

Poster presentation

Location Learning Test: a new tool for the assessment of visuospatial learning and memory in patients with schizophrenia. Preliminary results

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Background

The Location Learning Test (LLT) is a brief, nonverbal measure of the ability to learn the spatial location of a series of everyday objects. Initially it was developed by Bucks and Willison (1997) for use in Alzheimer's disease patients. However, it could also detect visuospatial memory deficits in other disorders associated with damage to hippocampus and to parahippocampal gyrus, such as schizophrenia. The aim of this study was to examine the applicability of LLT in patients with schizophrenia.

Materials and methods

15 patients with schizophrenia and 19 age-matched controls underwent the LLT. The test includes the location learning task of 10 everyday objects which are located on a grid 5X5. The subject is asked to put the cards with the objects in a net grid after having observed the grid with the objects in their original place. After 5 repetitions, a delayed trial follows. The performance between two groups was compared with the Mann-Whitney U test.

Results

The group of healthy controls performed significantly better in all tasks of LLT compared to the patients' group. The total displacement score and the delayed recall score were correlated significantly to the education level, whereas only the delayed recall score was correlated to the age. Although the learning index showed significant differ-

ences between groups, it had no correlation to the age or education level.

Conclusions

Findings indicate the sensitivity of the test for the detection of visuospatial memory and learning impairment, and also the applicability in patients with schizophrenia. However, further study for the validity of the test in this population is needed.

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