CATEGORY 1

Verbal Patients Who Say Little: A Syndrome of Nondominant-Hemisphere Deficits

by Frederic E. Oder, M.D.

Educational Objectives:

- To provide practical guidelines for identifying patients with nondominant-hemisphere deficits.
- To alert psychiatrists of possible therapeutic misdirections.

A syndrome of nondominant-hemisphere deficits primarily affects some women, often causing serious problems in interpersonal relationships and in work.

As a result, these women are frequently referred for psychiatric evaluation and treatment. If the nature of the problem is unrecognized (which is often the case), the "therapy" that follows is usually unsuccessful.

Right—or nondominant—hemisphere dysfunction has received increasing attention over the past decade. The right hemisphere, richer in association areas and myelinated fiber tracts than its counterpart, is thought to have more connections to different parts of the brain than the left hemisphere.

Several adjectives have been used to contrast the differential functioning of the cerebral hemispheres. The left hemisphere is depicted as linear and sequential in its working mode, while the right hemisphere is assigned a more synthetic and integrative mode.

Research has tended to support the popular notion that the left brain is more "analytic" while the right brain is more global, more synthetic. Semrud-Clikeman and Hynd have suggested that a neuroanatomic substrate exists, pointing out that the left brain has predominantly short fibers between modalities, which would be most adaptable to analyzing and categorizing data, while the long, myelinated interregional fibers of the right hemisphere are better suited to bringing many inputs together in a process of integration.

Neurologists and neuropsychiatrists alike have described right-hemisphere syndromes, the best known being the syndrome of denial and neglect that is so frequently seen in stroke patients. Aprosody, an inability to invoke or comprehend the affective component of language, is thought to arise from right-hemisphere lesions. The nondominant hemisphere, according to Bear, may have a central role in the production and expression of emotion, mirroring the left hemisphere in the production of language.

The richest literature describing clinical nondominant-hemisphere syndromes is generated by neuropsychologists in their work with learning-disabled children. Learning disabilities affect mainly boys who have trouble with reading and language. A number of researchers have described patients with "nonverbal learning difficulties"—verbal children, mostly girls, whose learning, in the broadest sense, is impaired. These verbal children use language in an odd way and are often unable to comprehend nonverbal cues. They do poorly in novel situations and have great difficulty comprehending the ambiguity that accompanies interpersonal relationships.

Children with nonverbal learning disabilities mature into adults who tend to fail in work and personal relationships because of their nondominant-hemisphere pathology. As Strang pointed out, such patients are frequently referred for psychotherapy, and when their deficits are not recognized, this work, too, is doomed to end in failure.

Unlike attention deficit disorder (ADD) and the dyslexias, the syndrome of nondominant-hemisphere deficits is more common in females. The typical picture is of a young woman from a middle- or upper-middle-class background who may be verbal, animated and initially engaging. A history of average, above average or even superior academic performance may be elicited.

In taking a developmental history, it is instructive to talk to the parents of these patients when possible. One discovers that nondominant-hemisphere patients, as children, often showed little interest in toys. They may have been early language learners and early readers. Because of superior language abilities, teachers may not have perceived any problem. Indeed, their somewhat precocious verbal abilities tend to encourage these children to seek the company of adults instead of their peers. Finally, the parent may note that the child was somewhat clumsy and did poorly in sports or avoided sports altogether and had difficulties in mathematics, which contrasted sharply with the child's reading ability.

As adults, patients with nondominant-hemisphere deficits are hyperverbal and may sound more informed or insightful than they really are. They tend to string clichés together and to use stereotyped facial expressions and gestures. Their prosody may be flat or exaggerated, making them appear like poor actresses or actors.

Cognitively, these patients tend to be literal and sequential in their thinking, proceeding from one detail to the next or from one moment to the next as they recount something they have experienced. Their thinking proceeds only in one direction—forward—and has been likened to the process of stringing beads. Patients with nondominant-hemisphere deficits do not understand generalizations and consequently have trouble in "getting to the point." Inferences are difficult, so they are often baffled unless presented with abundant verbal information.

Novel situations calling for new solutions are especially distressing to patients with problems in the nondominant hemisphere. These patients tend to fall back on rote, using learned verbal solutions to problems that may be quite inappropriate. Employers note that they cannot "think on their feet."

Nondominant-hemisphere patients have difficulty with the affective component of communication as well. They may have a problem (as do alexithymics) in monitoring, identifying and expressing their feelings. Conversely, they may not comprehend the nuances of other people's affective tone in personal relationships.

All of these troubles are compounded by the patient's inability to recognize that a problem even exists. Many of these patients exhibit the denial that characterizes nondominant-hemisphere lesions, rendering them oblivious to their difficulty. Because of their penchant for denial, these patients are not accurate in their self-report. While they often will present a long history of what sounds like failures in work and relationships, they generally have no understanding of the dynamics of what has happened or even that they have failed.

Personal relationships are impoverished in this group of patients. Denial, coupled with difficulty "reading" other people, may place them at especially high risk for abusive relationships. Often there is an intense, clinging attachment to one person. In the case of a girl or young woman, this person may be the mother who herself may have similar deficits. The Canadian neuropsychologist Rourke describes a waiting room scene involving such a dyad that is diagnostic. The mother and daughter "carry on a verbal interaction almost indefinitely, the content of which is reminiscent of two adjacent motorized sidewalks in an airport moving in opposite directions. That is, what one says bears little or no relationship to what the other is saying—almost as though they were oblivious to virtually every aspect of the relationship except for the comfort that each rather obviously feels in rattling on with verbiage that can twist and turn in any direction so long as the air remains filled with words. It is not uncommon to observe both parties talking about different things at the very same time, and seeming completely oblivious to the communicative intent or content of each other's discourse."

Failures at work are common with these patients. Motor clumsiness often puts more menial jobs (waitressing, for example) out of their reach. Many people tend to experience these patients as exasperating, as having difficulty "seeing the forest for the trees," which makes working with other people difficult, except on a superficial level. In higher-level occupations, employers are inevitably disappointed by a lack of creativity and initiative that belie the patient's initial good presentation and impression.

Case History

The patient, 34, was a married schoolteacher who had been encouraged to seek psychotherapy because of "rigidity" in the classroom, according to the school's principal. She was in good general health with no prior psychiatric history and no history of substance abuse. Family history was strongly positive for affective illness; the patient's mother and maternal grandmother had been hospitalized for depression.

The therapist was soon puzzled. This was a verbal woman, obviously not psychotic, but something was wrong with her thinking. When the therapist attempted to gingerly portray his confusion about the nature of the patient's problem, he was brushed aside with a cliché as the patient kept talking.

The therapy sessions were uncannily alike. They met early in the morning during one summer. The patient would sit down and launch into a long monologue. The therapist, to his mounting consternation, found that he was unable to remember even a semblance of this woman's life story. Flooded with detailed descriptions of disconnected people and events, the therapist felt increasingly frustrated and seized upon the beginning of a new school year as an excuse to terminate.

Several years later this woman was hospitalized for an episode of severe depression. The patient's verbiage attracted the attention of several staff members. Neuropsychological testing revealed a constellation of right-hemisphere deficits including notable confusion on Wechsler constructional subtests and a part-oriented, weakly organized Rey-Osterrieth Complex Figure Copy. A more thorough developmental history revealed a triad of findings common in this population:

(Please see Verbal, page 16)

Psychiatric Times - Category 1 Credit

To earn Category 1 Credit, read the "Nondominant-Hemisphere" article, complete the application for credit and mail with your $10 payment to **CME, Inc.**

You must keep your own records of this agreement. Photocopy this coupon and include it in your continuing education file for reporting purposes. CME, Inc. certifies that this learning module, when used and completed as designed, qualifies for up to one hour of Category 1 Credit toward the Physician's Recognition Award of the American Medical Association and the CME requirement of the American Psychiatric Association. CME, Inc. is accredited by the Accreditation Council for Continuing Medical Education.

Application for CME Credit

I have carefully studied this article.

Signature:_____ Date:_____

Name:_____ Degree:_____

Address_____

City:_____ State:_____ Zip:_____

Phone: (_____)_____

Social Sec. #:_____ Birthdate:_____

☐ $10 Check payable to **CME, Inc.** is enclosed.

Clip this coupon and mail with payment to:

Cat. 1, 1/94—CME, Inc. • 1924 E. Deere Ave. • Santa Ana, CA 92705-5723

Verbal

Continued from page 15

clumsiness, good verbal and reading skills and poor performance in math.

Therapist's Reaction

Therapists (not unlike employers) initially may respond to this group of patients with enthusiasm, especially to the more intelligent, higher functioning ones. These are, after all, highly verbal people who are superficially engaging and have spent years learning how to please teachers and parents.

Pleasure at meeting a "verbal" patient with whom one can do traditional psychotherapy rapidly dissipates once a session or two of history-taking ends. In a less structured session, in which one might want to talk about what seems most important to the patient and to begin to develop an idea of repetitive patterns of difficulty, the patient talks and talks, flooding the listener with endless adjectival detail, but with no sense at all of what the problem really is or what the patient considers important. The therapist soon becomes aware that he or she has no ability to accurately and effectively understand this patient's inner experience. The therapist, in other words, tries to empathize with the patient and only becomes confused.

As time goes on and no movement occurs, the therapist will invariably label the patient's mode of thinking as a "resistance" that needs to be clarified and "understood" so that important material can emerge in the therapy. This is a pivotal mistake. Depending on the vigor with which the therapist launches this confrontation, the reaction in the patient will range from apparent bafflement to feeling assaulted. In any case, the result is invariably the same: The patient continues to talk.

The therapist is then placed in a situation not unlike that which confronted Brer Rabbit and the Tar Baby in *Uncle Remus: His Songs and Stories*, only in this case it is not the Tar Baby's silence that invokes increasing frustration. Aided by the process of denial, the patient talks, perhaps even more earnestly, in an attempt to hold the therapist with words, and is mystified when the therapist inevitably communicates displeasure.

Once stuck, the therapist often remains so. Many endeavors in psychotherapy that are not going well end mercifully quickly with a tacit acknowledgment from both parties that something is not clicking. With a patient with nondominant-hemisphere deficits, however, it is usually not that simple. The patient, again, may have inordinate difficulty recognizing that the work is stalled and that the therapist is confused. If the therapist is unaware of the patient's cognitive problems, then he or she assumes the untenable position of the person who urged the leopard to change his spots.

Interface with Other Disorders

Blocked from success in work and love, these patients are vulnerable to other psychiatric disorders. No studies presently exist to describe the incidence of comorbidity, but it is easy to imagine a marked overlap of nondominant-hemisphere deficits with substance abuse and affective illness.

It is in the area of character pathology that nondominant-hemisphere deficits may make the most significant and often unrecognized contribution to psychopathology. In 1942, the analyst Helena Deutsch wrote a paper describing what would become a famous psychiatric typology, the "as if" patient. The cases presented by Deutsch were young women who drift from one very different social setting to another, appearing to take on the superficial trappings of whichever group they are with, and fading into the background. She compared them to passionless actresses, unable to communicate with warmth: "...the individual's whole relationship to life has something about it which is lacking in genuineness and yet outwardly runs along 'as if' it were complete. Even the layman sooner or later inquires, after meeting such an 'as if' patient: 'What is wrong with him or her?' Outwardly the person seems normal. There is nothing to suggest any kind of disorder. Behavior is not unusual, intellectual abilities appear unimpaired, emotional expressions are well ordered and appropriate. However, despite all this, something intangible and indefinable obtrudes between the person and his fellows, giving rise to the question, 'What is wrong?' " The answer to that question may well lie in nondominant-hemisphere deficits.

Although the "as if" personality never reached *DSM* status, it has been influential in analytic thinking about the borderline personality. Such writers as Meissner accord it a place in describing the spectrum of this condition. The borderline personality characteristically is given to stormy, unregulated, even exaggerated outbursts of affect. Might a part of the problem lie in an inability, based on right-hemisphere compromise, to properly express and modulate feeling states? Similarly, these patients are prone to vastly exaggerate the affective productions of others. The characteristic idealization and devaluation of these patients may have, at its base, a faulty mechanism for processing incoming affect. One obvious consequence of such a deficit is the brief intense relationships of borderline patients. The relationships are quickly entered into and equally quickly abandoned at the first hint of rejection.

Patients with nondominant-hemisphere deficits exist along a wide spectrum. As with any syndrome in medicine, ranging from something as "simple" as pneumonia to something as "complex" as diabetes mellitus, variation in clinical presentation is the rule. This variation is all the more apparent in a syndrome involving an organ that is nearly infinitely complex, the human brain.

Dr. Oder is a psychiatrist in private practice in Gloucester, Mass.

References

1. Bear D. Hemispheric specialization and the neurology of emotion. *Arch Neurol.* 1983;40:195-202.
2. Deutsch H. Some forms of emotional disturbance and their relationship to schizophrenia. *Psychoanal Q.* 1942;11:301-321.
3. Meissner W. *The Borderline Spectrum.* Northvale, N.J.: Aronson; 1984.
4. Mesulam M-M. *Principles of Behavioral Neurology.* Philadelphia: F.A. Davis; 1985.
5. Nemiah JC. Alexithymia: theoretical considerations. *Psychother Psychosom.* 1977;28(n1-4):199-206.
6. Osterreith P, Rey A. Le test de copie d'une figure complex. *Arch Psychologie.* 1944;30:206-356.
7. Ozols EJ, Rourke BP: Dimensions of social sensitivity in two types of learning disabled children. In: Rourke BP, ed. *Neuropsychology of Learning Disabilities: Essentials of Subtype Analysis.* New York: Guilford; 1985.
8. Rourke BP. Central processing deficiencies in children: towards a developmental neuropsychological model. *J Clin Neuropsychol.* 1982;4:1-18.
9. Rourke B, Young G, et al. Adult outcomes of central processing deficiencies in childhood. In: Grant, Adams, eds. *Neuropsychological Assessment of Neuropsychiatric Disorders.* New York: Oxford University Press; 1986.
10. Semrud-Clikeman M, Hynd G. Right hemispheric dysfunction in nonverbal learning disabilities: social, academic and adaptive functioning in adults and children. *Psychol Bull.* 1990;107:196-209.
11. Springer S, Deutsch G. *Left Brain, Right Brain.* 3rd ed. New York: W.H. Freeman and Co.; 1989.
12. Strang JD, Rourke BP. Adaptive behavior of children with specific arithmetic disabilities and associated neuropsychological abilities and deficits. In: Rourke BP, ed. *Neuropsychology of Learning Disabilities: Essentials of Subtype Analysis.* New York: Guilford; 1985. ❐