medical attention would have associated neurological findings (Khandanpour 2012, Albon 2008)². It is estimated that 5- 15% of patient having psychosis have organic causes and the underlying causes vary widely in nature (Albon 2008). Apart from presenting with neurological deficits, organic psychosis may present with paranoid thoughts and thought disorder (Albon 2008).³

Case reports on intact intracranial aneurysm being the underlying cause of FEP are rare to find. We found none during our search. However, Woo & Sevilla reported a case of 65 years Caucasian man with no past psychiatric history, who presented with depression⁴, mania and paranoia (Woo 2007). They symptoms were attributed to intact basilar artery aneurysm that was pressing against the pons. There have been few case reports of patients presenting with psychosis following rupture of cerebral aneurysm. Hall and Young

reported a case of ruptured frontal cerebral aneurysm that presented with psychosis (Hall 1992)⁵. A case of Capgras syndrome following rupture of right middle cerebral artery aneurysm has also been reported (Bouckoms 1986).⁶

CONCLUSION

The reported case confirmed the importance of detailed psychiatric interview and psychological testing and neuroimaging in persons with psychiatric disorders, as well as the importance of multidisciplinary approach in the diagnosis and therapy. The case indicates that organic brain lesions, including intracranial aneurysms, should be suspected in elderly patients presenting with their first episode of psychiatry disorder.

Declaration of Patient Consent

The authors certify that they have obtained all required patient consent forms. The patients understand that their names and initials will not be published and efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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