

Chronic Fatigue Syndrome Associated with a Psychotic State Resulting in Multiple Murders

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A 28-year-old, ambitious, academically successful Asian man with a zeal for hard work develops infectious mononucleosis and its resultant lethargy and fatigue. He becomes depressed, then develops symptoms of mania before turning floridly psychotic. In his psychotic state he develops grandiose delusions about being the second son of God after Christ and takes it upon himself to rid the world of all evil by defeating the anti-Christ. He kills four people and seriously injures a fifth. He is arrested and found not guilty by reason of insanity. He remains a diagnostic puzzle for a long time before starting to respond to neuroleptic medication.

Case Report

Mr. Q is a 28-year-old, single, oriental college graduate, the oldest of a staunchly religious Catholic middle-class family of four in which there was no known psychiatric problem or any history of drug or alcohol abuse. He describes his childhood as a happy one until the age of 13, when his father started getting sick. He attended private schools and was a "straight A" student with active involvement in intel-

lectual clubs at school. In his junior year, when his closest friend moved away, he started feeling depressed, lonely, and wanted to die.

He was 15 years old when his father died of cancer. This aggravated his feeling of abandonment and he threw himself fully into athletics and academics. Perseverance and hard work helped him graduate Phi Beta Kappa and *summa cum laude* from an Ivy League university in May 1987. In his third year of college, he went to Spain as an exchange student. He met and fell in love with a "very beautiful" American girl from an influential family. He declined her invitation to accompany her on a day trip. Although he developed intense feelings toward the girl, he was afraid to get close to her for fear of rejection. He had never had any

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sexual encounters because "he did not have time for such things; ambition was the core of my personality." However, he was preoccupied with establishing a relationship with the girl.

Mr. Q admitted having tried marijuana once, and drinking one to two cans of beer on rare weekends while in high school, with occasional inebriation. He states that he stopped drinking after graduation. He had developed an ulcer, for which he was treated with Maalox and later with Zantac for six months. At the age of 23, in 1987, he started working as a trainee in a bank. Although he describes the job as easy, he states that he did not like it; he did not find it "challenging enough for my intelligence." He also felt that two or three people were against him and would make "snide remarks about me." He worked there for six months. Despite his short work record, he felt he was going to be "an important and powerful person in the business world."

Mr. Q describes a dramatic change in his life after he was diagnosed with Epstein-Barr Virus (EBV) around Christmas of 1987. He reports feeling very fatigued, sleeping almost 10 hours at night, compared to his earlier need for only about 5 hours. He persisted in going to work, but in February 1988, feeling constantly tired, sad, and depressed and having passive suicidal thoughts, he took a leave of absence from his job. He spent his day time in sedentary activities, as he felt lethargic. He states that his heterophile titer was very high.

He was put on acyclovir by an infectious disease specialist, while also receiving doxepin and alprazolam from his family physician. From December 1987 until the inci-

dents at the end of May 1989, he was sick, tired, and depressed, and stayed home watching TV and listening to music.

He saw several psychologists and psychiatrists. He tried different types of therapies and relaxation techniques. He tried antidepressants and anxiolytics, but refused lithium, which was offered to him by one psychiatrist. He was not consistent in pursuing treatment with one therapist. He did not see any improvement in his condition, and his earlier drive and optimism turned into hopelessness.

His upbringing led him to seek solace in religion. As he delved deeper into religion, he started having delusions of grandeur about being the second son of God, after Christ. He showed symptoms of paranoia, such as feeling that there was a conspiracy against him by his family and friends, that they were manipulating his thoughts and were responsible for his sickness. Mr. Q admitted to having racing thoughts. He states that as the son of God, he received telepathic messages from God. He "heard" prophecies in music. He unravelled messages from the actions of people around him. He had to defeat the anti-Christ. In order to achieve this end he had to stoop to the level of the anti-Christ and use brutal means. On Memorial Day of 1989, he stabbed four people to death and seriously injured a fifth. He states that at that time, he could not understand the "irrationality" of the resistance put up by one of the persons he wanted to stab, especially since he could resurrect them after three days.

Mr. Q was arrested. He remained psychotic for a long time, even when treated with antipsychotics. He vehemently re-

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fused lithium. He was found not guilty by reason of insanity and was later transferred from the forensic hospital to a state mental hospital.

Discussion

Mr. Q was an achievement-oriented "workaholic." When he was seven years old his parents had migrated to the United States. He was not reunited with them until a year later. It is not clear whether he developed any form of depression at that time. As the eldest son, he shouldered the burden of studying hard and becoming a role model for his brothers. Although he claims that the death of his father brought him grief, he worked his way out of it because "in our family, feelings are repressed, not expressed." About three years later, his close friend left school; he felt his whole world crumbling. He was angry at his mother for having abandoned him to come to the United States, angry at his father for having died, angry at his friend for deserting him, angry at the loneliness he felt as a result of his sickness. He had thoughts of suicide. He certainly was under a lot of stress, yet it does not appear that he would have carried a psychiatric diagnosis other than an adjustment disorder with depressed mood at that time.

His MMPI profile was compatible with borderline psychotic reaction, or a vulnerability to psychotic decompensation, and dependency-independency conflicts. There was no premorbid psychological testing for comparison. His laboratory tests were essentially normal. His affect was constricted. He was sad about what happened, but never expressed remorse. He continues receiving neuroleptics.

Mr. Q's diagnosis remained a puzzle for quite a while. He was variously diagnosed as having major depression, bipolar disorder, or major depression with psychotic features. The patient presented with the appearance of both bipolar disorder, manic type, with a history of depression and schizophrenia as suggested by the intensity of his psychotic decompensation, and a consistently constricted affect, when neither depressed nor manic. He was therefore given an Axis I diagnosis of schizoaffective disorder. He also carried an axis II diagnosis of schizoid personality disorder.

It is apparent that Mr. Q suffered from chronic fatigue syndrome (CFS). Holmes *et al.*¹ described the syndrome as new-onset, debilitating fatigue that drops the average daily activity to less than 50 percent of the premorbid level and lasts for six months. Graffman *et al.*² report that CFS is associated with concurrent or premorbid psychiatric disorders at greater than chance level.

In their controlled study of 40 patients with depression or affective disorder, DeLisi *et al.*³ found that patients with affective disorder demonstrated a trend toward higher titers of antibodies to EBV. Our patient had about six months of depressive symptoms, but this followed the diagnosis of EBV as demonstrated by very high titers of antibodies to EBV. Klein *et al.*⁴ reported a case of a patient with an active EBV infection and a history of bipolar disorder who developed an acute psychosis that improved in two weeks. Infectious mononucleosis and/or EBV have been implicated in the causation of neurological impairment and coma.^{5,6} Todman⁷ found that symptoms of disorientation may accompany cognitive deficits, but rarely per-

sist or evolve into an affective disorder. The present case suggests that high titers of EBV and the resulting CFS may have precipitated a psychosis associated with violence. These are, of course, alternative explanations of the patient's psychosis. Even if CFS is implicated, the mechanisms of its influence are unclear. Fatigue may have been an unusually severe stressor for a person with this patient's premorbid personality, or some more direct neurophysiological impairment may have been involved.

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