








Fibromyalgia and cytokines

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Highlights

- There are no diagnostic biochemical markers or instrumental test on which to base the fibromyalgia diagnosis.
- Pro-inflammatory levels of cytokines IL-1RA, IL-6 and IL-8 are increased and anti-inflammatory cytokines decreased in fibromyalgia.
- Chemokines are also found to be increased in fibromyalgia patients.
- The alteration in chemokines' levels may account for the central sensitization in these patients.

Abstract

Fibromyalgia is a common chronic pain syndrome characterized by widespread pains and characteristic somatic symptoms. Current evidence suggests that cytokines and especially chemokines may have a role in the pathogenesis of this syndrome. Cytokines are small soluble factors that work as immune system messengers. They can be classified as pro-inflammatory and anti-inflammatory cytokines. Chemokines are a special kind of pro-inflammatory cytokines that guide the movement of circulating mononuclear cells to the injured side. Some pro-inflammatory cytokine levels (i.e. IL-1RA, IL-6, and IL-8) and,

recently, some chemokines' levels have been found to be increased in patients with fibromyalgia. Thus, herein we review the current knowledge regarding the role of cytokines in fibromyalgia patients and their possible clinical relevance.

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Keywords

Fibromyalgia; Cytokines; Chemokines; Biologic markers; Pain

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