Neuropsychological impairment in female patients with chronic fatigue syndrome: a preliminary study.

Santamarina-Perez P, Eiroa-Orosa FJ, Rodriguez-Urrutia A, Qureshi A, Alegre J.

Author information

1a Department of Child and Adolescent Psychiatry and Psychology, Institut Clínic de Neurociències, Hospital Clínic Universitari, Barcelona, Spain.

Abstract

This study examines neuropsychological impairments associated with chronic fatigue syndrome (CFS) and explores their association with related clinical factors. Sixty-eight women with CFS were assessed with a neuropsychological battery. Raw scores were adjusted for age and gender and were converted to T scores according to normative data extracted from a local sample of 250 healthy subjects. Neuropsychological dysfunction was calculated using summary impairment indexes (proportion of test scores outside normal limits-T score <40 for each cognitive domain). Finally, a linear regression was calculated to identify predictors of cognitive deficit, including intrinsic factors of the disease (level of fatigue and length of illness) and extrinsic factors (emotional factors, age, and education). Approximately 50% of scores showed impairment in attention and motor functioning, and nearly 40% showed impairment in speed information processing and executive functioning. Fatigue predicted attention and executive functioning impairment, and emotional factors predicted verbal memory dysfunction. According to our findings, cognitive dysfunction in CFS could be explained by pathophysiological processes of the disease. One implication of this would be the need to identify homogeneous subgroups of patients with CFS by taking into account common factors, which, in turn, would help to identify more specific cognitive profiles, which could then serve to implement appropriate therapeutic measures accordingly.

KEYWORDS:
chronic fatigue syndrome; cognitive dysfunction; neuropsychological assessment