READING REHAB

by Margaret Greenwald, Ph.D.
Member, American Speech-Language-Hearing Association

Stroke often produces reading difficulties. This "acquired dyslexia" or "alexia" may occur with or without other language challenges and even when writing ability is intact.

The inability to read interferes with work and recreation for many survivors, making it difficult to follow written instructions, pay bills or use the computer. The ease and pleasure of reading is often replaced by effort and frustration. However, many improve their reading through spontaneous recovery, direct practice or compensatory strategies.

THE GEOGRAPHY OF DYSLEXIA

Stroke causes many different types of dyslexia. This variety reflects two things: 1) the way normal reading ability is organized in the brain, and 2) the size and location of an individual stroke. The brain's left hemisphere supports most language functions, including reading, but the right hemisphere does have some normal reading ability. Because of this, a person with a left hemisphere stroke can regain some reading ability via the injured left hemisphere as well as the right hemisphere.

A VARIETY OF FORMS

Silent reading can be easier than reading aloud following stroke. This is because word retrieval is a lingering challenge for nearly all stroke patients, and this difficulty in recalling words for speech can affect reading aloud just as it affects conversation. On the other hand, some individuals have a hard time recognizing written words and/or understanding their meaning.

Certain types of words, such as irregularly spelled words or abstract ones, may be harder to read than regularly spelled or concrete words. There may be a difference in a survivor's ability to read single words versus sentences or paragraphs.

SOME WAYS AROUND THE READING BLOCK

To compensate, many individuals use audiotape resources such as Books on Tape. Instructional materials for many hobbies and interests are available on audiotape and videotape, and current technology lets computers scan text and read aloud.

The reading demands of some daily activities can also be reduced with new routines or strategies. For example, taking recognizable product logos to the grocery store instead of a written shopping list.

Some At-Home Treatment Ideas

Treatment often helps survivors with dyslexia. Many speech-language pathologists are trained to diagnose acquired dyslexia and can recommend treatment or home-practice strategies appropriate for each person's unique pattern of dyslexia. However, the process of reading recovery is complex and largely depends on the location and severity of the stroke.

The following suggestions may help survivors with reading difficulties:

"Sounding out" letters. Individual letters or letter combinations such as B or CH can be presented and the survivor asked to say the corresponding sound. In this exercise it is not correct to provide letter NAMES. The sound should be produced. For instance, the letter "S" makes the "ssssss" sound.

Begin with a small set of letters to sound out, and add more letters gradually over many practice sessions until the survivor can sound out all the letters of the alphabet plus SH, CH, PH and TH. This approach works because many English words can be read correctly by sounding out the letters and then blending the sounds to make a word. For some survivors, learning to sound out even the first letter of a word can assist word retrieval during reading.

Naming letters. Some survivors are able to pronounce words that are spelled aloud to them. For example, they are able to say the whole word "boat" if someone first spells it aloud — B-O-A-T. These individuals may learn to spell words aloud to themselves by naming each letter.

Although some people begin using this strategy on their own, it eludes others who have difficulty saying the letter names. These people may benefit by practicing saying the letter names. This may eventually help them spell written words aloud. Although this is a slow process, it is one way to achieve some functional reading. Survivors who are already using this strategy may be able to increase their reading speed by reading a paragraph over and over.

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Recognizing and/or understanding whole words. Some survivors have particular difficulty reading whole words that cannot be sounded out, such as "yacht" or "island." For these people, pairing a written word with the corresponding picture may help them recognize the word and understand its meaning. Here are several ways survivors can learn to pair written words with their meanings:

a) Read magazine or newspaper headlines and look at the associated pictures.

b) Surf the Internet for Web pages where words and pictures are paired.

c) Watch television with written words on the bottom of the screen.

d) Listen to an audiotape while looking at the corresponding written words.

Note that these tasks require only silent reading, not reading aloud.

Focusing visual attention. Some people with acquired dyslexia have difficulty reading sentences or paragraphs because they can't focus their visual attention on one word at a time. Visual distraction can be reduced by cutting a "window" in a piece of paper and then moving the window along a line of text so that it can be read one word at a time.

These strategies and exercises can help survivors with dyslexia improve their reading ability. There is ongoing research into acquired dyslexia, and speech-language pathologists will use this research to develop new treatments for improving the ability to read after stroke.

For more information or to find an ASHA-certified speech-language pathologist in your area, call ASHA's Action Center at 800-638-8255, e-mail ASHA at stroke@asha.org or visit ASHA on the Web at www.asha.org. SC