Chapter 6
Putting It All Together: Two CTNA Case Examples

Case #1. Dementia or Pseudodementia?

This is a case of a woman we'll call Jane. Jane sought a neuropsychological evaluation from me (Dr. Gorske), after seeing a neurologist, initially for a second opinion regarding medical problems she was having, but in the process she revealed that she had been experiencing memory and concentration difficulties that were affecting her work. She told her neurologist that she had noticed memory difficulties for many years, but over the last year, these seemed to worsen. She was worried that she might have a serious neurological problem, such as dementia, so she wanted to be evaluated in order to either put her mind to rest or begin some type of preventative treatment. I received the referral from the neurologist, with a prescription indicating that the purpose of the evaluation was to assess for a dementia or a pseudodementia. Jane was scheduled for about 2 weeks later.

When I met Jane, her level of focus and sense of purpose struck me immediately. I met her in the waiting room, and she immediately stood up, shook my hand (firmly, I might add), handed me the initial demographic paperwork that was sent to her, and followed me back to my office. In her arm was a briefcase that I assumed was full of folders and paperwork. We did a little bit of small talk on the way back about her drive, the weather, among other things. However, it was clear that she was ready to get down to business.

During the initial history-gathering session, another thing that struck me about Jane was how informed she was about the purpose of our meeting. Many patients I see do not understand why they are there and have done no research about what to expect, and we usually spend time explaining what a neuropsychological assessment is, how it can be useful, and what can be expected from the results. Jane understood that this was a neuropsychological assessment to assess if she had a dementia disorder or a pseudodementia (which she did not completely understand, so I provided her information). She understood the basics of what was to happen and that it was a lengthy process. Afterward, I filled in a few other details about what she could expect. From there, she pulled out some of her paperwork and provided me with a list of doctors she wished to have the results sent to. Additionally, she provided me with a handwritten list of

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her medications and their side effects and a list of medical problems and procedures she had experienced in the last 15 years and the types of complications she experienced (cognitive or otherwise) as a result of these illnesses and procedures.

We proceeded to discuss relevant history. It is rare that I come across an individual who reports their personal history as detailed and succinctly as Jane. Jane was a Caucasian female in her mid-50s. She had a graduate degree and worked most of her life in administrative and management positions. By all accounts, she was a highly intelligent, competent, and insightful person who was a self-described "go-getter," who has historically been mentally sharp up until she began noticing her cognitive difficulties. Jane had a history of multiple medical problems, including fibromyalgia, irregular heartbeat, and hypertension (controlled at the time of our meeting), and she had a bout with cancer for which she received chemo- and radiation therapy. There was no evidence in her history of a head injury, seizures, loss of consciousness, or any other incident that could compromise her cognition. She had been experiencing bouts of depression for which she was on an antidepressant and received periodic psychotherapy, but her mood symptoms did not impair her functioning to any significant degree. She was, however, dealing with many stressful situations. Her one grown child had significant mental health issues leading to periodic hospitalizations. Jane was divorced, and her marriage had been conflictual and stressful due to her husband's severe mental health issues. These, in addition to her multiple medical issues, her chronic pain, and her fears of not being able to work, all weighed on Jane. Yet she relayed all these experiences in a calm, intelligent, and insightful way, admitting that the stress takes a toll on her but that she would never think of giving up trying to live a meaningful life.

Jane's family history included members with mental health and substance abuse problems, and there were at least two distant relatives that were suspected of having dementia. The knowledge of these family members is what made Jane nervous because she was afraid of following the same path.

After completing her history, we proceeded with the neuropsychological testing. Jane showed fine endurance and persistence and seemed to give her best effort throughout. Thus, I felt the results were likely a good estimation of her abilities. After completing the tests, we scheduled a feedback session for 2 weeks later.

Jane was anxious and excited about the feedback session. She found the neuropsychological tests intriguing (she had never been tested before), and she wanted to learn the results and how they fit into her life. Her two questions were whether or not there was evidence of dementia and, if not, what could be the reason she has trouble remembering names and events?

I decided to address her first question about dementia because this obviously weighed heavily on her mind and because, in her case, the answer was easy. Jane performed in the high-average to superior range on all tests of intelligence, auditory and visual immediate and delayed memory and recognition, attention and working memory, episodic list-learning memory, executive functions (with

a few exceptions that will be discussed), and confrontation naming. All test scores fell between the 80th and 90th percentiles. Her memory was quite intact (and, in fact, probably better than mine!), and there were no signs of a dementing process based on her test results. This obviously put Jane at ease, but the question remained, why was she having these problems she's noticed?

We looked at her scores on the Controlled Oral Word Association Test (COWA), which included FAS and animal naming. Her scores on these tests fell in the average to low-average range, a considerable discrepancy, given her other scores. I asked Jane about her experience taking that test. She remembered that during the test, she began citing words that began with "F" and then had a brief moment of "blanking out." I asked her what was going through her mind at that moment. Jane looked at me and said that she was thinking to herself, "What is wrong with you? Are you stupid? You should be able to do this. You must be some kind of idiot?" I asked her what happened next. She stated that she began to become angry and berate herself for not being able to come up with more words. I then asked her if she noticed what happened to her when she was saying those things to herself. Jane thought for a moment and then began to nod and stated that she became more angry and tense, at which point her mind became a complete blank. I summarized the process Jane just described and asked her to tell me more about it.

Jane proceeded to tell me that she has always been very hard on herself. In work, with her children, and even when she was married to a severely mentally ill man, she placed high expectations on herself to take care of things and perform well. To perform meant to be a good mother, wife, worker, student, or whatever roles Jane adopted for herself. Whenever Jane felt she was not meeting expectations or, heaven forbid, actually failing at something, she would become very hard on herself and mentally berate herself. Usually this process was barely conscious to her. She recognized that she placed high demands on herself but had never fully realized the degree of harshness that was reflected in her thoughts. She recognized that she would become tense and unable to fluidly perform any task or duty, and she perceived herself as "shutting down."

Quite spontaneously, Jane then began to describe her early childhood years. She grew up in a family that expected high levels of achievement from her and her siblings. She further remembers never being able to please her parents for anything she did. If she brought home all *As* in school, there was no acknowledgement because that was to be expected. If she missed 1 out of 30 items on a test, she was asked why she missed that one. However, at the same time she received mixed messages. The boys in her family were held in high esteem, while the girls' accomplishments were overlooked. Jane never felt encouraged and validated in her competencies or accomplishments. However, instead of becoming hopeless, she tried even harder. The harder she tried, the more she achieved. However, the downside is that she became hypersensitive to any perceived failure. Any event perceived as a failure suddenly led her to experience a flood of anxiety while her past and present merged, and she began hearing a series of

cognitive injunctions that she was incompetent and inadequate. The anxiety created from this experience led her mind to shut down from stress.

For the last 10 or 15 years, Jane had been trying to be a good mother, wife, employee, and student and concomitantly had been trying to effectively deal with her own failing health. I described her experience as trying to juggle all these competing demands, all the while feeling intensely anxious and incompetent until her mind finally says, "Enough, I'm taking a nap!" The experience of her mind taking a nap is that she does not process information quickly, efficiently, and fluidly. As a result, she does not attend to and forgets things. This process was best described in Jane's description of her feelings during the neuropsychological tests. Most people experience some level of anxiety during testing because of the inherent performance demands. However, Jane said she felt the most relaxed she'd been in a while because she only had to attend to one task for a period of time. Her exemplary scores reflected what she is capable of when she is able to focus and concentrate without being distracted by her multiple daily stressors and harsh internal dialogue.

Our conversation answered many questions for Jane. Hearing that she was extremely bright with an above-average memory capacity was very relieving and validating for her. Our discussion about the way she deals with stress was something she partially knew about herself, but she had no understanding of how it was impacting her. We discussed ways she could use this information in her psychotherapy meetings. I suggested that she learn ways to identify when this "stress reaction process" is occurring and then find ways to counteract her stress response through relaxation, meditation, and mindfulness training in addition to some traditional cognitive therapy work. I suggested that a mindfulness-based cognitive therapy intervention could be very helpful now that she is armed with this experiential knowledge of how her thoughts and beliefs about herself contribute to the stress response, which in turn leads to inefficient cognitive processing. In reviewing her history, I also suggested the possibility that her medical conditions, in particular her bout with cancer, chemo-, and radiation therapy could be contributing to some of her lowered cognitive abilities as well. However, I leaned more toward anxiety being the culprit and suggested that she work on these therapy strategies and undergo retesting in 1 year. Jane readily agreed to this and seemed anxious to begin working on these issues.

Comment: I have seen many cases like this where the patient is a highly intelligent and accomplished woman in her early to mid-50s, who gradually becomes aware of a decline in her cognitive abilities. Most of the time, the results are similar to those of Jane's. Occasionally, I have had the unfortunate experience where the cognitive decline fits a mild cognitive impairment profile, and further neurological examinations suggest the patient is in the very early stages of dementia or some other neurological condition. Other times, the reasons for the cognitive changes have been related to medical conditions and sometimes hormonal imbalances related to change of life. Yet other times, the change is perceived.

Patients compare their cognitive abilities to the way they were at age 20 instead of accepting that there is normal-age cognitive decline.

In the cases like Jane's, I am struck by the history of where the patient, usually a woman, has grown up in an environment that has been invalidating to their intellectual initiatives. Young girls receive the message(s) that their intellectual achievements are not important or that nothing they do is good enough. For me, such cases have driven home the importance of finding a balance between encouraging our young girls' achievements and competencies while accepting and validating who they are as human beings.

Case #2: Brian's Brain

Brian was a 9-year-old boy referred for an evaluation at the Psychology Assessment Center at U.C. Santa Barbara. After seeing an advertisement for our services, his mother brought Brian to our clinic for the evaluation of a possible attention-deficit disorder. He had a 2-year history of inattention in school, some minor behavioral disruptions, and deteriorating peer relationships. Approximately 9 months prior to his appointment, he was started on a stimulant medication by his pediatrician. According to Brian's mother, the medication had mixed effects; although it seemed to reduce the amount of outbursts in the classroom, Brian seemed lethargic and "directionless."

Brian's mother was a well-groomed professional woman in her late 30s. She and Brian's father, an architect, had been married for 12 years, and Brian was their only child. Both she and Brian's father had college degrees and worked fulltime in professional-level occupations. There was no family history of ADHD, learning disabilities, psychiatric disturbance, or significant medical problems. Pregnancy and delivery were unremarkable, and all developmental milestones were achieved on time or early. Brian's health history was likewise unremarkable. All reports stated that Brian was a healthy and happy child.

Apparently, trouble began midway through first grade, where Brian began to lose focus in the classroom. He was often off-task, and teachers frequently had to redirect him to maintain his seat, complete his work, and keep appropriate boundaries with other children. He continued to have friends and playmates, but as his behavior became increasingly disruptive, these friendships were more and more strained. His mother tearfully recalled Brian's dismay at not having been invited to a classmate's birthday party a year ago. His teachers strongly urged Brian's mother to seek a consultation for stimulant medication. She was initially resistant to the idea, and instead, took him for a nutritional analysis, hoping for a dietary change that might be helpful. After 3 months of a specialized diet, Brian's condition did not improve. Reluctantly, she discussed the issue with her pediatrician, and he was started on his first course of medication. After a discussion with his physician and his mother, it was agreed that he would not be tested while taking medication.

Brian eagerly presented for neuropsychological assessment. He was easily separated from his mother and accompanied the clinician to the testing room. Throughout the evaluation he was curious, engaged, funny, and delightful to work with. He easily persevered throughout the lengthy process and appropriately asked for breaks when necessary. Despite his relatively good mood, Brian would often make disparaging remarks about his own abilities. Comments such as, "Oh, I bet this will be hard," "I don't know if I can, but I'll try," and "I might have screwed that up, but I'm not sure" punctuated his test performance. When asked why he thought that his performance was poor, Brian would often shrug or say, "Because I'm not good at this sort of thing." The examiner pressed him further to describe other times that he feels like this. He responded, "I don't know. In school, a lot of the kids really seem to be able to get stuff quickly, but I'm not as smart as they are. I'm not quick like that." Later, he said, "I feel stupid compared to other kids." He was encouraged through the assessment to try his best, and he was praised frequently for his hard work and diligence. At the end of the evaluation, Brian's mother was sent home with behavior-rating scales for her, her husband, and Brian's teacher to complete and return via mail.

Results of behavior ratings did, indeed, suggest clinical levels of attention problems and hyperactivity, both at home and at school. His teacher noted higher levels of inattention, but his mother reported higher levels of hyperactivity at home. However, Brian's father's report did not acknowledge significant concerns for either hyperactivity or inattention, but rather reflected concerns about depression and anxiety.

Strikingly, Brian's test results are nearly uniformly strong. Measures of cognitive, achievement, and memory were all in the high-average to superior range, with little scatter. Given the reason for referral, Brian was administered several tests of executive functioning and attention. Results of the Rey–Osterrieth, Wisconsin Card Sort, a Continuous Performance Test, Stroop, and COWA revealed no difficulty with organization, planning, sequencing, working memory, or sustained attention. In short, Brian did not display the cognitive markers for ADHD.

Brian was also administered several tests of personality and emotional adjustment including the Personality Inventory for Youth (PIY), incomplete sentences, Roberts Apperception Test, and the Rorschach. Briefly put, consistent with his father's report, Brian appeared to struggle with issues of negative mood, poor self-esteem, and anxieties about personal abilities, safety, and expectations of others. Brian noted that he is often inattentive, but these concerns did not seem to be of the same magnitude as his affective issues. In short, the same indecisiveness and lack of confidence seen in Brian's test-taking behavior was noted in the results of his emotional assessment.

Four weeks later, Brian and his mother returned for feedback. Although Brian's father had initially hoped to be present, a last-minute meeting called him away unexpectedly. Because of Brian's age, it was decided to present testing feedback separately to him and his mother. The discussion started alone with

his mother. Because the primary reason for referral related to the presence or absence of ADHD, this is where we began feedback. We began by asking Brian's mother how she expected that he did on the tests. "I don't know," she replied, "I'm assuming that he's pretty bright, but that he might've gotten really off track on things." To illustrate, we started by discussing the Continuous Performance Test that we administer via computer. After describing the nature of the test and that it was a good measure of sustained attention, she offered, "Oh boy, I bet he really bombed that." She was quite surprised to hear that he performed well on the task and all of the other measures of attention.

"So, what's going on?" she asked. Feedback went on to describe Brian's test-taking behavior, the comments he often made about himself, and his fears about the adequacy of his performance. "Does that sound like Brian?" we asked. She acknowledged that it did, but that she worried that this was a *reaction* to his cognitive problems. We went on to explain to Brian's mother that although he displays the behavioral symptoms of ADHD, these did not seem to have a primary cognitive origin. In our clinic, we call this a *functional ADHD*, meaning that the behavioral symptoms are present without any signs of cognitive correlates. In such cases, we begin to look for more social and emotional causes of inattention that might be attenuated by other forms of treatment, including psychotherapy, parent training, or family psychotherapy.

In attempting to answer the question of "the real issue," we spoke about the disagreement between her and her husband, which was reflected in the behavior-rating scales. "Well," she said, "Brian's father doesn't spend enough time with him to see all of these problems. He's often not around when trouble arises. When dad comes home, Brian is on his best behavior." We assured her that these scales did not communicate any *truth* about Brian's behavior, but rather were important in that they represented a disagreement about how they saw their son and the differential expectations they might have of him. We reflected, "How confusing it must be for Brian to have one parent who sees him like this [showing her dad's profile of scores] and one parent who sees him like this [showing her own ratings of Brian's behavior]. It can be difficult for kids to understand what's expected of them and whether they're a good kid or not." His mother responded, "Oh, I see what you mean. Things really haven't been very good at home between his father and me for some time now. We've been talking about separating and maybe even getting a divorce. Naturally, Brian doesn't know anything about this, but it's clear that we see him differently."

We went on to educate Brian's mother a bit about how children are often acutely aware of emotional issues between their parents, even if such issues are not discussed openly. We hypothesized that many, if not all, of Brian's symptoms might be explained by his fears about the integrity of his parents' marriage and his personal security in the midst of those issues. Brian's mother offered that maybe what was needed was some family psychotherapy to address these issues as well as some individual therapy to help Brian cope with the stressful situation.

Feedback with Brian was short, focusing mainly on reflecting to him that he was smart and that he should do well in school. The team acknowledged that we had "heard" Brian's emotional concerns and feelings that he often feels a little sad and worried about his abilities. We let him know that recommendations had been made to his parents about how they might be able to help him do as well as he possibly could.

In short, this case illustrates how testing data can reflect underlying issues that might not be neuropsychological at all. Brian's test-taking behavior was a great way to illustrate to him and to his mother that his issues were not cognitive ones, but emotional. Furthermore, rather than focusing on behavior ratings as a measure of Brian's *true* behavior, it was used to illustrate that there were different *perspectives* of him and what was causing his difficulties. These data can serve as a point of departure for future discussions, allowing all parties to begin with a common point of reference and a way of seeing their child.