“Micronutrient management of fibromyalgia: metabolic endotoxemia, low grade inflammation, lipid mediators and oxidative stress”

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Abstract (EN)

The ethiopathogenesis of fibromyalgia (FM) remains up to date of idiopathic origin. However, several links have been made between FM and low grade inflammation or endotoxemia, dysbiosis or small intestinal bacterial overgrowth (SIBO), intestinal tight junction dysruption, Lipopolysaccharide (LPS) influx, pathogen associated molecular patterns (PAMPS), Toll-like receptor 4 (TLR4) and Nuclear Factor k-B (NF-kB). Further studies have found that lipid peroxidation can block the transformation of macrophages type 1 in macrophages type 2 hence blocking the resolution mediators of inflammation. In this mini-review, we want to show the evidence that microbiote dysruption as well as dysruption of the innate immune system due to gut dysbiosis and/or SIBO, together with an intestinal barrier hyperpermeability, may provoke local and systemic inflammation with involvement in lipid peroxidation inducing oxydative and mitochondrial stress as the possible ethiopathogenesis of FM. Novel ways of looking at FM may be in the horizon but a multi-factorial vision needs to be taken in order to help sufferers at a causalistic level.

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