

Abstract

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Changes in intracellular calcium and magnesium ions in the physiopathology of the fibromyalgia syndrome

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BACKGROUND: Calcium and magnesium ions play a key role in the physiology of muscular contraction: changes in calcium ions concentration may be involved in the pathogenesis of fibromyalgia. Since the plasmatic levels of calcium and magnesium in fibromyalgia patients is always in the normal range, it seemed interesting to evaluate the intracellular calcium and magnesium concentration.

METHODS: The study was carried out on two groups of subjects: 100 affected by fibromyalgia and 40 healthy controls.

RESULTS: The results obtained show that in fibromyalgia patients the intracellular calcium and magnesium concentration seems to be a peculiar characteristics of fibromyalgia patients and may be potentially responsible for muscular hypertonus.

CONCLUSION: It is still to be confirmed the effective role of this anomaly in the pathophysiology of fibromyalgia and the potential role of drugs active on calcium homeostatis.

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