

GENERALIZED PAIN HYPERSENSITIVITY IN FIBROMYALGIA PATIENTS

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Chronic widespread pain is one of the leading symptoms of fibromyalgia. Signs of generalized hyperalgesia can often be observed in these patients. However, it is not clear if the pain hypersensitivity is present for different painful stimuli. Therefore, the aim of this study was to determine if there were differences in pressure pain threshold - PPT, heat pain threshold - HPT and cold pressure threshold - CPT between fibromyalgia patients and healthy subjects. The present cross-sectional study included 45 subjects (average age 54.60 ± 7.96 years, 88.9% females), of whom 23 (51.1%) were diagnosed with fibromyalgia, while 22 (48%) were the healthy control group in whom PPT, HPT and CPT were measured on the forearm and on the paraspinal musculature of the lumbosacral region of the spinal column. Fibromyalgia patients had a significantly lower PPT compared to the group of healthy subjects: 26.13N/cm² vs. 53.54N/cm², ($Z=-4.439$, $p<0.001$); HPT 39.70 °C vs. 44.85°C, ($Z=-3.871$, $p<0.001$); CPT 20.51°C vs. 12.51°C, ($Z=-2.612$, $p=0.009$). In the area of the paraspinal musculature, PPT was 37.01 N/cm² vs. 75.77 N/cm², ($Z=-4.178$, $p<0.001$); HPT - 38.18°C vs. 44.13°C ($Z=-3.758$, $p<0.001$); CPT - 21.52°C vs. 11.16°C ($Z=-2.737$, $p=0.006$). Fibromyalgia patients demonstrated generalized hyperalgesia for all tested modalities (pressure, heat and cold). *Acta Medica Medianae* 2023;62(2): 15-22.

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