
SOFT NEUROLOGICAL SIGNS IN PATIENTS WITH BIPOLAR DISORDER

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Background: Soft neurological signs (SNS) are minimal, nonlocalizing, objective abnormalities that result from disrupted cortico-cortical and cortico-subcortical connectivity. They can be subdivided into impairments of motor coordination, sensory integration, sequencing of complex motor acts, orientation and hard signs and can be measured by the Heidelberg scale. SNS are supposed to reflect specific cognitive deficits and not a general brain dysfunction that makes them a suitable target for research on endophenotypes in schizophrenia and BD.

Objective: The aim of our study was to compare the incidence of various SNS in adult BD patients to healthy controls (HC).

Methods: We report preliminary data on 16 DSM-IV-TR BD I patients having a current manic, mixed or depressive episode and 20 HC with no Axis I or II mental condition. Both groups were assessed by the Heidelberg Scale.

Results: BD patients had significantly higher SNS total score in comparison to HC ($p < 0.01$), as well as significantly higher scores for motor ($p < 0.05$), sensory ($p < 0.001$), and complex ($p < 0.05$) SNS. There were no inter-group differences in orientation and hard signs scores.

Conclusions: Our results suggest that in comparison to HC, BD patients have much more motor, sensory and complex SNS. Our future research will also aim to reveal whether these deficits are trait or state markers in BD, whether the episode polarity has any impact on their incidence, and whether SNS are more common in first degree relatives of BD patients than in HC. The final aim is to aid the construction of valid endophenotypes in BD.