Case Report

TOURETTE’S SYNDROME AND SCHIZOPHRENIA: CASE REPORT

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ABSTRACT
Tourette’s syndrome (TS) and schizophrenia are two disorders in psychiatry that share common neurobiological and pathophysiological characteristics. They also have similar medication choices when it comes to intervention. The present case report shows Tourette’s disorder and schizophrenia in the same patient.

Keywords: Tourette’s Disorder, Schizophrenia

INTRODUCTION
Here we report a patient who first developed Tourette's syndrome (TS) and later schizophrenia with the typical positive and negative symptoms. This observation as well as other reported cases raises the question of whether both disorders may share a common background. Both these disorders have similar symptomatology (echolalia, motor symptoms, cognitive deficits, and obsessive-compulsive symptoms), similar pathophysiological signs, genetics and signs of an underlying inflammatory process in many cases, as well as common therapeutic strategies (Muller et al., 2002). A genetically determined susceptibility could possibly underlie both disorders, e.g., an auto-immunologically triggered inflammation or a common pathophysiology of certain symptoms (Comings and Comings, 1993). Both these disorders show disturbances of the multiple functional pathways, which seem to be involved in the pathophysiology of both (Bradshaw, 2001). The clinical overlap of TS and schizophrenia may be due to a final common pathophysiological pathway in the dopamine and serotonin system (Sverd et al., 1993).

CASES
A 17 year old right handed male patient who was Guajarati speaking and Hindu by religion being educated upto the 8th standard and resident of bhiwandi presented to our outpatient department with his mother with chief complaints of not interacting with family members, repeated grunting sounds being produced by the patient, sideways movement of the head intermittently, fearfulness, suspiciousness and decline in understanding and memory. The patient was apparently alright a year on, was his behaviour was uncalled for and not in keeping with his premorbid personality. He would speak only when spoken to and would always answer in an irritable tone. He showed restlessness as he would keep pacing throughout the day. He would not sleep all night and was muttering to himself throughout the day and night. He would claim that West Indian and American police forces were after his family and that they would kill patient his mother and siblings. He would keep talking about this throughout the day. A month after the onset of the illness he consumed 10-15ml of phenyl in response to his stress and was admitted and treated at a local hospital. He would get angry on trivial reasons, was easily provoked and this behaviour was uncalled for and not in keeping with his premorbid personality. The patient started having motor movements comprising of right hand and left leg at a time. He would move it sideways throughout the day. He would make grunting sounds throughout the day at a frequency of 1-2 times per minute.
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The patient was shown to a local psychiatrist and started on Haloperidol 10mg per day in divided doses, Trihexyphenydyl 14mg per day and Tetrabenazine at 50mg per day. The patient did not show improvement in the motor symptoms but the psychotic symptoms were brought under control with the medication. The patient started a new behaviour in the form of playing with his penis throughout the day and making masturbatory movements. He does so in front of all family members. He has been stopped by them but to no avail. He insists on doing it in the balcony and outside the window and thus creating nuisance for the neighbours. After touching his genitals patient used to smell his hand repeatedly. He also continued to make grunting sounds and sideways movement of the head which were jerky and intermittent.

On our assessment we diagnosed the patient with Tourette’s syndrome with schizophrenia and he was maintained on Haloperidol 15mg per day, Trihexyphenidyl 16mg per day and Tetrabenazine 50mg per day. He was also started on Risperidone 4mg per day and asked to follow up every 15 days. On last follow up he was better and showed improvement in most areas though grunting and movements occasionally remained. He has been following up regularly with us.

DISCUSSION

Studies have demonstrated that a common pathophysiology involving the dopamine system and the dopamine 3 (D3) receptor genes have been implicated in both TS and schizophrenia (Pennington and Ozanoff, 1996). There have been case reports in the past that have reported the co-existence of both disorders. Neurobiological similarities with involvement of the basal ganglia, corpus callosum, temporal lobes and frontal lobes have been implicated in both disorders (Haber et al., 1986). There have also been similarities in drug preferences when it comes to the medical management of both disorders. Risperidone and Haloperidol are the preferred drugs for TS while the same have been widely used in the long term management of schizophrenia (Shapiro et al., 1989). There is a need for further research into the developmental psychopathology and neurobiology of both these disorders as well as final common pathways that help elucidate the mechanisms at play in causing their comorbidity.

REFERENCES


