

THE SNT-AD AND THE MINI-SKQ: TWO TOOLS TO EVALUATE THE LEXICAL-SEMANTIC IMPAIRMENT SCREENING IN ALZHEIMER'S DISEASE AND MILD NEUROCOGNITIVE DISORDER

Laurent Lefebvre, Sandra Invernizzi, Sandrine Basaglia-Pappas, Isabelle Simoes Loureiro

University of Mons, Cognitive Psychology and Neuropsychology lab,
Mons, Belgium

Lexical-semantic impairment is one of the first symptoms of Alzheimer's disease (AD). Picture naming disorder reflects difficulties in the retrieval of the lexical label of words, while semantic disorders demonstrate impairment in the representation of conceptual meaning. This pattern is already early present in amnesic Mild Neurocognitive Disorder (aMND) and appears to be a predictive criterion for a progression to an AD (Gainotti et al., 2014). The purpose of this study is to present preliminary results obtained with a population presenting aMND assessed with two quick tools, the SNT-AD and the mini-SKQ, respectively measure picture naming impairment and semantic impairment. Two groups of participants were formed: a control group of elderly participants without cognitive impairment (N=15, MMSE=29.06+/-0.8, number of females=9, age=72.1+/-7.8), and a group of participants with aMND (N=17, MMSE=25.3+/-2.3, number of females=14, age=76.9+/-7.2) matched for age and socio-cultural level ($p>.05$). A second study compared control group (N=38, MMSE=28.58 +/-0.17, number of females=19, age=76.24+/-0.97) and Alzheimer's disease patients at a mild level (N=39, MMSE=20,46 +/-0.76, number of females=30, age=77.7+/-1.1).

The SNT-AD consists of 10 black and white pictures to be named and the mini-QCCS consists of 12 questions assessing semantic characteristics of objects.

Mann-Whitney and t-tests were performed to compare the performance of the groups two by two. The aMND group showed significantly lower performance on the SNT-AD ($U=63$; $p=.012$) and marginally significant on the mini-SKQ ($U=81.5$, $p=.067$). AD patients have significantly lower performance than controls ($t(75)=6.13$; $p<0.001$).

These first results are encouraging and lead to further reflect upon the early and quick detection of lexical-semantic disorders, which are known to be present in the early stage of AD, towards which the mild neurocognitive disorders may evolve.