Schizophrenia in identical twins

Sir,

Genetic factors are believed to play an important role in the causation of schizophrenia. While the lifetime risk in the general population is just below 1%, it is 6.5% in first-degree relatives of patients and it rises to more than 40% in monozygotic twins of affected people. Analyzing classic studies of the genetics of schizophrenia done as early as in 1930s, Fischer concludes that a concordance rate for psychosis of about 50% in monozygotic twins seems to be a realistic estimate, which is significantly higher than that in dizygotic twins of about 10–19%. A case of schizophrenia occurring in identical twin is reported here.

Mr. A, 30-year-old unmarried male from middle socioeconomic urban background was brought with the complaints of irrelevant talks, sleeplessness, restlessness, lack of self-care, loss of weight, poor appetite, etc., for 8–9 months. He had developed firm belief that he had been afflicted with some cancerous disease and had such serious illness that his intestines and other abdominal contents had started rotting. He was also extremely suspicious about his family members and kept on refusing medications even for pulmonary tuberculosis from which he was suffering. He appeared to be a bit retarded and socially withdrawn, talking very little, and mostly in short sentences. Rapport was established with great difficulty. He was preoccupied with the delusional thoughts as described above and reported hearing occasional voices. On physical examination and after perusal of his investigation reports including X-ray chest, it was found that he was also suffering from pulmonary tuberculosis. A clinical diagnosis of schizophrenia, paranoid type, (ICD 10, F20.0) was made. He was put on Risperidone with the dose gradually increased to 8 mg/day in divided dosages. He started to take medication with some difficulties after repeated counseling. Night time sedative was given to promote sleep. Trihexyphenidyl 2 mg thrice daily was added after 2 weeks, as he showed some extra-pyramidal symptoms. After 2 months of treatment, he showed considerable improvement and was advised to continue treatment with reduced dosage.

The notable feature in the present case was that not only both the twins had developed paranoid schizophrenia, but the symptom profiles were also very much similar. Wide-ranging psychotic symptoms suggested independent psychotic disorders in both ruling out shared psychotic disorder. No family history of mental illness even in second and third-degree relatives could be found. The twin, who was employed, showed better recovery in comparison to the unemployed one, who continued to have the residual symptom of schizophrenia.

Two twin studies on psychotic illnesses could be found on searching the Indian Journal of Psychiatry, one is a case report of mania in twins and the other one is a case report of Folie a deux in identical twin sisters. In fact, genetic studies as such in respect of psychiatric disorders are very scarce in our country. We could find a pilot study to find the association of consanguinity and depression and a pedigree study on the genetics of affective disorders. There is a need to encourage genetics-based research in India to find out association of genetic factors with psychiatric disorders.

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Conflicts of interest
There are no conflicts of interest.

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