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[Intervention Review]

Speech and language therapy for aphasia following stroke

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ABSTRACT

Background

Aphasia is an acquired language impairment following brain damage that affects some or all language modalities: expression and understanding of speech, reading and writing. Approximately one-third of people who have a stroke experience aphasia.

Objectives

To assess the effectiveness of speech and language therapy (SLT) for aphasia following stroke.

Search methods

We searched the Cochrane Stroke Group Trials Register (last searched June 2011), MEDLINE (1966 to July 2011) and CINAHL (1982 to July 2011). In an effort to identify further published, unpublished and ongoing trials we handsearched the *International Journal of Language and Communication Disorders* (1969 to 2005) and reference lists of relevant articles and contacted academic institutions and other researchers. There were no language restrictions.

Selection criteria

Randomised controlled trials (RCTs) comparing SLT (a formal intervention that aims to improve language and communication abilities, activity and participation) with (1) no SLT; (2) social support or stimulation (an intervention that provides social support and communication stimulation but does not include targeted therapeutic interventions); and (3) another SLT intervention (which differed in duration, intensity, frequency, intervention methodology or theoretical approach).

Data collection and analysis

We independently extracted the data and assessed the quality of included trials. We sought missing data from investigators.

Main results

We included 39 RCTs (51 randomised comparisons) involving 2518 participants in this review. Nineteen randomised comparisons (1414 participants) compared SLT with no SLT where SLT resulted in significant benefits to patients' functional communication (standardised mean difference (SMD) 0.30, 95% CI 0.08 to 0.52, $P = 0.008$), receptive and expressive language. Seven randomised comparisons (432 participants) compared SLT with social support and stimulation but found no evidence of a difference in functional communication. Twenty-five randomised comparisons (910 participants) compared two approaches to SLT. There was no indication of a difference in functional communication. Generally, the trials randomised small numbers of participants across a range of characteristics (age, time since stroke and severity profiles), interventions and outcomes. Suitable statistical data were unavailable for several measures.

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Authors' conclusions

Our review provides some evidence of the effectiveness of SLT for people with aphasia following stroke in terms of improved functional communication, receptive and expressive language. However, some trials were poorly reported. The potential benefits of intensive SLT over conventional SLT were confounded by a significantly higher dropout from intensive SLT. More participants also withdrew from social support than SLT interventions. There was insufficient evidence to draw any conclusion regarding the effectiveness of any one specific SLT approach over another.

PLAIN LANGUAGE SUMMARY**Speech and language therapy for aphasia following stroke**

Language problems following a stroke are called aphasia (or dysphasia). About one-third of all people who experience stroke develop aphasia, which can affect one or more areas of communication (speaking, understanding spoken words, reading and writing). Speech and language therapists are involved in the assessment, diagnosis and treatment of aphasia at all stages of recovery, and work closely with the person with aphasia and their carers. There is no universally accepted treatment that can be applied to every person with aphasia. We identified 39 trials involving 2518 randomised participants that were suitable for inclusion in this review. Overall, the review shows evidence from randomised trials to suggest there may be a benefit from speech and language therapy but there was insufficient evidence to indicate the best approach to delivering speech and language therapy.