Reply to: Mast cells in fibromyalgia

S. POLLACK

Sirs,

We would like to thank Dr Pollack for his interest in our paper and, in particular, for his intriguing comments on the possibility that mast cells might play a role in continuous pain (1).

Although many of the mechanisms and characteristics of fibromyalgia are well defined, its pathophysiology is still far from being fully understood (2). Mast cells probably play an important role in chronic pain (and therefore fibromyalgia) not only on the grounds of the histological evidence referred to by Dr Pollack (3, 4), but above all because of their importance in neuro-inflammation. Neuro-endocrine immune stimuli can induce an increasing number of local mast cells and further the extent of their degranulating activity (5). Mast cells have a close anatomo-functional relationship with nerve fibres and blood vessels, and produce and rapidly release nerve growth factor (6). Microglia respond to the pro-inflammatory signals released by other non-neuronal cells, such as CNS resident mast cells, and it has been suggested that activated glial cells can contribute to spreading the sensation of pain and maintain its chronic status (7). The growing evidence of mast cell-glia communication opens up new perspectives for developing therapies that target neuro-inflammation by differentially modulating the activation of the non-neuronal cells that normally control both peripheral and central neuronal sensitisation (8).

The data concerning palmitoylethanolamide, a non-pharmacological analgesic, are promising insofar as its cannabimimetic action on mast cell receptors may reduce histamine-induced responses and modulate the onset and maintenance of pain (9, 10).

We hope that further scientific contributions will clarify the relationship between mast cells and chronic pain, and the potential therapeutic role of cannabinoid receptor agonists in the treatment of fibromyalgia.

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