

A Suicidal Adult in Crisis: An Unexpected Diagnosis of Autism Spectrum Disorder

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Case Presentation

"Mr. A" is a 44-year-old married man who presented to the emergency department stating, "I cut my wrists to attempt suicide because I was thoroughly depressed." He was admitted to the psychiatric unit, and a detailed history was obtained. Mr. A was a healthy child but often got into fights at school. He was the salutatorian of his high school class and earned a bachelor's degree in chemistry. His first psychiatric contact was in college. At that time, he experienced depression and anxiety while drinking large amounts of alcohol and abusing illicit drugs, and he attempted to take his life by cutting his wrists. He was admitted to the local psychiatric hospital, stabilized, and discharged to an alcohol treatment center for 30 days of further treatment. After college, Mr. A found stable work as a chemist. He ran chromatography and spectroscopy machines and took great pride in his systematic work. He has been married for 11 years and has three young adopted daughters. He describes himself as a quiet, "mellow" person who minds his own business and tries not to draw attention. One year before the current admission, Mr. A was in an altercation at work, where he bit a coworker, who required wound care in an intensive care unit. Mr. A was court-ordered to psychiatric hospitalization, where he was treated for major depression and impulse-control disorder with quetiapine, haloperidol, and supportive psychotherapy. After he was discharged, his outpatient clinicians continued quetiapine and psychotherapy, discontinued haloperidol, and added escitalopram to his treatment regimen. Three days before the current admission, Mr. A had another altercation at work after discovering that his boss had hired an employee to assist him with his duties. He was upset by this, as he did not want an assistant and felt he could not tolerate another person's presence. He was unable to articulate these concerns to his boss. Instead he reacted by cursing heavily and throwing a chair at his

boss before walking away in a rage. He was fired on the spot. Mr. A became so upset that he decided to drive to a distant city to kill himself. He chose this particular city in part because it is where his favorite TV program had been filmed. En route, he bought two hunting knives, with other camping gear so as not to arouse suspicion. He also bought two gallon-bottles of tequila and checked himself into a hotel. After drinking a large amount of alcohol, he cut two deep longitudinal wounds in his wrists while taking a bath. He refilled the bathtub with water several times and continued to drink tequila before going to bed. Upon awakening the next morning, he left a note apologizing for the "mess," wrapped his wrists, put on a long-sleeve shirt, and went sightseeing. After touring locations where his favorite TV program had been filmed, he decided to go to a casino in a different city to gamble and then drown in a bathtub. By this time, however, his wife had filed a missing persons report, and Mr. A was stopped by the police and brought to the emergency department for a psychiatric evaluation. He was admitted voluntarily to the psychiatric ward.

On admission, Mr. A appeared moderately well groomed and was wearing a tattered brown T-shirt and pajama pants. His eyes moved little, maintaining a fixed stare at the mouth of the interviewer. His speech was clear, but his words were cautiously chosen and there was little rhythm to his sentences. He reported his history circumstantially and discussed emotionally charged occurrences matter-of-factly. He recounted events with a smile incongruent with the circumstances he was describing. He stated that he was depressed, but his affect was surprisingly calm and complacent. He had no thought disorder and endorsed no hallucinations or delusions.

Mr. A was initially formulated as having an adjustment disorder with depressed mood and a cluster B personality disorder. However, after a few days on the unit, a pattern of awkward social interactions and stereotyped mannerisms became evident. Mr. A continued to stare at the clinicians' lips when interviewed, answering questions with almost scripted verbal responses, and he showed little capacity for discussing his own and others' feelings. The team recognized these as autistic traits and conducted further evaluation to elucidate the full story behind Mr. A's unusual symptoms. A telephone interview with Mr. A's adoptive family revealed that he had grossly normal language development as a child but had always exhibited social awkwardness, a poorly developed regard for the feelings of others, and preoccupation with routine and rigidity. As an infant, he rebuffed his mother's affection and coddling. As a toddler, he engaged in independent or parallel but not reciprocal play, often playing intensely and exclusively with toy trucks. As a school-age child, he kept to himself and was picked

on by other students for being different. Although Mr. A had never been diagnosed with autism as a child, the team and consulting faculty members agreed that Mr. A's history and current phenomena were consistent with an adult with Asperger's disorder. The combination of rigidity, poor reading of social cues, suspiciousness of others, and poor coping skills in handling frustration are characteristic of Asperger's disorder, and for Mr. A, they likely precipitated the violent actions that led to his firing and his previous and current suicide attempts and hospitalizations.

Discussion

Autistic disorder and Asperger's disorder are pervasive developmental disorders marked by impairments in social interaction and communication, coupled with restricted and stereotyped behaviors and interests. Although both autistic disorder and Asperger's disorder are considered part of the same spectrum, known as the autism spectrum disorders (ASDs) (1), autistic disorder and Asperger's disorder are distinct diagnostic classifications. Individuals with autistic disorder have significant impairment in language, motor skills, and often intelligence compared to those with Asperger's disorder. Recent data suggest that the rate of all pervasive developmental disorders is 60–70/10,000 births, with autistic disorder present in around 10/10,000 births and Asperger's disorder in around 2.5/10,000 births (2). However, most data concern diagnosis in children. Little is known about the prevalence of ASD diagnosis in adults, but many individuals with ASDs, such as Mr. A, remain undiagnosed well into adulthood (3). One study from the United Kingdom suggests the ASD prevalence in adults to be 0.8%–1% (4).

Children and adults with ASD share similar characteristic sociocommunicative abnormalities (5), although symptoms change considerably with age (6). While having an ASD remains a lifelong disability, almost half of adults with ASDs achieve a reasonably normal level of functioning, and about 15% become fully self-sufficient (6). However, these are very likely underestimates, as individuals with less severe disorders often go undiagnosed. Mr. A is typical for an adult with a mild ASD, as he has only evidenced the disorder when stressed sufficiently by work and relationships. Diagnosing ASDs in adults can be particularly challenging because few tools specific to adults are available, a detailed developmental history is not always readily available, and comorbid conditions are likely to complicate the phenomenology. Clinical diagnosis relies heavily on a detailed history of childhood and adult behaviors from informants, especially regarding verbal and social skills and repetitive behaviors.

Although several genetic tests and questionnaires are available to aid in diagnosis, they are often not feasible for the practicing clinician. Fragile X syndrome, present in about 3%–6% of cases (7), is the largest single-gene cause of ASD. When suspicion is strong for a genetic disorder, a medical genetics referral is appropriate, where patients

may receive fragile X testing and a G-banded chromosomal analysis. The gold-standard research questionnaire is the Autism Diagnostic Observation Schedule, used in conjunction with the Autism Diagnostic Inventory (8). Although these instruments were developed for children, both can be used for adults with different levels of language and development (8). In adults, the Autism Spectrum Quotient (9) or the Adult Asperger Assessment (10) can serve as a useful guide for clinicians seeking to make the diagnosis in selected individuals.

Diagnosis relies heavily on a detailed history of childhood and adult behaviors, especially regarding verbal and social skills and repetitive behaviors. Adults with ASDs, like Mr. A, have problems relating to others in both their personal and professional lives (8), and in fact being a loner is a diagnostic feature of ASD. Mr. A had little social interaction with people outside his family and was most content when working by himself in the lab. Adults with ASDs also misunderstand gestures and fail to share interests with others, which makes these individuals appear cold and detached. In verbal interactions, they tend not to focus their gaze on the speaker's eyes but instead on the region around the mouth (11). One theory for this behavior is that fixating on the mouth instead of the eyes heightens the attention to speech and enables greater social insight (11). Mr. A noted that watching faces intently and reading lips allowed him to compensate for his difficulty in understanding emotions and body language. Children and adults with ASDs also display characteristic behaviors and preoccupations with routine and may become very upset when their behaviors or routines are interrupted. Although systematic thinking and special interests enable some adults with ASDs to achieve success in the workplace and mask their underlying impairments, the need for sameness can produce great distress in their personal and professional lives, causing their coworkers to see them as impolite or excessively direct (8). Although Mr. A was highly praised by his boss for being one of the best gas chromatographers in the field, he was also easily strained by unwanted interactions with colleagues.

Another factor complicating diagnosis is the frequent presence of other psychiatric disorders comorbid with ASDs. Major depressive disorder is thought to be the most common psychiatric diagnosis seen in adolescents and adults with Asperger's disorder, with a prevalence of 37% (12). Adults with ASDs and comorbid major depression may display a wide spectrum of symptoms, from depressed mood and irritability to aggression and suicidality. These symptoms can produce problems for the patient and his or her family and occasionally result in hospitalization (13). Much of Mr. A's irritability, suicidality, and affective changes could be attributed to the coexisting major depression.

While the literature on treatment of adults with ASDs is sparse, many useful strategies can be adapted from the techniques used to treat children with ASDs. First, it is im-

portant to treat co-occurring psychiatric conditions. Selective serotonin reuptake inhibitors (SSRIs) are commonly used to treat depressive and social withdrawal symptoms. However, the efficacy of these agents has been brought into question by a recent randomized controlled trial (14) that suggested that SSRIs may result in adverse activation in ASD patients and so should be used and titrated cautiously. Mr. A's depression responded well to escitalopram in combination with supportive psychotherapy focused on education regarding ASDs. Mr. A's alcohol dependence was treated with motivational interviewing and follow-up treatment in an alcohol dependence halfway house.

Second, antipsychotics can be effective in ameliorating ASD symptoms. Risperidone is the only medication proven in children to decrease impulsivity and behavioral problems associated with ASDs (15); it may be similarly efficacious in adults. Aripiprazole has also shown promise, but only in some open-label studies (16). Clinical experience suggests that dosages lower than those used for psychosis are sufficient in ASDs. Akathisia can be problematic in ASD patients and should be considered when evaluating worsening agitation with treatment. Based on clinical experience, mood stabilizers such as valproate, carbamazepine, oxcarbazepine, and lithium may be useful in managing aggression and irritability, but published data are lacking.

As with other treatments, the literature on behavioral therapy in adults with ASDs is limited. Approaches that are effective in childhood ASDs may also help adults. Directive interventions emphasizing a structured environment and real-life, concrete examples may be especially beneficial (8). Another effective method involves ASD patients analyzing triggers of frustration in known situations, learning stepwise approaches to appropriate responses, and applying these more adaptive behaviors to unfamiliar situations (17). Mr. A was provided with education and supportive psychotherapy and referred to more intensive outpatient psychotherapy after his discharge from the hospital.

As this case illustrates, diagnosis of ASDs in adults is difficult but crucial. Although many adults with ASDs may be high functioning and have only mild symptoms, recognition of the disorder and treatment can greatly improve their lives. Months after discharge, Mr. A greatly appreciates knowing that he has an ASD, remarking, "It's helpful to at least know why I see or experience the world differently than what others seem to." Mr. A is now undergoing multifaceted treatment for the impairments and comorbidities of his ASD. Further awareness and study are needed to help clinicians enable adults with ASDs to reach their full potential.

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