

Acute aphasia has been discussed in the literature only rarely until today. It is generally described as fluctuating in symptoms and not systematically treatable in the first days up to ca. four weeks following stroke. Apart from this opinion, we stress the importance of an early onset in the treatment of aphasia, which is based on specific information about deficits and residual functions right from the start, because the initial restitution processes in the neural networks will profit best from specifically correct input and production (Lit.). The need for adequate tests for this stage of aphasia becomes obvious.

First, this paper introduces a new test for the acute phase of aphasia (Bielefelder Aphasia Screening BiAS, 2006), which contains tasks on auditory perception of words and sentences, object naming and sentence production, verbal fluency, automated language functions, reading and writing. For the oral production tasks phonematic and semantic cues are specifically defined for each item. In addition, spontaneous language use is documented and rated on several relevant parameters, including communicative adequacy, a tendency to perseveration, paraphasias, and sentence structure.

The screening has been evaluated on a sample of 40 healthy adults (mean age 69,4 y) and 60 neurological patients (mean age 71,1 y) following first stroke, being classified by expert ratings (2 clinical linguists, 2 medical doctors) as aphasic. All patients were tested for the first time between 48 and 90 hours after the insult. 23 patients were tested additional times ca. 1-2 weeks and about 4-6 weeks after the insult.

Objectivity of the screening is high, with instructions for a standardized application of the test, evaluation of answers and interpretation of results. Interrater reliability for the evaluation of answers is quite high with Spearman Rho = .8 up to 1 (10 aphasic patients / 3 raters). Item reliability values of the tasks are good for items with free answer format (mean .62 - .69) and even adequate for most items with multiple choice format and only 2 or 3 answer alternatives (mean .44 - .62). The internal consistency of subtests lies very high with Cronbach's between .92 and .96 (for single task groups between .8 and .96). Even retest reliability is quite high over the period of ca. 1 week between t1 and t2 with Spearman rank correlations of .79 to .87 and over the period of ca. 4 weeks between t2 and t3 with Spearman rank correlations of .82 to .94. These quite high correlations leave some doubt on the general fluctuation of symptoms in the acute phase.

The external validity of the test is very high, as subtests of the BiAS significantly correlate with corresponding subtests of the AABT (Biniek, 1993) or the AST (Kroker, 2002, German version of the FAST, Enderby et al., 1987). Construct validity is assessed by means of clustering and factor analysis. It reveals a factor solution with the first factor showing high positive loadings of nearly all tasks and subtests, that can be interpreted as a general factor of aphasia. Factors 2, 3 and 4 have to be interpreted in terms of verbal fluency, language perception and writing competence. So, the BiAS allows additional relevant observations on language perception, writing and verbal production, that is not covered by other tests for the acute phase.

In the second part of our talk, we will present a first therapy evaluation study, comparing 35 patients receiving aphasia treatment through the first six weeks following stroke on the BiAS to 12 patients having no access to therapy at least in the first weeks, before they join a Rehabilitation centre or ambulant therapy. Several relevant observations can be derived from this study. Of course, all patients show significant positive development for at least one subtest or variable over the first 6 weeks post onset. Beside the high degree of spontaneous recovery on most tasks, phonological form and word fluency profit significantly from therapy in our sample. In addition, some qualitative changes in word variability, automation and fluency are presented. Relevant variables of therapy success are discussed.