deterioration that have been seen to follow a period of psychotic illness in adult GM_2 gangliosidosis may be secondary to treatment with phenothiazines, which may accelerate the course of the disease.

Accordingly, proper diagnosis of this disease in the presence of psychosis is essential in order to prevent inappropriate treatment with neuroleptic medication. Any patient, especially of Ashkenazic Jewish origin presenting with psychosis and the neurological signs enumerated above, needs to be evaluated for hexosaminidase A deficiency so that neuroleptic medication may be avoided.

Our patient responded well to lithium carbonate. Whether this treatment is effective only in psychosis in the post-partum period, which as noted above has an affective component, or whether it can be expanded to other cases of psychosis in the presence of hexosaminidase deficiency, will be determined by further clinical experience.

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Schizophrenia and Multiple Sclerosis

Distribution in Italy

The present study extended an earlier report of USA states with high levels of schizophrenia also having high levels of multiple sclerosis (MS). A high correlation ($r = 0.81$) between schizophrenia and MS rates in the districts of Italy was found.

The present research extended an earlier study that found that the 10 USA states with the highest schizophrenia rates had significantly higher multiple sclerosis (MS) rates than the 10 lowest schizophrenia-rate states (Templer *et al*, 1985). The authors of that study investigated this relationship because of common properties of the two disorders. Both are chronic, familial disorders that begin in early adult life and run an irregular course. Both appear to be more common in the colder parts of the world. The possibility of slow virus aetiology has been suggested for both. The present study determined the geographical similarity of MS and schizophrenia rates in Italy, a country that appears to have reasonably complete and adequate rates for both disorders.

Method

The schizophrenic first-admission rate for Italy was taken from Arieti (1974) and was for 1949–1974. Although Italy has 17 districts, $n = 16$ for the present study because Arieti provided a combined first-admission rate for Campania and Lucania. The MS death rates for the 17 districts for 1937, given by Limburg (1950), were used. The average rate for Campania and Lucania was used because the schizophrenia data for these two districts were combined.

Results and Discussion

The correlation coefficient between the MS and schizophrenia rates in Italy was 0.81 ($P<0.001$). Such a high correlation, accounting for almost two-thirds of the variance in the rates under consideration, was surprising, as a correlation between two variables is theoretically limited by the reliability of those two variables. Also, it has been well established that interrater reliability of schizophrenic diagnosis is ordinarily not remarkably high.

The reason for the high schizophrenia–MS correlation in Italy is a matter of conjecture. Climatic and other variables in the realm of the physical environment, diet and other life-style factors, and genetic and/or other individual differences, could be relevant. Viral and other diseases could also be responsible for the similar geographical distribution. It would appear that some variables could be conducive to the development of both disorders.

There are far-from-inconsequential methodological difficulties in this research. They include the limited reliability for the two diagnoses, different kinds of rates, and the correlating variables for different years. With regard to the last point, even if the data were available for many years for both variables, one would not know which pair of years would be most meaningful. There are differences of opinion about the age at which harmful effects occur for both disorders. Overall, the evidence does not point to time of birth or time of onset in the two disorders. As an example of the complexity of this situation, MS seems determined less by the country a person resides in than by his or her country of origin (McAlpine *et al*, 1972). However, such methodological limitations ordinarily lower more than elevate correlations. The composite perspective provided by Templer *et al* (1985) and the present findings indicates a positive relationship between MS and schizophrenia, at least in some localities. However, correlation does not equal causation, and the meaning of our findings is not clear.

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