CASE STUDY

A 22-YEAR-OLD MALE WITH A MANIC EPISODE

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BACKGROUND

A 22-year-old African-American male presented to the emergency department with auditory hallucinations, euphoria, paranoia, and grandiose claims. He has no history of substance abuse and notes difficulties, such as social withdrawal, beginning at the age of 15 years, when his father died. He has become frightened of his symptoms and is seeking assistance.

HISTORY OF PRESENT ILLNESS

The patient presented to the emergency department with auditory hallucinations. He reported that he heard a male voice repeatedly saying, “I am jealous of you.” He was unable to recognize the individual; however, he suspected that he was jealous regarding the financial deals he was about to make. He reported that he was in contact with “some very big people from some very big corporations” and that these contacts may net him “billions of dollars” in the next several months. However, he was unable to give more specifics regarding these deals. He said that people were following him around and listening in on him to get hold of this secret information. He became increasingly frightened about this, thus he was seeking help regarding how to deal with these situations. He adamantly denied any previous hospitalizations or psychiatric problems.

He reported that he was full of energy and couldn’t sleep because of thinking about these deals. His thoughts were racing very quickly, which he attributed to his great intellect and his ability to absorb an enormous amount of information rapidly. He also reported that many women had heard about his upcoming financial windfall and were “just lining up to be with me.” When the psychiatrist suggested that he take some medication to calm him down, he became indignant, accusing the psychiatrist of “being like all the others who don’t believe me.” He was fearful that the psychiatrist would give him an injection to get the secrets out of him, and he became verbally threatening, indicating that he may hurt anyone who stopped him from his mission. He then attempted to escape from the emergency department. He was brought back by security and given an intramuscular (IM) injection of haloperidol 10 mg and lorazepam 2 mg. He subsequently had a dystonic reaction and was administered benztropine 2 mg IM with effective relief of the dystonia. He became calm and sedated within 30 minutes of receiving the medication. His alcohol level and toxicology screen were negative and all other routine laboratory screens were negative.

MENTAL STATUS EXAMINATION IN THE EMERGENCY DEPARTMENT

In the emergency room, the patient was noted to be a thin African-American male looking his stated age. He was pacing about the room. He was euphoric; however, he became easily irritated and angry if confronted directly concerning his claims. His speech was fluent but pressured. His thought process manifested a flight of ideas, and the content was entirely about his deals and upcoming success. He manifested grandiose delusions concerning his potential for wealth, his intelligence, and his connections to the powerful and wealthy. He also was sexually preoccupied concerning women’s interest in him. There was no suicidal ideation, but he made threatening comments to the hospital staff. His insight and judgment were very poor. He was oriented in 3 spheres and was grossly intact cognitively, although formal testing could not be carried out.

PAST PSYCHIATRIC HISTORY

The patient began to have difficulty at approximately age 15 years, after his 78-year-old father died. He became increasingly withdrawn, talking little to family and withdrawing from friends. He lost interest in school and other activities and seemed to “go into his own little world” according to his mother. He spent...
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most of his free time by himself, remaining in his room watching TV or playing games on his computer. His mother reported that “he just seemed content to be by himself” and she did not clearly see him as depressed. At times he complained of hearing the voice of his deceased father talking to him. He also thought people in the street were talking about him behind his back. His mother thought that he would grow out of his problems, thus she did not seek psychiatric attention. However, his grades declined, and at the age of 17 years he refused to go to school after he became convinced that many people were now spying on him. His mother thought that he just “needed some time to grow up.” He eventually returned to school and completed high school, but he remained socially isolated and paranoid.

MEDICAL PROBLEMS
There was no history of medical problems.

DEVELOPMENTAL HISTORY
The patient was born term with no complications. His mother was 25 years old at the time of the delivery and his father was 63 years old. His mother made regular prenatal visits and, other than taking prescribed vitamins, was on no other medications. His mother recalls having a “virus” for 2 to 3 weeks during her second trimester. Other than running a fever of approximately 103º F and having to remain at bed rest, she did not recall any other details of the illness. The pregnancy was otherwise uneventful. The patient was mildly delayed in attaining his milestones and did not walk or talk until age 18 months. At that point he developed at a more normal rate. He enjoyed playing sports, but he was described as “somewhat clumsy” in his motor skills.

As a young child, the patient was described as an overly attached child who tended to be anxious and fearful of separation. He was unable to attend preschool as he would not leave his mother's side for prolonged periods. He had difficulty in kindergarten and throughout elementary school, but was able to attend regularly with encouragement. He was a somewhat below average student and reportedly had an IQ of approximately 90.

FAMILY HISTORY
His mother described herself as an outgoing individual who made friends easily. She did not report any psychiatric history in herself or her extended family. Other than the brief affair with the father of the patient who was 39 years her senior, she was able to maintain long-term relationships. She was currently in a marriage of 20 years. She has 2 other children ages 13 and 18 who were developing normally. She has maintained a job as an administrator in a busy physician’s office for the past 21 years. Her current husband is helpful and tolerant of the patient’s problems, but has had difficulty forming a close relationship with him, despite his own extensive efforts.

The patient’s natural father was described as distant and only saw his son occasionally. He offered little financial support and was unreliable in his visits. He died at age 78 years of a cerebrovascular accident (CVA) and dementia. Little is known of his background or family history. The patient reported that the difficulty he had in establishing a relationship with his natural father as one of the major disappointments of his life. He attributed the death of his father to the onset of his psychological difficulties in high school.

SOCIAL HISTORY
The patient had not worked since graduation from high school, and he primarily stayed at home with his parents. He currently engages in few social activities with his family or friends and appears to be comfortable with this lack of social activity. He was able to maintain a couple of close friends until the onset of his difficulties at age 15 years.

SUBSTANCE ABUSE HISTORY
There is no history of substance abuse.

CASE DISCUSSION
This patient presented with a classic manic episode. His affect was elated and irritable, typical of a manic presentation. He manifested grandiose delusions concerning his ability to amass enormous wealth and develop connections. He was also sexually preoccupied concerning women’s interest in him. He had no insight into his disorder, as evidenced by his unshakable belief in his delusions and his denial of previous psychiatric difficulties. His knowledge concerning haloperidol injections indicated that he did have experience with inpatient mental health procedures.

However, his past history is typical of a schizophrenic process, thus he should be diagnosed with schizoaffective disorder. At the age of 15 years, he experienced a subacute onset of what would later evolve into a full psychotic process. There are several indications of a schizophrenic process, including the following:
The patient presented with the subacute onset of predominantly negative symptoms along with some positive symptoms. The negative symptoms include social and academic withdrawal, loss of interest, and low motivation. The early positive symptoms included auditory hallucinations (ie, hearing the voice of his deceased father) along with ideas of reference and thinking that people were talking about him behind his back. The positive symptoms became more prominent with time and resulted in the first hospitalization.

There was an absence of predominant mood symptoms. Although the prominent social withdrawal and loss of interest may be interpreted as affective symptoms signaling depression, his mother indicated that he did not appear depressed and he appeared to be content to withdraw “in his own little world.”

There were several risk factors in his early development that placed him at increased risk for schizophrenia. Although his mother followed through with ongoing prenatal care, she experienced what appeared to be a viral illness during her second trimester. Several, although not all, studies have noted an association with maternal viral exposure and schizophrenia. The father was age 64 years at the time of the birth of the patient. It is becoming increasingly evident that advancing paternal age may increase the risk of schizophrenia in offspring. In one study, the odds of schizophrenia in the children of men age 45 years or older were 2.8 times as great as in the offspring of men aged 20 to 24 years.

There was evidence of developmental delays with delayed speech and motor capabilities as an infant. He was noted to be “clumsy” in his motor skills in childhood. Motor and language difficulties have been found to be predictors of schizophrenia. Apathy, which was manifested in this patient, has been associated with lower performance IQ scores, decrements in rapid visuomotor sequencing tasks, and difficulties in verbal learning/recall, as compared to schizophrenics who did not manifest apathy as well as normal individuals. The apathetic cohort had significantly reduced bilateral frontal lobe functions relative to the other groups, although both schizophrenia groups showed evidence of bilateral temporal lobe volume reductions. Impaired premorbid functioning has been associated with more severe negative symptoms, increased time to treatment response, deterioration of premorbid functioning, in addition to increased susceptibility to tardive dyskinesia.

A more episodic and fluctuating course would be more characteristic of an affective illness.

There is some evidence of a paternal genetic contribution; however, this can only be considered suggestive rather than definitive. We know little about the father other than he did not form a close relationship with his son. This social distancing may be a sign of a schizophrenic spectrum disorder; however, there are many other factors that could have contributed to this distant behavior by the father. His father died at age 75 years of a CVA and dementia. For example, it is conceivable that the father was already showing some signs of either of these disorders at age 65 years.

**Psychopharmacologic Treatment Issues**

The treatment in the emergency department consisted of the injection of 10 mg of haloperidol and lorazepam 2 mg IM. The combination of these agents is frequently used in emergency departments and inpatient units. Extrapyramidal symptoms (EPS), such as acute dystonic reactions noted in this individual, are common with haloperidol, and this may be very frightening to the patient and interfere with rapport with the clinical staff. This is especially true with drug-naive patients. The excess sedation noted frequently with lorazepam interferes with subsequent history taking and may cause respiratory depression, especially in individuals who have been abusing street drugs.

Ziprasidone was the first of the atypical agents to become available in an IM formulation and there are some advantages to the use of this agent. A 20-mg dose of IM ziprasidone was demonstrated to be effective for acute administration starting 15 minutes after injection without the evidence of dystonia, akathisia, or excessive sedation. The calming effect persisted up to 4 hours after injection, and there was no evidence of dystonia or akathisia in this study. A 10-mg dose may be repeated every 2 hours to a dose of 40 mg/24 hours. Olanzapine is available as an IM injection and, in a study comparing this medication with haloperidol, the atypical agent was found to be effective in decreasing agitation in a dose-response manner from 2.5 to 10 mg. The rate of Parkinson symptoms with haloperidol was 16.7%, and this was significantly more than symptoms observed with olanzapine.
In terms of the acute treatment of the manic episode, atypical neuroleptics should be the treatment of choice. All of the atypical agents have been approved for the treatment of schizophrenia and use of these agents is now considered the standard of care. Although the incidence of EPS, including tardive dyskinesia, is less with the atypical agents, significant other side effects are becoming increasingly apparent with several of the atypical agents. Metabolic abnormalities, including increase in weight, exacerbation or newly emergent diabetes, in addition to hyperlipidemia, have been noted with many of the atypical agents. Patients treated with olanzapine or clozapine are most at risk for these side effects,12,13 whereas ziprasidone14 and aripiprazole are associated with the lowest risk.15,16

Any of the atypical agents could be used clinically in this patient, especially considering documented efficacy of all of them in acute manic episodes and schizoaffective disorder. All of the agents have also been shown to be effective in improving negative symptoms and cognitive dysfunction, which was present in this patient premorbidly.17,18 However, whether the atypical agents differ in their ability to affect varying aspects of negative symptoms and cognition requires further study.

The patient did not present for treatment until several years after the onset of symptoms. This is not atypical in the course of schizophrenia. However, there is increasing evidence that early intervention is advisable, and there is some suggestion that subsequent outcomes may be improved.9,19

CONCLUSIONS

This patient presented with a classic manic episode with a previous course typical of schizophrenia. The atypical agents should be considered the treatment of first choice in these individuals because they are effective in the acute treatment of mania and the long-term treatment of schizoaffective disorder. Attention should be given to side effects with these agents, especially metabolic parameters because this individual will require long-term treatment with these agents. There is increasing evidence that early intervention and sustained treatment of this individual may have prevented this acute decompensation.

REFERENCES