



LET'S TALK

...FOR PEOPLE WITH SPECIAL COMMUNICATION NEEDS

Cognitive-Communication Problems Following Right Hemisphere Damage

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Description of the Communication Disorder

The right hemisphere of the brain may be damaged as a result of stroke, traumatic injury, surgery, or infection. Historically, the right hemisphere was called the “minor” hemisphere, and was thought to play an insignificant role in communication. More recent studies have identified communication problems associated with right hemisphere damage; such problems include inadequate answers to questions, inappropriate content, unrelated details, and difficulty staying on topic. It is important to note that many individuals with right hemisphere damage are not aware that their communication is disrupted.

Possible Causes

Although family members often describe individuals with right hemisphere brain damage as “having no trouble talking,” they may in fact demonstrate more subtle communication problems. The communication deficits of individuals with right hemisphere damage are usually not specific to problems with grammar or word retrieval. Rather, they more likely result from problems in cognitive areas such as attention, perception, memory, organization, reasoning, and problem solving. Consequently, the resulting communication problems are often referred to as “cognitive-communication” problems.

Potential Consequences

Depending on the nature of the cognitive breakdown, specific difficulties may result that interfere with daily activities and the ability to return to work or renew leisure activities. For example, an individual with right hemisphere damage frequently experiences disorientation, difficulty identifying time and place, which may lead to confusion. Memory disturbances are common and may interfere with the ability to learn information or relearn previously acquired information. Disturbances in attention may also occur. As a result, individuals may have difficulty concentrating on a specific task for more than a few seconds or minutes. Concentrating on a task may become more difficult when there are a lot of distractions in the environment or when the individual has to do more than one thing at a time, such as cooking dinner while talking on the phone.

Left-Side Neglect

Left-side neglect is one of the most notable disorders of attention that may occur. Left-side neglect means that the individual is not aware of, and does not respond to, items in the left side of space. Left-side neglect may hinder basic daily activities, such as grooming and dressing, and may interfere with reading and writing. For example, the individual may shave only on the right side of his face, overlook food on the left side of the plate, or ignore words on the left side of the

page during reading. The person may bump into furniture on the left side during walking, and in severe cases, may even ignore the left side of his or her own body.

Deficits in higher level cognitive areas of organization, reasoning, and problem solving may also occur. When an individual with right hemisphere damage retells a story or event, the person may sequence the events incorrectly or retell the events without interpreting their significance. The individual may also experience difficulty understanding the meaning of abstract language such as jokes and proverbs.

Social Judgment

Problems in social judgment — knowing what is appropriate and inappropriate — are often present. Pragmatics is an important aspect of social judgment and involves, in part, the ability to use and interpret nonverbal aspects of communication that supplement the words we use. For example, a scowl on the face and an angry tone of voice indicate the true feelings of the speaker regardless of the words being said. Individuals with right hemisphere damage have difficulty interpreting a speaker’s facial expression and body posture, and therefore may lose the true intent of the message. Their expression of emotional tone, which is conveyed through their own use of facial expression, gesture, body language, intonation, volume, and rate of speech, may also be impaired.

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They are often described as having “flat [expressionless] affect,” with speech in a monotone. Other problems, such as reduced eye contact, may be evident during conversation.

Who Intervenes

When an individual demonstrates problems affecting oral and written communication skills, referral to a speech-language pathologist is warranted. Based on the results of an evaluation, the speech-language pathologist determines the need for treatment. Together with the individual and family, the speech-language pathologist identifies goals and develops a treatment plan to achieve these goals. The speech-language pathologist uses a variety of treatment techniques that focus on improving communication skills and/or the underlying cognitive skills. Both individual and group communication treatment may be appropriate.

Suggestions for Caregivers

- Provide a consistent routine and structured activities to decrease confusion.
- Place orienting materials, like clocks and calendars, in highly visible areas.
- Minimize distractions so the individual can concentrate on the task at hand (e.g., turn off the radio or television, keep table surfaces clear of everything except items needed for the activity).
- If left-side neglect is present, position yourself on the person's right side when conversing, and avoid rapid movement around the individual. Rearrange the environment by putting objects and materials in the person's right visual field.
- Organize the home environment to aid memory (e.g., keep items in the same place, reduce clutter).
- Break up tasks into smaller steps. Encourage the individual to slow down during tasks to reduce impulsivity. Encourage repeated

practice of tasks so they become more automatic.

- Establish eye contact before initiating conversation or giving messages.
- Repeat and rephrase directions.
- Encourage the individual to repeat and rehearse instructions to ensure understanding and retention of important details.
- Ask questions during conversation to ensure that the person is remembering details and following topic changes.
- If the individual goes off on a tangent, remind him or her of the topic at hand.
- Be concrete and direct in language use; avoid idioms and metaphors or sarcasm. Do not be disappointed if the person does not appreciate humor.
- Be aware that the individual's lack of facial expression or monotone voice does not necessarily indicate disinterest.
- Use words to express your thoughts and emotions. Do not rely on facial expressions or body language alone to express your feelings, because these may be misinterpreted.

- Always provide sufficient supervision to ensure safety. You cannot force an individual into awareness. Some individuals may believe that nothing is wrong with them and refuse to give up activities like driving, or resist supervision in such activities as using the stove.

For more information, or to obtain a referral for a certified speech-language pathologist, contact the American Speech-Language-Hearing Association at 800-638-8255 or www.asha.org.

ASHA Resources:

American Speech-Language-Hearing Association at 800-638-8255 or www.asha.org

American Stroke Association at www.strokeassociation.org

National Stroke Association at www.stroke.org

Heart and Stroke Foundation of Canada at www.heartandstroke.ca

Mayo Clinic at www.mayo.edu/cerebro/education/stroke.html



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