

AS A LIFE-LONG CONDITION with symptoms that are battled every minute of the day, attention-deficit/ hyperactivity disorder (AD/HD) exacts a toll. Delayed identification of AD/HD and co-existing mood disorders can dramatically diminish an individual's quality of life.1

Roughly half of adults diagnosed with AD/HD have accompanying mood symptoms, ranging from feelings of frustration and irritability to mood swings and major depression.<sup>2</sup> Ominously, some develop selfdestructive behaviors or suicidal thoughts. Doctors **Learning from Case Studies** 

must carefully evaluate an individual's symptoms to accurately diagnose their underlying cause, being aware that AD/HD is often accompanied by co-morbid conditions such as depression.

The following case studies are based on real examples from my medical practice, although minor changes have been made to ensure the patients' privacy. These cases reflect both the complex relationship between mood disorders and AD/HD in adults and the difficulty of distinguishing among symptoms to determine the diagnosis, particularly if more than one condition is present. I offer these case studies to illustrate the benefits that correct diagnosis and treatment can make in the lives of individuals with AD/HD and mood disorders.

## **Brandon**

Brandon came to his doctor late in his junior year of high school at the urging of his mother. As a student in a competitive high school, he recognized that his academic performance would not get him into a choice university. Brandon was upset that community college appeared to be his only option. His father was an Ivy-League-educated attorney and his older sister was thriving at the state university. His friends would also be attending highly ranked universities, and Brandon realized he was being left behind.

Brandon was tearful as he described his concerns to his therapist. He could not concentrate in class and was always worried. His worrying distracted him to the point that he could not focus on his teacher's instruction. Despite his family's emphasis on schooling, his studying was inconsistent and he was often unprepared with assignments. Grades were rarely above Cs. Brandon acknowledged being sad, but mostly appeared to be frustrated with his recurrent behaviors. Still, he enjoyed skateboarding and being with his girlfriend and soccer teammates.

Brandon was diagnosed with depression, referred to his family doctor and prescribed an antidepressant. One month later he was not improving, and his dose was doubled. Now complaining of sexual dysfunction,

Brandon was switched to a different antidepressant. This new medication resulted in a 15-pound weight gain. Dejected by his poor response to medications, Brandon retreated and lost faith that his problems could be addressed medically. He found little motivation to pursue psychotherapy.

Three years later Brandon and his mother saw television advertisements for a new AD/HD medication. Identifying with the description of symptoms, he visited the referred Web site and scored high on the AD/HD screening test.<sup>3</sup> At a local CHADD meeting, the family was directed to an AD/HD specialty center. A multimodal approach was undertaken including psychological testing and counseling, a psychiatric examination, and a review of his treatment history and physical health.4

The evaluation team learned that Brandon's problems intensified after high school. His friends had moved on, and community college proved every bit as frustrating as high school. Although he enjoyed tinkering with home electronics, he was unable to pass computer science courses. His lack of direction and perceived laziness heightened tensions with his highly driven father.

In reviewing Brandon's history, the team learned that although his problems became most apparent in late adolescence, earlier report cards had identified Brandon's underperformance. As Brandon's mother discussed his early school years, she confessed that she shared many of her son's behaviors; she now feared that her attention and learning difficulties would be embarrassingly evident if she were forced to re-enter the work place.

Brandon did not exhibit symptoms of hopelessness, helplessness or any suicidal tendencies during psychological testing. Thus, he did not meet criteria for a depression diagnosis. A discrepancy in his aptitude tests was found, suggesting a visual-spatial learning disability. A more extensive AD/HD checklist confirmed the earlier screening test. Unlike the AD/HD Adult Self-Report Screening Test (ASRS), the more detailed symptom checklist identified characteristic symptoms of both inattention and impulsivity.<sup>5</sup>

The psychiatrist reviewed the team's findings. Brandon had a persistent childhood history of AD/HD that was confirmed by speaking with Brandon's mother, reviewing old report cards and administering checklists. A family history (via his mother) was detected. A learning disorder was revealed, whereas depression was not. By synthesizing this data from the comprehensive assessment, AD/HD (combined type) was diagnosed. Depression was ruled out.

A stimulant medication was prescribed. Brandon's symptoms quickly improved. Brandon's concentration increased, his impulsivity diminished, and he felt more focused and productive. At the same time, Brandon entered the center's AD/HD counseling program. He was educated about his learning disability and advised to pursue classes that emphasized his cognitive strengths (writing) and those that avoided his relative weaknesses (mathematical calculations). With structural therapy, the family gained insight into his condition. Understanding and compassion began to replace blame. Within two semesters on medications and in therapy, Brandon transferred to a regional university. He is currently applying for a master's program in technical writing. He rekindled his relationship with his parents.

#### **Discussion**

Brandon's untreated AD/HD symptoms caused him frustrations that were misdiagnosed as major depression. AD/HD can look like depression, but the conditions are distinct and respond to different medications. AD/HD treatment can rapidly reverse feelings of underachievement and underproductivity.

Brandon's experience also underscores the importance of obtaining an accurate treatment history and

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ordering appropriate psychological testing. The team learned Brandon had an earlier failed trial of antidepressant medications. Since his symptoms had not previously responded to these medications, there was little reason to try this medication class again. By diagnosing his learning disability, the team was able to help him obtain academic accommodations (untimed testing, a note-taker, etc.). His tutor taught him valuable study skills. In many ways, Brandon's delayed diagnosis created an environment of self-doubt and cost him years of productive time.

## **Nancy**

Nancy had sought counseling years earlier. As a young teenager she struggled with an eating disorder. During times when she felt panicky, she would cut her arms superficially. She performed adequately in high school but never seriously applied herself. Several times she had engaged in supportive psychotherapy, yet little of this effort translated into a sustained clinical improvement.

Nancy's struggles persisted into young adulthood. Nevertheless, she excelled in ballet and for years she maintained a disciplined training schedule. Only in the last year had lingering injuries ended her dance career. Ostensibly, Nancy decided to seek treatment to discuss her anger over her lost vocation.

Her therapist extracted the following history. Nancy married a supportive husband five years earlier, but she felt hopeless about her future. Always sensitive—tears were common, particularly when she felt socially slighted. Her libido was absent-a circumstance which strained her marriage. Her husband wanted to start a family, but Nancy felt overwhelmed at the prospect. She slept excessively, but was constantly fatigued. She could not concentrate and felt inefficient and unproductive. She became dependent on caffeine and nicotine despite her awareness that these behaviors jeopardized her health.

Nancy's therapist began a trial of antidepressant medications. Three weeks after starting the medication, Nancy noted improvement. Her crying episodes were less frequent and her pervasive sadness dissipated. Most importantly, her suicidal thoughts vanished. She reported that as she felt better, her counseling sessions were more meaningful and she was now able to implement suggestions made in therapy. Her relief was evident.

Two months later, Nancy returned to her doctor. On antidepressants, her mood and anxiety symptoms were obviously better, but other symptoms persisted.



She had a lack of energy and felt fatigued. Her concentration was still poor and although some gains from the antidepressant were appreciated, Nancy still felt poorly. Increasing her medication added only minimal benefit.

Faced with her partially treated depression, Nancy's physician reviewed her psychiatric history and symptom inventories. Although her depression scores had fallen, Nancy's AD/HD scales remained elevated. Some of her mood symptoms had responded to treatment, but her cognitive complaints like memory, focus, energy and concentration had not. A long history of untreated impulsivity was detected. A diagnosis of major depression and AD/HD was made and a stimulant medication was added to the antidepressant.

This combination proved very helpful. Nancy noted improved energy and mood. Her productivity increased as she was more motivated. She spent less time sleeping and became more socially engaged. Nancy became more organized, bought and used a personal digital assistant (PDA) and felt much more in control of life. Two years later, her improvements have been sustained.

## **Discussion**

Nancy's case highlights the co-existence of AD/HD with major depression. Many patients require specific medications for each condition. Treating only the depression or just the AD/HD is insufficient.<sup>6</sup> Nancy noted that her best functioning was when she was actively training for ballet. She and her therapist realized that after her injury she no longer had this aerobic outlet, and her depression intensified.

Understanding the unique role of exercise in many

individuals with AD/HD is essential. Exercise, though a poorly understood mechanism, is an inherent way to combat symptoms of AD/HD and tension. When Nancy was injured and could no longer exercise, her depression worsened. Without an aerobic outlet she could no longer compensate for her AD/HD and depressive symptoms.<sup>7</sup>

Before the diagnosis of AD/HD and the addition of the stimulant medication, Nancy was viewed as having treatment-resistant depression. More than half of individuals treated with antidepressants do not have a full response.<sup>8</sup> The number that do not respond to antidepressant treatment because of undetected AD/HD is unknown, but suspected by some to be quite high.<sup>9</sup>

As she began to feel better, Nancy again considered becoming pregnant. She asked her physician about the safety of medications during pregnancy. More is known about selective serotonin reuptake inhibitor (SSRI) antidepressants than psychostimulants, but neither class is approved by the U.S. Food and Drug Administration as being safe during pregnancy. As of now, Nancy is unsure whether she is willing to stop her medications to become pregnant.<sup>10</sup>

#### Robert

Robert, a 47-year-old military veteran, began seeing his therapist with a chief complaint of depression. During his military service, his intermittently explosive behavior resulted in a diagnosis of borderline personality disorder. Since his military discharge, Robert had been unable to sustain employment. When he did work, he was frequently absent and performed inconsistently. His many employers complained of his tardiness, and co-workers were displeased by his moodiness. He fared little better in his personal life. Twice divorced, he had a series of tumultuous and unsatisfying relationships. Twice he had been arrested for domestic violence—both times following alcohol use. Yet despite his troubles, Robert seemed sincerely interested in securing help.

Medication treatment had primarily been with mood stabilizing agents used for bipolar disorder. On one medication he noted no benefits, on another his hair fell out. On antipsychotic medications he experienced unacceptable weight gain. Robert felt his most recent medication offered him a greater sense of calmness. But his mood swings persisted, he remained impatient, and his ability to organize and plan was still poor.





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Tipped off by the knowledge that Robert's 11-year-old son had been recently diagnosed with AD/HD, Robert's psychiatrist undertook a thorough diagnostic workup. AD/HD (combined subtype) was determined and a non-stimulant medication was prescribed in conjunction with the antidepressant.

Within weeks, Robert noted improvement. His impulsivity decreased, and he became less easily provoked to anger. He was able to concentrate and stay interested in mundane tasks. Angry outbursts became less frequent and his children and employer were more content. After six months of combined treatment and incremental improvement, Robert remarked that he had never felt better.

#### **Discussion**

Although not part of the diagnostic criteria, emotional lability—or constantly changing emotions—is commonly seen with AD/HD.<sup>11</sup>

These outbursts can be viewed as elements of a personality disorder, purely a substance use disorder or bipolar disorder. In fact, Robert had AD/HD plus major depression. Combining an AD/HD medication and an antidepressant elevated and stabilized his mood.

Since starting this regimen, he has enjoyed a sustained response over the past several years. With simultaneous Alcoholics Anonymous treatment, he remains sober and gainfully employed. His relationships with his children have greatly improved.

#### Conclusion

AD/HD and mood disorders are common, often comorbid conditions that are critical to identify and treat. As awareness and understanding of AD/HD in adults heightens, clinicians will need to be aware of this complex relationship. The reward of deciphering this diagnostic puzzle and prescribing correct treatments is gratifying to the individual with AD/HD and the doctor alike.

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