

Neuropsychological Aspects in Adolescents Victims of Sexual Violence with Post-Traumatic Stress Disorder

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Abstract : Introduction: Sexual assault against children and adolescents is a public health problem with serious consequences on their quality of life, especially for those who develop post-traumatic stress disorder (PTSD). The broad literature in this research area points to greater losses in verbal learning, explicit memory, speed of information processing, attention and executive functioning in PTSD. Objective: To compare the neuropsychological functions of adolescents from 14 to 17 years of age, victims of sexual violence with PTSD with those of healthy controls. Methodology: Application of a neuropsychological battery composed of the following subtests: WASI vocabulary and matrix reasoning; Digit subtests (WISC-IV); verbal auditory learning test RAVLT; Spatial Span subtest of the WMS - III scale; abbreviated version of the Wisconsin test; concentrated attention test - D2; prospective memory subtest of the NEUPSILIN scale; five-digit test - FDT and the Stroop test (Trenerry version) in adolescents with a history of sexual violence in the previous six months, referred to the Prove (Violence Care and Research Program of the Federal University of São Paulo), for further treatment. Results: The results showed a deficit in the word coding process in the RAVLT test, with impairment in A3 ($p = 0.004$) and A4 ($p = 0.016$) measures, which compromises the verbal learning process ($p = 0.010$) and the verbal recognition memory ($p = 0.012$), seeming to present a worse performance in the acquisition of verbal information that depends on the support of the attentional system. A worse performance was found in list B ($p = 0.047$), a lower priming effect $p = 0.026$, that is, lower evocation index of the initial words presented and less perseveration ($p = 0.002$), repeated words. Therefore, there seems to be a failure in the creation of strategies that help the mnemonic process of retention of the verbal information necessary for learning. Sustained attention was found to be impaired, with greater loss of setting in the Wisconsin test ($p = 0.023$), a lower rate of correct responses in stage C of the Stroop test ($p = 0.023$) and, consequently, a higher index of erroneous responses in C of the Stroop test ($p = 0.023$), besides more type II errors in the D2 test ($p = 0.008$). A higher incidence of total errors was observed in the reading stage of the FDT test $p = 0.002$, which suggests fatigue in the execution of the task. Performance is compromised in executive functions in the cognitive flexibility ability, suggesting a higher index of total errors in the alternating step of the FDT test ($p = 0.009$), as well as a greater number of persevering errors in the Wisconsin test ($p = 0.004$). Conclusion: The data from this study suggest that sexual violence and PTSD cause significant impairment in the neuropsychological functions of adolescents, evidencing risk to quality of life in stages that are fundamental for the development of learning and cognition.

Keywords : adolescents, neuropsychological functions, PTSD, sexual violence

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