

Cardiac Involvement in Patients with Chronic Fatigue Syndrome as Documented with Holter and Biopsy Data in Birmingham, Michigan, 1991-1993

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Abstract:

We report the prevalence of abnormal oscillating T-waves at Holter monitoring in a consecutive case series of 67 chronic fatigue syndrome (CFS) patients from an infectious diseases center in Birmingham, Michigan, in the years 1991-1993, and compare these abnormal T-waves to similar tests in 78 non-CFS patients matched for age, place, time, and the absence of known other confounding medical diseases. Patients in both groups had normal resting 12-lead electrocardiograms (ECGs), rest/stress myocardial perfusion studies (thallium 201 or TC-99 sestamibi studies and two-dimensional echocardiograms (except for the incidental findings of mitral valve prolapse without significant regurgitation or, an incidental nonsignificant aortic stenosis). The prevalence of labile T-wave abnormalities by Holter monitoring was greater in CFS patients than in non-CFS patients ($P < .01$). Repetitive T-wave flattening was a sensitive indicator of the presence of CFS. The absence of these abnormal T-waves made the diagnosis of CFS unlikely (statistical sensitivity, 0.96). The combination (e.g., the presence of both oscillating T-wave flattenings plus T-wave inversions) was an accurate indicator of the possible presence of CFS. Right ventricular endomyocardial biopsies in CFS patients showed a single patient with lymphocytic myocarditis. Light and electron microscopic cardiomyopathic changes were present in the others.

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