Role of AAC Intervention for Adults in Middle Stage PPA

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Abstract

Primary Progressive Aphasia (PPA) is an atypical form of dementia characterized by core memory functions remaining intact even as deficits in language appear and worsen (Mesulam, 2003). Mesulam (2003) and Kertesz and colleagues (2003) have described language changes associated with PPA but limited evidence is available to guide clinical intervention practice as the disorder progresses over time. The purpose of this study was to identify how often and what type of intervention was required to maximize outcomes of treatment for two adults with a medical diagnosis of PPA or probable PPA. Results summarize outcomes of staging communication intervention as well as the AAC intervention approach used with each person.

Introduction

Adults with a medical diagnosis of Primary Progressive Aphasia (PPA) face an uncertain future. PPA is considered an atypical dementia resulting in a loss of language functioning over time while memory remains intact for a period of at least two years (Weintraub, Rubin, and Mesulam, 1990; Mesulam, 2003). In many cases, cognitive changes occur in middle to late stage PPA. Kertesz, Davidson, McCabe, Takagi, and Munoz (2003) describe the progression of PPA in stages related to time post-onset of the language impairment. Early stage is onset to two years; middle stage is three to four years; and late stage refers to more than four years post-onset of language symptoms. Given the progressive change in language and/or cognitive skills, adults with PPA often benefit from speech-language therapy to ensure the person continues to communicate as independently and effectively as long as possible. There are case studies in the literature describing an AAC approach to intervention for people with PPA (Cress & King, 1999; Murray, 1998; Rogers & Alarcon, 1998); however, there is limited evidence documenting when and what type of AAC intervention best meets the communication needs of adults with PPA over time as their disease progresses.

Purpose

The purpose of this study was to follow two adults with a medical diagnosis of PPA or probable PPA over time to identify how often and what type of AAC intervention maximized the outcomes of treatment.
Methodology

Participants. Two adults with a medical diagnosis of PPA or probable PPA were referred to the researcher for speech-language intervention. The adults were in the middle stage of PPA given that they had each experienced changes in their language for at least two years and had begun noticing changes in their cognitive functioning.

Data Collection. The adults participated in quarterly meetings to assess language, cognitive, and communication changes as well as identify communication needs for intervention. An intervention plan was established during each session which focused on teaching the use of AAC strategies and techniques to assist the person with PPA and his/her communication partners to compensate for their language impairment and maintain their current level of communication for as long as possible.

Intervention. Each participant received speech-language therapy using an AAC approach. The specific approach used was Proactive Management. This approach to treatment for adults with PPA is summarized in King, Alarcon, and Rogers (2007), Rogers and Alarcon (1998), and Rogers, King, and Alarcon (2000). Each participant and a communication partner were interviewed to determine current communication needs and anticipate future communication needs. Intervention was then provided to the participant and his/her communication partner. All treatment services were provided by a certified, licensed speech-language pathologist.

Data Analysis. Impairment level assessment of language and cognitive skills was collected at each quarterly meeting. In addition, intervention strategies, and techniques, as well as partner training sessions were summarized for each participant as it related to enhancing or maintaining participation in a desired communication activity. Changes in impairments as well as activities and participation were evaluated and compared between quarterly sessions to determine necessary staging of intervention.

Results

Treatment outcomes will be provided for each participant as well as how intervention maintained participation in communication activities even though impairment level changes in language and cognitive functioning were identified. Guidelines for staging speech-language intervention using an AAC approach for adults with PPA will also be provided.

I have gathered baseline data on the two participants and I have scheduled a second meeting for May 2007. I will also have a third visit completed in August 2007 for each participant. Baseline data revealed different aphasia symptoms across the participants as well as varied communication needs, see Table 1. Insight and spousal support were key factors in the successful implementation of treatment techniques.

Conclusions

I anticipate the results will enhance service delivery of adults with PPA or probable PPA by providing evidence that an AAC approach to intervention allowed participants to remain engaged in desired communication activities for longer periods of time and with more success than without treatment. Many individuals with a medical diagnosis of a degenerative type of dementia are not routinely assessed and treated by speech-language pathologists. Periodic
diagnostic treatment with adults with PPA may enhance participation in communication activities.

Clinical Implications

The potential implications of this study are to recommend a time frame for diagnostic treatment as well as identify successful AAC treatment strategies and techniques for adults with a diagnosis of PPA or probable PPA as the disease progresses.

References


Table 1. Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Aphasia Type</th>
<th>TPO¹</th>
<th>Comm Needs²</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>82</td>
<td>Moderate Expressive</td>
<td>5</td>
<td>Taking telephone messages</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Communicating at card games</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Independently writing her own</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>grocery list, writing messages</td>
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<tr>
<td>MA</td>
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<td>Mild Expressive</td>
<td>2</td>
<td></td>
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in note cards

1 TPO refers to time post onset of aphasia symptoms in years
2 Comm Needs refers to examples of current communication needs