

MANIA IN TWINS : A CASE REPORT

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ABSTRACT

A 19 year old patient presented with a first episode of mania. A year ago his twin brother had developed a similar illness. In the family, there was no other history of psychiatric disorders.

Key Words : Affective disorder, Twins

INTRODUCTION

Emil Kraepelin in 1921 had stated that in approximately 36% of patients the parents have some form of psychiatric illness. Later other studies confirmed this finding.

A case of twins, both of whom had developed bipolar affective disorder, is reported here. One of the twins, (the index case), was admitted to our hospital, while only history is available for the second, as he had absconded from home during the course of illness and could not be traced.

CASE REPORT :

Mr. S, a 19 year old uneducated, unmarried Hindu male of lower socioeconomic status presented with 1 month history of increased talking, singing songs, wandering aimlessly in the streets and sleeping very little. He expressed ideas such as a desire to buy costly things like a car, house etc. He had an ectomorphic build and showed increased psychomotor activity, elation, delusions of grandeur, and impaired judgment and insight.

He had a full term normal delivery conducted at home, and the index case was born 20 minutes later than his twin. The mother had not received any immunization or ante-natal care, and she had not developed any illness or taken any medication during the gestation. Both the children were healthy, and neither had any congenital anomaly. The development of the twins proceeded uneventfully. Both were reared in the same environment and were similarly looked after. They were never sent to school due to financial constraints and a lack of

inclination on the part of the parents.

The patient had not suffered from any psychiatric illness previously, and there was no similar history in either their parents or other ancestors.

The twin of the patient, Mr. K, about a year ago at the age of 18 had developed a psychiatric illness characterized by grandiose talk, increased spending, wandering around, decreased social inhibitions and decreased sleep. He claimed acquaintance with the local political leaders and police officers. He was shown to various faith healers without any benefit. Finally, 3 months after the onset of the illness, he went away from home, and till now his whereabouts are unknown. Since both the twins were of the same sex, it could be presumed that they were monozygotic, although this obviously could not be confirmed due to the absence of Mr. K.

DISCUSSION :

The patient was diagnosed as to have a manic episode with psychotic symptoms (F30.2. ICD - 10 (WHO 1992), and was treated with oral haloperidol (20 mg / d) and 4 ECTs. The patient recovered completely and was discharged in a months time.

For the other twin although a direct interview was not possible, a diagnosis of bipolar disorder, mania (F30.2. ICD - 10) was entertained based on the history obtained from reliable informants - the parents. A significant point was that the family, who had not sought medical treatment for the first twin despite the presence of a well-equipped

psychiatric hospital nearby, brought the index patient early in the illness, to a tertiary care center.

Although family, twin and adoption studies point towards a genetic basis for inheritance of affective disorders, the mode of transmission is still unknown (Craddock and McGuffin 1993). Polymorphic DNA markers, linkage and association studies have recently been employed to this end. The chromosomal regions of potential interest identified are 11q21-25, 15q11-13, chromosome 21 and x chromosome (Craddock and Owan 1994). X chromosome has attracted particular attention because of cosegregation of color blindness, glucose-6 phosphatase dehydrogenase, and the association of affective disorder with fragile X in some cases.

An alternate possibility is that the reports of association represent an ascertainment bias and there is no actual association (Jeffries et al (1993). On overall consideration, there is no compelling evidence of association between fragile X and affective disorder. There is an undisputed preponderance of concordance of monozygotic (67%) over dizygotic (15%) twins (Gershon et al 1989). Recently Kendler et al (1992) have quoted it as 48% and 42% respectively using DSM-III-R criteria.

In Indian literature, studies on genetics are conspicuous by their scarcity. Chatterjee (1984) has strongly criticized this sad state of affairs. In Indian literature for the last 20 years, only 2 studies dealing with the genetic aspects of affective disorder could be found: Singh and Agarwal (1980) and Rao et al (1993). The former study reported a morbid risk of 22.7 for first degree relatives of probands of mood disorder and mainly dealt with unipolar / bipolar dichotomy. Rao et al (1993) have reported a pedigree study. Analyzing four generations of a single family they found evidence of transmission from mother to children, but no specific male to male transmission, thus raising the possibility of X-linked inheritance. Neither of these studies have dealt with the issue of zygosity.

The difficulties in conducting genetic studies are numerous. The unavailability of a National

Register precludes easy accessibility to the population. Another problem is the lack of specialist psychiatric services at the grass-root level, also general practitioners, who do not refer such patients to psychiatrists. Lastly, genetic departments are available only at few centers across the country. All these factors, individually and in combination contribute to the scarcity of genetic studies in India. With such a dearth of material on twin studies in Indian literature, we considered it prudent to bring such a case to notice with the hope that it may prompt further and methodologically sound studies.

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