

Motor neurological soft signs among patients with schizophrenia: a clinical significance

ABSTRACT

Neurological soft signs (NSS) are subtle indicators of brain dysfunction which are present in excess among patients with schizophrenia. Its clinical significance remains unclear despite extensive researches in this area. The objective of this work was to determine the proportion of Schizophrenia patients who have motor NSS and then to compare the clinical features between these two groups; with and without motor NSS. This cross-sectional study which utilized the brief motor scale (BMS) was used to investigate the presence of motor NSS in 80 schizophrenia patients who attended Universiti Kebangsaan Malaysia Medical Centre (UKMCC) Psychiatric clinic. The diagnosis of Schizophrenia was confirmed by mini international neuropsychiatric interview (MINI). Symptomatology and abnormal motor movement were assessed using the brief psychiatric rating scale (BPRS) and abnormal involuntary movement scale (AIMS), respectively. A brief battery of cognitive tests covering aspects of attention, working memory and executive function was administered. The bivariate analyses were applied to look for any relationship between the study factors. Majority of schizophrenia patients (68.8%) in this study have motor NSS. The motor NSS were associated with ethnic group, level of education, age of onset, duration of illness and performance in cognitive assessment; verbal fluency, digit span forward, digit span backward and trail making B ($p < 0.05$) but not with trail making A. The assessment of motor NSS represents a brief, inexpensive and meaningful tool in assessing the cognitive functions in schizophrenia. It has the potential as an illness marker and a link between neurobiological research and clinical practice.

Keyword: Cognitive function; Neurological soft signs (NSS); Schizophrenia