Another Identical Schizophrenic Twin

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F. Kallman used twins to demonstrate the genetic role in schizophrenia. The concordance in identical twins was much higher than in fraternal (not identical) twins. Psychosocial theorists, however, subjected his work to extensive criticism as they attempted to prove that there was no genetic component whatever, or if there was it was a response to psychosocial factors. The main criticism of the identical twin research was leveled at the concordance being less than 100 percent. It was assumed that any concordance less than total negated the view that inheritance played a substantial role. Concordance rates for identical twins usually ranged from about 50 to over 80 percent, much higher than the highest concordance rate for unlike twins.

There is no doubt that many identical schizophrenic twins have nonschizophrenic brothers or sisters. Even diagnostic inaccuracy, large as it is, cannot account for the difference. But before we assume that the nonschizophrenic twins are normal, it is necessary to find out how well they really are. Are they in fact normal, or do they have minor degrees of the same illness which cannot be detected because they are free of the major symptoms of schizophrenia such as perceptual changes and thought disorders? It is possible the same biochemical dysfunction is present, but to a slight degree only in the nonschizophrenic twin. Because they have not experienced anything better, they have accepted an inferior degree of health as normal. A recent observation of mine may lead to a method for measuring how healthy the nonschizophrenic twins really are. A "normal" twin brother of a schizophrenic man recovering from his disease found to his surprise he was much better when he started to follow the same vitamin program.

My patient, born in 1954, first consulted me in July, 1977, complaining of severe tension. He was so confused and vague I had to get his history from his "normal" brother. Both were so alike in appearance that until high school it was impossible for their friends to identify them. The patient became physically weak. Infectious mononucleosis was diagnosed, and he stayed in bed one year on the advice of his physician. After this, at age 17, he became very suspicious and seclusive. He even stopped going to the bathroom and used a bed chamber in his room. He improved slightly in time and was able to complete grade 11, but remained withdrawn and introverted. When he was 21 he was very depressed and was admitted to a psychiatric ward for three months

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where he was given a series of ECT. Following that he was better, but far from well on discharge. He remained at home on tranquilizer medication where he remained irresponsible, forgetful, and incapable of any useful activity. Six weeks before I saw him he was again admitted to the same hospital for a few weeks. Before this admission he was catatonic and experienced visual and auditory hallucinations. When I saw him he was on TrifJuphenazine 25 mg per day, Cogentin 2 mg per day, and Dalmane 30 mg at night.

A mental status examination revealed the following changes:

Perception—Visual hallucinations where he saw an angel, the devil in a cage praying to him, and a god of destruction. Voices explained to him what was going on and encouraged him. He often felt unreal.

Thought—He was paranoid, suffered bizarre ideas and fears. It was difficult to follow his train of thought as his ideas flitted about almost at random. His concentration and memory were so bad he could not even read.

Mood—He suffered from rapid mood swings in the same day.

I advised him he was schizophrenic and discussed it as a biochemical illness, probably one of the B-vitamin dependencies. He was started on nicotinamide 1 g t.i.d., ascorbic acid 1 g t.i.d., and pyridoxine 250 mg each day, while maintaining his drugs. He was also advised to eat a sugar-free (junk-free) diet.

His normal brother reported he too had gone through a brief mild paranoid period several years before, but had been normal since. He wanted to take the same vitamins as a preventive measure to insure he would not become ill. He had read about schizophrenia and wished to reduce his chance of becoming ill to zero.

Both were seen six weeks later. The patient was more relaxed and felt much better. His voices were less disturbing, his delusions were nearly gone, his mood swings were less extreme, and he was able to relate to people about him better.

One month later he was much improved. The voices came infrequently. He reported that he had never before experienced the sense of reality which he now had and that at times it was confusing. He could not recall before being free of tension and anxiety. He had not realized that this kind of peace was possible. He no longer required sleeping medication and had discontinued Dalmane. He gave me an interesting description of how simple activities, which in the past had required a lot of attention, were now easy and automatic, like eating and dressing.

Because he was so much better I advised him that he need not come anymore, but could carry on with his general practitioner. He was advised to stay on his vitamin program and diet forever and to slowly decrease his tranquilizer once he had been normal for six months.

His brother reported that he felt very much better as well, that the vitamin program had given him a feeling of normality he had not had before. It was his plan to keep taking the vitamins the rest of his life.

There are many ways of trying to prevent schizophrenia. One way would be to add nicotinamide and pyridoxine to our food in a manner which would not interfere with our healthy habits of eating food only. If the optimum quantity were used, it would prevent the development of the vitamin-dependent schizophrenias. Another way would be for all vulnerable persons to take vitamin supplements. The vulnerable population are all the first-order relatives of schizophrenics, i.e., parents, siblings, and children. Of these, the most vulnerable are identical twins.

My observations on this twin pair reinforce my previous conclusions that very few identical twins of schizophrenic patients are normal. Genetic studies will remain imperfect until this is taken into account. The only practical test of normality will be whether they feel better on vitamin therapy for, if a person is normal, there should be no improvement in his or her feelings of well-being by taking vitamin supplements.

This conclusion applies to the vitamin-dependent schizophrenias. If they are examples of cerebral allergies, different genetic findings may emerge. Both types, however, may have a common final com-

ponent which causes the cerebral metabolic dysfunction, perhaps some interference in the operation of the transmitters, for not every vitamin dependency or cerebral allergy leads to schizophrenia. There are other factors as well.