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Ischemia-hyperpnea test is useful to detect patients with fibromyalgia syndrome.

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Abstract

OBJECTIVE:

To demonstrate the prevalence of neuromuscular hyperexcitability in Fibromyalgia Syndrome (FMS) by electromyography ischaemia-hyperpnea test (IHT) and its correlation with clinical and clinimetric parameters.

MATERIAL AND METHODS:

One hundred and forty-five FMS patients underwent IHT to evaluate neuromuscular hyperexcitability and were evaluated for pain (numeric Rating Scale and Regional Pain Scale), tenderness (tender points), disability [Fibromyalgia Impact Questionnaire (FIQ), Health Assessment Questionnaire (HAQ)], quality of life (QOL) [Short Form 36 (SF36)], mood [Hospital Anxiety and Depression Scale (HADS)], sleep [numeric rating scale (NRS)], and fatigue [Functional Assessment of Chronic Illness Therapy-Fatigue (FACIT)].

RESULTS:

Of the 145 patients, 95 were tested positive by IHT, and 33 and 17 patients were negative and borderline, respectively. By comparing the three groups, IHT positive patients had lower age and lower SF36 vitality (V), social activities (SA), and mental summary index (MSI) than negative patients ($p<0.05$). By comparing positive versus negative patients and by comparing positive and borderline patients versus negative patients, it was found that FACIT was higher, whereas age, SF36 V, SA, mental health (MH), and MSI were lower ($p<0.05$).

CONCLUSION:

FMS patients present a high prevalence of neuromuscular hyperexcitability, as assessed by IHT. IHT positive patients have poor QOL and higher fatigue than IHT negative patients. Thus, IHT positivity could identify FMS patients with a more severe disease.