

論 文 要 旨

(Anti-ganglionic acetylcholine receptor antibodies in Functional
Neurological Symptom Disorder/Conversion Disorder)

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Introduction

Functional neurological symptom disorder/conversion disorder (FNSD/CD) is a disorder of voluntary movement or sensory function. The etiopathogenesis of FNSD/CD is unknown and abnormalities in clinical tests are rarely detected. Although patients with FNSD/CD often exhibit autonomic symptoms such as orthostatic hypotension and gastrointestinal dysfunction, the exact frequency of autonomic complications in patients with FNSD/CD is unknown. Recently, serum antibodies against the ganglionic nicotinic acetylcholine receptor (anti-gAChR antibodies) were detected in patients with autonomic dysfunction. In the present study, we retrospectively reviewed clinicopathological data, including autonomic, motor, and sensory symptoms and anti-gAChR antibody serostatus, in patients with neurologically unexplainable motor and sensory symptoms.

Methods

Clinical data were collected for 59 patients presenting with neurologically unexplained motor and sensory symptoms at the Department of Neurology and Geriatrics between January 2013 and October 2017 and who were ultimately diagnosed with FNSD/CD according to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition. Correlations between serum anti-gAChR antibodies and clinical symptoms and laboratory data were analyzed. Serum anti-gAChR antibodies were quantified using a luciferase immunoprecipitation system assay.

Results

Of the 59 patients with FNSD/CD, 52 (88.1%) exhibited autonomic disturbances and 16 (27.1%) were positive for serum anti-gAChR antibodies. Forty five(76.3%) had both motor and sensory symptoms and autonomic symptoms. Cardiovascular autonomic dysfunction, including orthostatic hypotension, was significantly more prevalent (75.0 vs. 34.9%, $P = 0.008$) among anti-gAChR antibody-positive compared with antibody-negative patients. Anti-gAChR antibody serostatus did not correlate significantly with the frequency of other autonomic, sensory, or motor symptoms analyzed.

Conclusions

Although the DSM-5 diagnostic criteria for FNSD/CD focus primarily on motor and sensory symptoms, a high percentage of patients also present with autonomic dysfunction (or symptoms). We detected anti-gAChR antibodies in many patients with FNSD/CD, whereas anti-gAChR antibodies are very rarely detected in healthy subjects. An autoimmune mechanism mediated by anti-gAChR antibodies may be involved in disease etiology in a subgroup of FNSD/CD patients.