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Compared Psychophysiological Responses under Stress in Patients of Chronic Fatigue Syndrome and Depressive Disorder

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Abstract : Background: People who suffer from chronic fatigue syndrome (CFS) frequently complain about continuous tiredness, weakness or lack of strength, but without apparent organic etiology. The prevalence rate of the CFS is nearly from 3% to 20%, yet more than 80% go undiagnosed or misdiagnosed as depression. The biopsychosocial model has suggested the associations among the CFS, depressive syndrome, and stress. This study aimed to investigate the difference between individuals with the CFS and with the depressive syndrome on psychophysiological responses under stress. Method: There were 23 participants in the CFS group, 14 participants in the depression group, and 23 participants in the healthy control group. All of the participants first completed the measures of demographic data, CFS-related symptoms, daily life functioning, and depressive symptoms. The participants were then asked to perform a stressful cognitive task. The participants' psychophysiological responses including the HR, BVP and SC were measured during the task. These indexes were used to assess the reactivity and recovery rates of the automatic nervous system. Results: The stress reactivity of the CFS and depression groups was not different from that of the healthy control group. However, the stress recovery rate of the CFS group was worse than that of the healthy control group. Conclusion: The results from this study suggest that the CFS is a syndrome which can be independent from the depressive syndrome, although the depressive syndrome may include fatigue syndrome.

Keywords: chronic fatigue syndrome, depression, stress response, misdiagnosis

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