

NEGATIVE ASSOCIATION BETWEEN NEUROLOGICAL SOFT SIGNS AND CANNABIS USE IN TUNISIAN PATIENTS WITH FIRST-EPISODE PSYCHOSIS

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Introduction: Neurological soft signs (NSS) are minor or subtle neurological signs indicating non-specific cerebral dysfunction. They have been conceptualized as neurodevelopmental markers that mediate the biological propensity for the development of psychosis. Their interaction with the environmental factors such as cannabis use remains little studied.

Objective: To study the relationship between the NSS and the use of cannabis which is considered an environmental risk factor of psychotic disorder.

Methods: Sixty one in-patients (fifty three men and eight women; mean age: 28.9 ± 9.4 years) with a first-episode non affective psychosis according with DSM-IV were recruited. Neurological evaluations were carried-out by using the NSS scale of Krebs et al. (2000). We ascertained the use of cannabis with the cannabis subsection, included within the section of substance use, in the Composite International Diagnostic Interview (CIDI).

Results: The prevalence of cannabis use was 16.4 %. The mean NSS total score was 15.3 ± 6.7 . Significant lower NSS total score was found in cannabis users: 11.2 ± 5.6 versus 16.0 ± 6.7 ($p=0.04$). There was also an inverse but not significant relation between the use of cannabis and the motor coordination and the involuntary movements sub-scores.

Conclusions: Similar results have been reported in patients with schizophrenia and first-episode psychosis suggesting the existence of fewer NSS in the cannabis user patients. The cannabis could enhance the effects of genetic risk factors for psychosis. More work in the area of genetic-environment interactions in predicting psychosis is necessary.