

LIFETIME USE OF ANTIPSYCHOTIC MEDICATION AND CHANGE OF VERBAL LEARNING AND MEMORY IN SCHIZOPHRENIA IN 9-YEARS FOLLOW-UP IN GENERAL POPULATION SAMPLE

A. Husa¹, J. Moilanen^{1,2}, I. Rannikko^{1,3}, M. Haapea^{1,4}, G. Murray⁵, J. Barnett⁵, M. Isohanni^{1,2}, J. Veijola¹, H. Koponen⁶, J. Miettunen¹, E. Jääskeläinen^{1,2}

¹Department of Psychiatry, Institute of Clinical Medicine, University of Oulu, ²Department of Psychiatry, Oulu University Hospital, OYS, ³Oulu Deaconess Institute, ODL Rehabilitation/Neuropsychological Rehabilitation, ⁴Department of Diagnostic Radiology, Oulu University Hospital, OYS, Oulu, Finland, ⁵Department of Psychiatry, University of Cambridge, Addenbrooke's Hospital, Cambridge, UK, ⁶University of Eastern Finland, Kuopio, Finland

Introduction: Cognitive deficits, such as verbal memory dysfunction, are a core feature of schizophrenia. Yet the longitudinal course and associations of cognitive deficits with antipsychotic medication remain unclear.

Aims: Our aim was to analyze how lifetime antipsychotic dosage associates with the change of verbal learning and memory in individuals with schizophrenia during a 9-year follow-up.

Methods: Forty-two subjects with schizophrenic psychoses (22 males) from the Northern Finland 1966 Birth Cohort went through diagnostic interviews and cognitive assessment including California Verbal Learning Test (CVLT) at the ages of 34 and 43 years. Data of the subjects' lifetime antipsychotic doses in chlorpromazine equivalents were collected from patient history records, interviews and national registers. The association between verbal learning and memory (immediate free recall of trials 1-5 and free recall after long delay) and dose-years of antipsychotics was analyzed by logistic regression model.

Results: Higher dose-years of any and typical antipsychotics, but not atypical antipsychotics, associated statistically significantly to worse verbal learning and memory in cross-sectional analyses at age 34 years, even when onset age, sex, and severity of symptoms were controlled for. However, there was no statistically significant association between lifetime antipsychotic use and verbal learning and memory change between ages 34 and 43 years.

Conclusions: High lifetime antipsychotic dose did not associate to decrease in verbal learning and memory in schizophrenia in 9 years of follow-up. To our knowledge, this is a first report on association between cumulative lifetime antipsychotic use and change in cognition in a long-term naturalistic follow-up.