

The Possible Effect Of Clinical Recovery On Regional Cerebral Blood Flow Deficits In Fibromyalgia: A Prospective Study With Semi Quantitative Brain SPECT Scan.

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OBJECTIVE

Regional deficits in cerebral blood flow have been reported in a few studies of Fibromyalgia; however, there is no information on the effects of treatment and clinical recovery on these abnormalities. We evaluated the effects of amitriptyline treatment and consequent clinical recovery on cerebral blood flow changes in Fibromyalgia. **METHODS:** We assessed cerebral blood flow with a semi quantitative functional brain mapping technique of single-photon emission computed tomography in 14 patients with primary Fibromyalgia before and after 3 months of amitriptyline treatment. Patients were followed by visual analog scale, tender point count, and Beck Depression Inventory for clinical improvement. **RESULTS:** There was statistically significant improvement in visual analog scale and tender point count after treatment. Beck Depression Inventory did not change significantly. Statistically significant blood flow increase in bilateral hemithalami and basal ganglia and decrease in bilateral temporal, left temporo-occipital, and right occipital lobes were observed on single-photon emission computed tomography after treatment. **CONCLUSIONS:** We speculate that these findings could indicate that deficits in cerebral blood flow in Fibromyalgia improve parallel to clinical recovery.

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