The SunCIST Program – a Clinical Approach for Intensive Aphasia Rehabilitation

Kirmess M.¹,*, Becker F.¹, Günther L.², Hvistendahl A.²

¹ Sunnaas Rehabilitation Hospital & University of Oslo
² Sunnaas Rehabilitation Hospital

Background

Research suggests that intensive, repetitive and purpose specific language therapy for persons with aphasia can lead to improvement in language skills, also when it is carried out over shorter time periods and in the chronic stage (Berthier & Pulvermüller, 2011). One of the treatment approaches that implements these principles is constraint induced language therapy (CILT), which aims on improving acquired expressive language deficits after stroke. Sunnaas Rehabilitation Hospital offers a clinical program for intensive language treatment for persons with chronic aphasia which incorporates CILT, the SunCIST program.

The aim of this paper is to present the SunCIST program, preliminary results from the pilot study and directions for further program development.

Methods

SunCIST is carried out as a 3 week, inpatient intervention for groups of six patients. In addition to CILT two hours a day, the program has an interdisciplinary group approach that also focuses on psychosocial and physical aspects, as well as use of language skills in natural social situations. CILT involves card game activities using high- and low-frequency picture stimuli with communicative relevance at four levels of complexity, applied in a small group of three participants by a trained SLP (Kirmess & Maher, 2010). Overall, SunCIST offers an average of 45 hours with structured language activities, as well as 30 hours of other group activities within a 15 working day schedule.

All participants completed a standardized assessment protocol (three subtests of The Norwegian Basic Aphasia Assessment (NGA), PALPA (54) and a CILT specific assessment) on the first and the last day of the program. So far, eight groups including 46 persons with chronic aphasia (Mean = 3.4 years post onset, SD = 3.25) ranging from severe to mild have successfully participated in the SunCIST program, whereas one person dropped out.

Results

Despite large variation in aphasia severity and individual differences in time post onset, all participants showed a positive pre-post change on at least one subtest. Using paired samples t-test, improvement for all subtests was found ($p < 0.001$). Participants evaluated SunCIST as a positive experience and useful approach.
Discussion

Results from this pilot study support previous research studies applying CILT and the possibilities for improvement many years after the onset of aphasia. The SunCIST program allows persons with aphasia to address communication skills in a group setting which also includes several others activities within an inpatient environment. Therefore, other factors than the CILT treatment alone should be considered as influential to the outcome changes in language skills. Those may include external factors as for example the group membership and the availability of communication partners, as well as individual characteristics as motivation, severity of stroke and personality. Future research is planned to explore some of these factors in a control group design.

References
