

THE PAIN-RELATED FUNCTIONAL SOMATOSENSORY HEMISYNDROME: A BAD SIGN OF PAIN CHRONIFICATION

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Introduction:

Patients with unilaterally accentuated chronic pain often show ipsilateral hemisensory disturbances considered to be functional. Recent studies describe such deficits in connection with complex regional pain syndrome (CRPS) [1] and other chronic pain problems [2]. This poster aims at a more precise description and documentation of this specific complication in chronic pain patients.

Methods:

The medical history and symptoms of 60 patients with unilateral chronic pain and functional ipsilateral sensory disturbances has been analysed. Most of them got a conventional CT or MRI scan; 11 had a functional neuroimaging procedure (18-fluorodeoxyglucose positron emission tomography = FDG-PET). Depressive symptoms were assessed with the Hamilton depression scale (HAMD-17). Pain intensity was rated with a visual pain analogue scale (VAS). Results:

Two third of the patients remembered a trigger episode of somatic pain on the affected side. The chronic pain problem was always described as longlasting and strong (mean VAS: 7,7) but clinically not explained by persistent peripheral tissue damage. The clinical tests showed replicable somatosensory deficits for superficial touch and heat. All patients had experienced severe emotional distress (e.g. victims of violence, war, or persecution). Most patients suffered from moderate depressive symptoms. Conventional brain imaging procedures (CT, MRI scans) showed no structural changes. However, functional imaging using FDG-PET (done in 11 of these patients) showed in all cases a significant hypometabolic pattern of changes in cortical and subcortical areas, mainly in the postcentral gyrus, posterior insula, putamen, and anterior cingulate cortex.

Conclusion:

Pain-related functional somatosensory hemisyndrome seems to be a neuroreactive pattern involving somatoperceptive and psychological aspects of the brain. 1. Rommel O et al. PAIN 2001;93:279-293 2. Mailis A et al. J Rheumatol 2001;28:1385-1393

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