

Gestures and Other Nonverbal Alternatives
A Discussion Session

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Seven questions were discussed by the group.
The following is a summary of each response.

1. How beneficial is an Amerind sign program to aphasic patients?

Most participants reported using Amerind sign in conjunction with other signs (emblems) in groups consisting of severe aphasic patients who were almost as impaired in gestural output as they were in verbal output. Minimal change had been seen in many of these chronic patients over several years; change does come, but slowly. Although most acquire at least a few signs, these patients rarely used more than one gesture at a time and rarely substituted or added signs when the initial gesture failed to communicate the message. Perhaps a point is reached where patients are "overcued," responding in a stimulus-response fashion without functional comprehension of the true intent of the sign. Recognizing that Amerind was originally intended for glossectomies and other patients with intact central nervous systems and use of both hands, the best treatment approach appeared to be to allow the patient to generate his/her own gesture if an Amerind sign is too difficult for him/her to master. While a pointing board may be used to reinforce or to substitute for the acquisition of gestures, a visual program such as Dr. Helm's Visual Action Therapy should be pursued if failure continues.

2. To what extent can pantomime and other improvised gesture be used by aphasic patients?

Rather than teach a patient specific gestures, we can try to help him/her develop further his/her ability to pantomime. Schlanger and Horner were referred to as having demonstrated that aphasic patients can learn aspects of pantomime. Perhaps some patients are more receptive to pantomime because of their past experiences with games like "charades" and other spontaneous uses of pantomime. This approach is fully compatible with a gestural program using Amerind sign.

3. How could drawing serve to compensate for verbal output problems? Could drawing facilitate the teaching of pantomime and Amerind to aphasic patients?

During gestural treatment, patients frequently attempt to "draw" the outline of the object in the air rather than use the gesture. A patient's premorbid artistic ability would be an important factor to consider. Also, patients with visual problems or bilateral involvement would be poor candidates for this approach. If on graphic subtests in the PICA and the Boston, a patient draws objects instead of writing words or sentences, this may suggest the communicative potential of drawing for the patient. Although limited in the amount and type of information it can carry, drawing may be a suitable avenue of communication for the severely impaired aphasic patient.

4. What problems would you anticipate when attempting to teach an aphasic patient the use of a speech synthesizer (e.g., Handivoice)?

Two participants reported using the Handivoice 110 and 120 with moderately-impaired aphasic patients, both of whom had achieved minimal success. The patients were not at functional levels. Problems included inability to remember numbers and words and inability to understand the synthesized speech output. Other drawbacks of commercially available units included the expense of a speech synthesizer and the inability to economically construct a personalized vocabulary. Another participant reported that the Handivoice is being used fairly successfully in a program at St. Anthony's Hospital in Columbus, Ohio. Dr. Florance and the rest of the staff there have a research grant on utilization of the Handivoice in aphasia. They have apparently adapted many of the matrices that go on the Handivoice, making the matrices simpler and more appropriate for aphasic patients. The group agreed that patients who had little or no verbal ability but had other good skills (e.g., auditory comprehension, visual memory) would probably be good candidates for training using the Handivoice. Of course, they are also good candidates for other treatment interventions, such as MIT and Amerind. It is unlikely that "globally" aphasic patients, who have difficulty with most everything attempted, would achieve functional success on a device such as the Handivoice.

5. Under what conditions might a computer be an appropriate alternative to verbal output for aphasic patients?

No one in the group was currently using a personal computer or computer terminal with an aphasic patient. The possibilities were discussed. A computer screen could present words and pictures (some computers can also present speech) to a patient who could respond by using a light pen on the screen or by pressing one or more keys on the keyboard. The computer could give feedback, select the next appropriate step and document progress. Computers could be used in hospitals with special application for chronic outpatients who could each have their own personal entrance code into the computer for access to their own treatment program. The price can be less than that of a speech synthesizer and a patient may wish to purchase one for home use.

6. How effective is the use of videotape feedback when teaching gestural modes of communication to aphasic patients?

A mirror may be handy and inexpensive, but it does not retain the information for later review as does videotape. Videotape offers the patient the opportunity for delayed (visual and auditory) feedback so he/she can assess more objectively his/her performance. Also, the recorded image (as with a facial expression or hand gesture) can be viewed repeatedly and can be enlarged on the TV monitor screen for closer inspection. Finally a patient's baseline performance can be stored for review by the patient at various points along the treatment program.

7. What about the telephone?

The "Speak and Spell" electronic game has been used by one nonverbal aphasic patient to communicate over the telephone. Although all words are not spelled correctly, the listener can usually guess the intent of the message. Other telephone strategies were discussed. For emergencies, the patient can dial "operator" and then start a pre-recorded message on an

inexpensive cassette tape recorder to inform the operator of the problem, the address, and so on. This may be adapted for calls to family, friends or neighbors (using preset automatic dialing machines) using different cassette recordings with the peoples' names or pictures on each cassette.