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influences of clinical definition of neuropathic pain on drugs' indication and registration

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- The interaction between the pharmaceutical world and clinical science are strongly interdependent
- Sometimes pharmaceutical innovation drives clinical advancements
- Gabapentinoids deeply contributed to influence awareness on neuropathic pain

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Gary a. Mellick
Larry B. Mellicy
Gabapentin in the management of Reflex sympathetic Dystrophy
Journal of pain and symptom managemnt
pp 265-266 Vol 10 N° 4, May **1995**

Backonja, M., Beydoun, A., Edwards, K.R., Schwartz, S.L., Fonseca, V., Hes, M., LaMoreaux, L., Garofalo, E.
Gabapentin for the symptomatic treatment of painful neuropathy in patients with diabetes mellitus. A randomized controlled trial Journal of the American Medical Association 280 (21), pp. 1831-1836, **1998**

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Publications on “Neuropathic Pain”

	195* January
2008	3153
2007	2956
2006	2632
2005	2336
2004	**1969**
2003 Pregabalin 1st Clinical Trial	1545
2002	**1375**
2001 Pregabalin 1st report	1170
2000	909
1999	**741**
1998 Gabapentin Clinical Trial	584
1997	508
1996	**165**
1995 Gabapentin 1st report	116
1994	109
1993	83
1992	74
1991	42
1990	25
1989	19
1988	10
1987	9
1986	10
1985	6
1984	14
1983	9
1982	3
1981	4
1980	5
1979	2
1978	1
1977	5
1976	
1975	

Searched by “scopus”

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- Neurology is the clinical specialty of localization and identification of correspondence between symptoms and signs and location of the injury/lesion.

- When applied with its restrictive interpretation, neurology of pain and the sensory system requires a correspondence between peripheral or central sensory pathways and pain localization.

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In 2001 with Per Hansson and Marco Lacerenza (IASP Press) we wrote: "the international association for the study of pain (Merskey and Bogduk 1994) defines neurogenic pain as "Pain initiated or caused by a primary lesion or dysfunction or transitory perturbation in the peripheral or central nervous system". Neuropathic pain is a subentity where "transitory perturbation" is omitted. The inclusion of dysfunction in the definition may be a source of confusion because it allows nociceptive and psychogenic conditions to be improperly diagnosed as neurogenic/neuropathic….. Therefore we suggest amending the definition of neuropathic pain to: pain due to a primary lesion of the peripheral or central nervous system".

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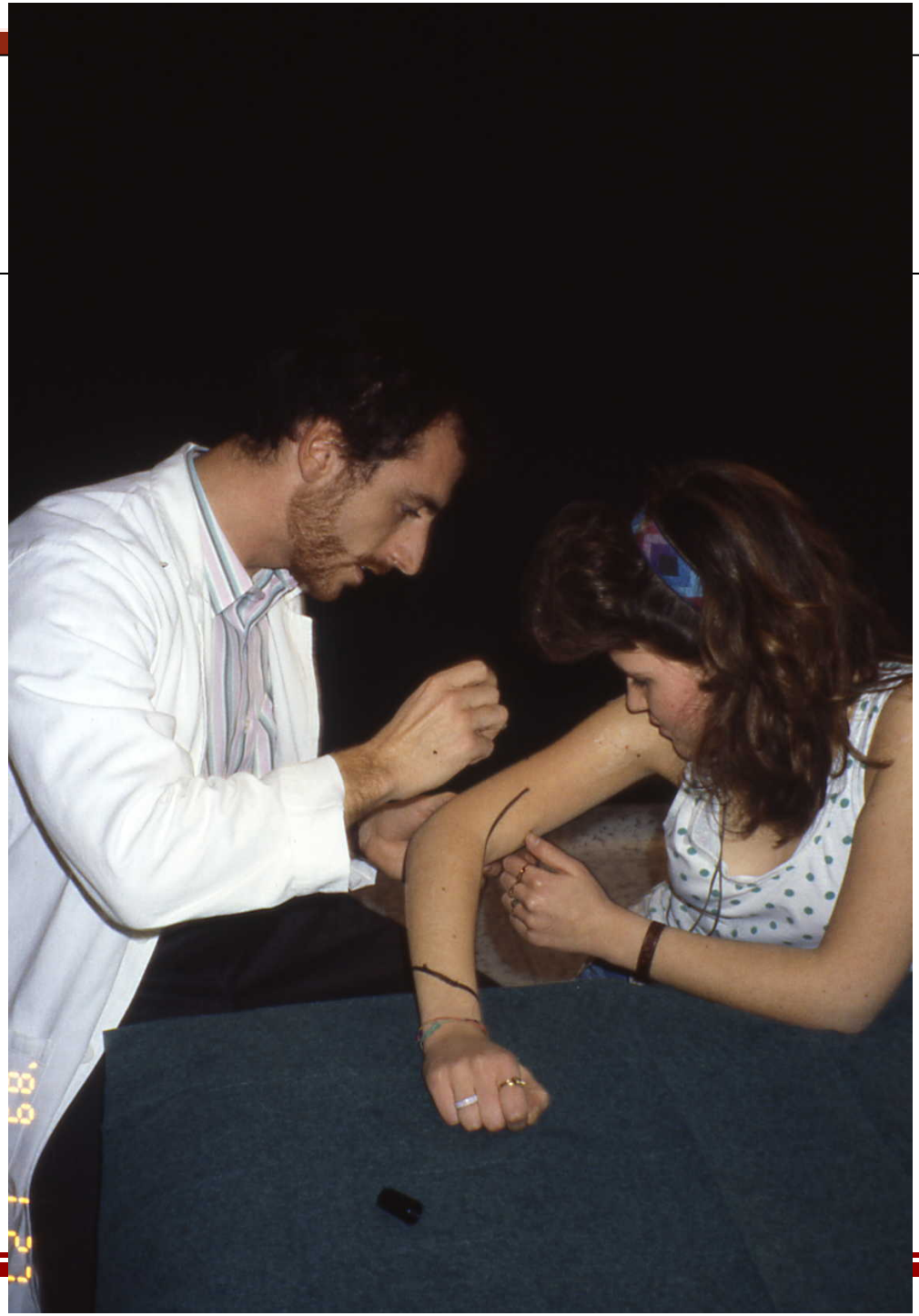
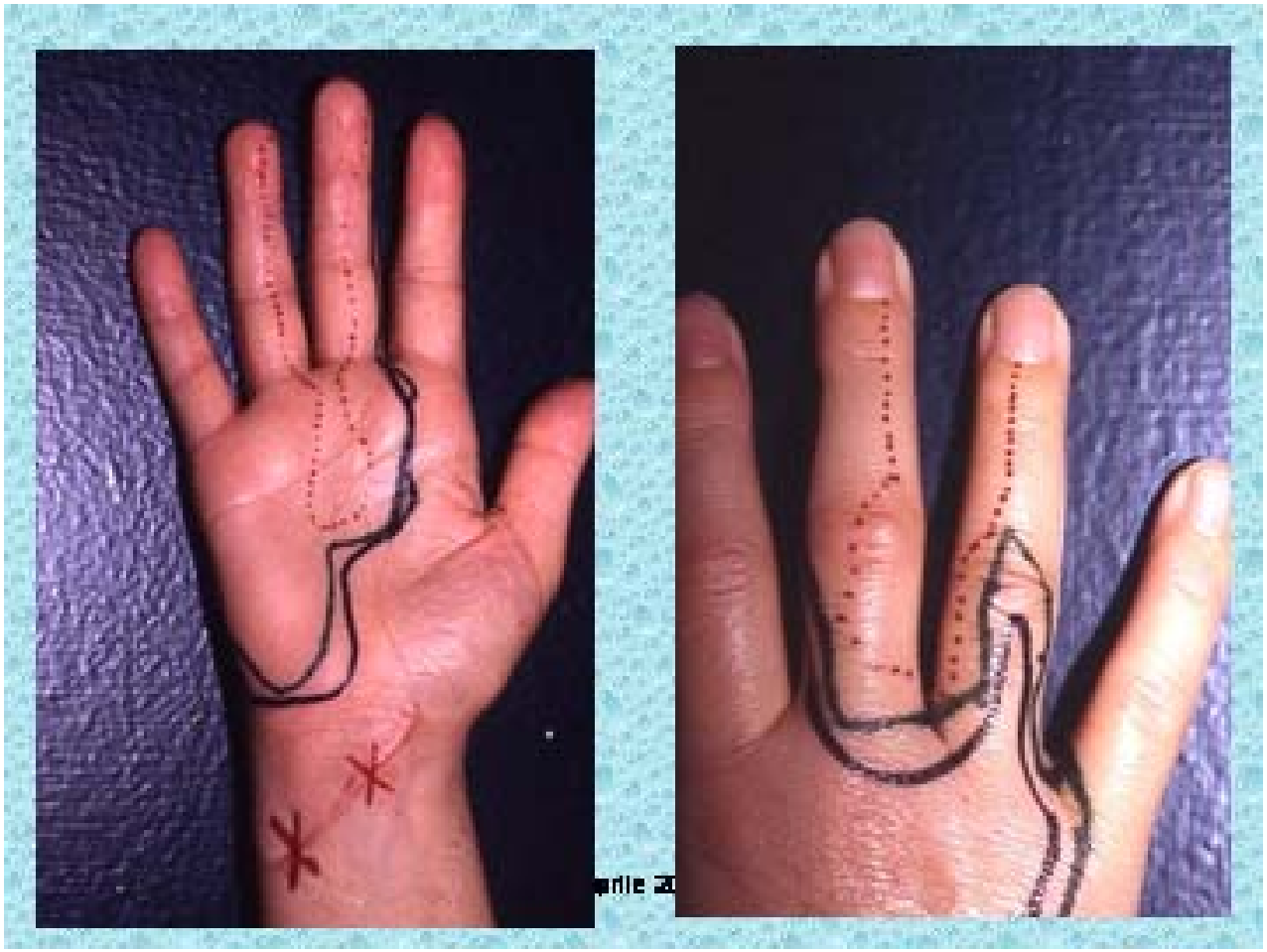
Abstract

The classical neurological investigation does not provide a satisfactory basis for a clear assessment in most patients with neuralgia. On the other hand, treatment up to now has remained problematic. In this situation measurements of sensitivity may be of benefit: they permit a precise diagnosis and follow-up of the lesions and moreover enable valuable statements on the pain perception of the patient. In this paper, the **examination** procedures for three types of sensitivity are described: touch, temperature and thermic pain. Examples of their application are discussed.

Matched Terms:

Index Keywords: **sensory** receptor; Receptors, **Sensory**; **Sensory** Thresholds
See the Extended format page for all index keywords in this document.





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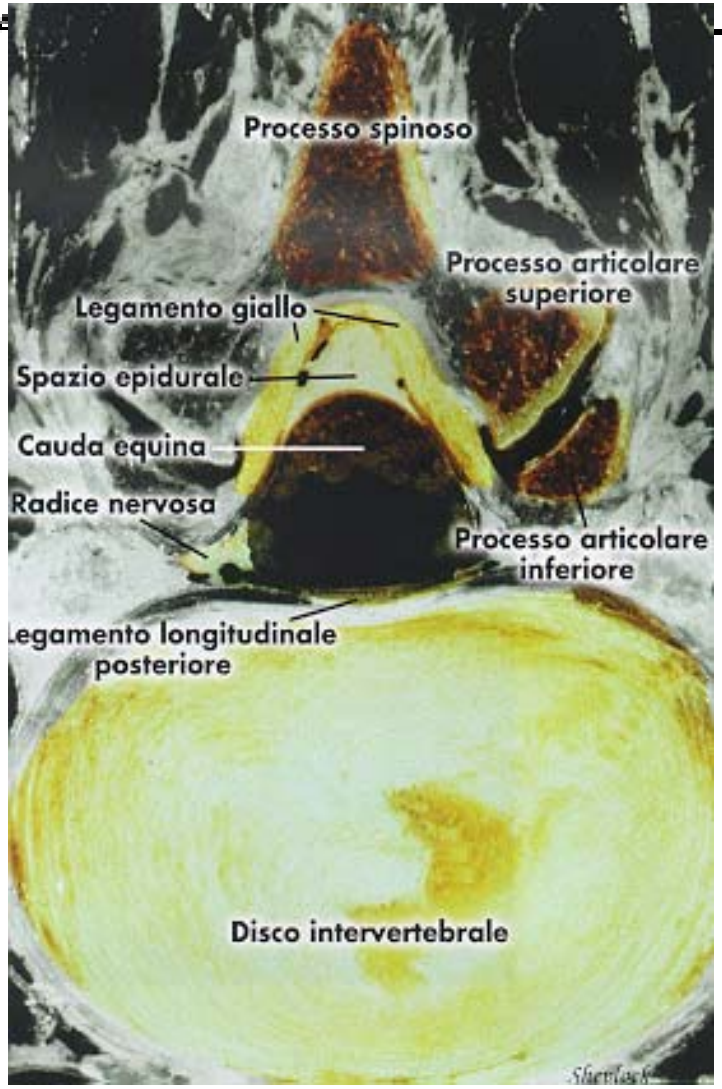

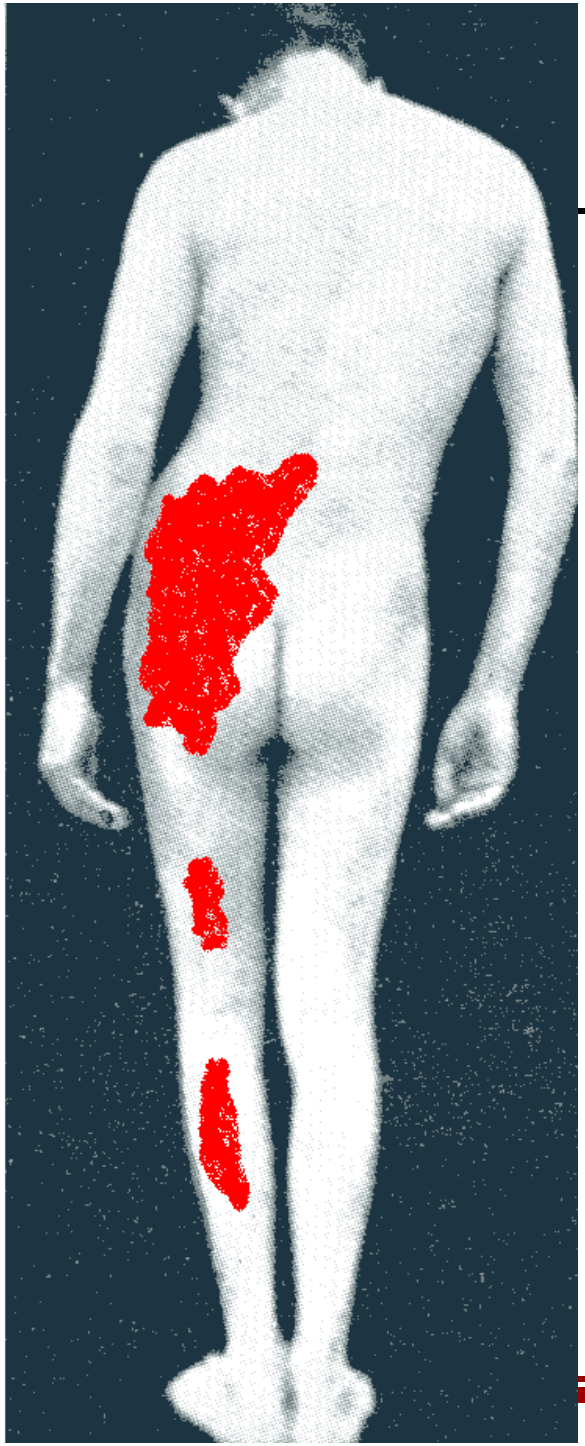

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Is Migraine a Neuropathic Pain Syndrome?

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Many migraineurs in the general population have not received proper diagnosis and either will self-medicate or use ineffective therapies [3]. Migraine is known to impose significant individual and societal burdens resulting from functional disability and loss of productivity. The condition has been estimated to account for more than 10 million physician office visits yearly and frequent use of emergency or urgent care facilities [4]. Migraine

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Is fibromyalgia a neuropathic pain syndrome?

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Abstract

The fibromyalgia syndrome (FM) seems an unlikely candidate for classification as a neuropathic pain. The disorder is diagnosed based on a compatible history and the presence of multiple areas of musculoskeletal tenderness. A consistent pathology in either the peripheral or central nervous system (CNS) has not been demonstrated in patients with FM, and they are not at higher risk for diseases of the CNS such as multiple sclerosis or of the peripheral nervous system such as peripheral neuropathy. A large proportion of FM sufferers have accompanying symptoms and signs of uncertain etiology, such as chronic fatigue, sleep disturbance, and bowel/bladder irritability. With the exception of migraine headaches and possibly irritable bowel syndrome, the accompanying disorders are clearly not neurological in origin. The impetus to classify the FM as a neuropathic pain comes from multiple lines of research suggesting widespread pain and tenderness are associated with chronic sensitization of the CNS. An examination of how the term neuropathic pain is defined reveals a conceptual split into 2 partially overlapping groups of disorders: those with demonstrable pathology in the nervous system and those characterized primarily by enduring dysfunction in the nervous system. Requiring demonstrable pathology in the nervous system in the definition of neuropathic pain is the traditional approach. The expansion of the definition to require only enduring nervous system dysfunction is less palatable because it opens the classification to many disorders of uncertain etiology, including complex regional pain syndrome. As it is uncertain which of the many different chronic pain syndromes include an enduring component of central sensitization, restricting the term "neuropathic pain" to those disorders with a primary etiology clearly related to the peripheral or CNS is prudent and consistent with clinical practice.

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Résumé La fibromyalgie est un syndrome douloureux chronique et complexe dont l'origine n'est pas encore élucidée. Cette origine est probablement multiple, somme de facteurs biologiques, psychologiques et sociaux.
Parmi les facteurs biologiques, tant les éléments anamnestiques de douleur diffuse — les signes cliniques que sont l'allodynie et l'hyperalgésie, la réponse thérapeutique aux co-analgésiques — que les éléments expérimentaux, suggèrent un mécanisme de sensibilisation centrale. Celle-ci pourrait s'expliquer par un influx augmenté de la périphérie, mais on s'intéresse également à l'idée d'une facilitation centrale et à l'existence d'une susceptibilité génétique à la douleur chez les patientes fibromyalgiques. Cette sensibilisation centrale n'est pas à voir comme la simple expression d'une lésion anatomique du système nerveux et il ne s'agit pas de réduire la fibromyalgie à une seule dysfonction neurologique ; néanmoins, le concept de sensibilisation centrale a actuellement une place incontournable dans la pathogénie de la fibromyalgie.

Mots clés Fibromyalgie - Sensibilisation centrale - Facilitation centrale

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Review

Biology and therapy of fibromyalgia

Stress, the stress response system, and fibromyalgia

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Arthritis Research & Therapy 2007, **9**:216 (doi:10.1186/ar2146)
This article is online at http://arthritis-research.com/content/9/4/216

See related editorial by Eisinger, http://arthritis-research.com/content/9/4/105

Anesthesiology 2006; 104:570–87

Opioid-induced Hyperalgesia

A Qualitative Systematic Review

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Opioids are the cornerstone therapy for the treatment of moderate to severe pain. Although common concerns regarding the use of opioids include the potential for detrimental side effects, physical dependence, and addiction, accumulating evidence suggests that opioids may yet cause another problem, often referred to as *opioid-induced hyperalgesia*. Somewhat paradoxically, opioid therapy aiming at alleviating pain may render patients more sensitive to pain and potentially may aggravate their preexisting pain. This review provides a comprehensive summary of basic and clinical research concerning opioid-induced hyperalgesia, suggests a framework for organizing pertinent information, delineates the status quo of our knowledge, identifies potential clinical implications, and discusses future research directions.

OPIOIDS are the cornerstone therapy for alleviating an all-inclusive and current overview of a topic that may be difficult to grasp as a whole because new evidence accumulates quickly and in quite distinct research fields. As such, a comprehensive review may serve as a source document. However, a systematic review also uses a framework for presenting information, and such a framework may facilitate and clarify future communication by clearly delineating various entities or aspects of OIH. Finally, a systematic review aims at defining the status quo of our knowledge concerning OIH, a necessary task to guide future research efforts and to identify potential clinical implications.

For the purpose of this review, it is important to point out that OIH occurs in several distinct settings charac-

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REVIEW

Fibromyalgia and psychiatric disorders

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Abstract. Fibromyalgia (FM) is a common and polymorphic syndrome, characterized by long-lasting, widespread musculoskeletal pain, in the presence of 11 or more tender points located at specific anatomical sites. A heterogeneous series of disturbances, mainly involving autonomic, neuroendocrine and neuropsychic systems, is usually present. Even if subjective, the chronic psychophysical suffering state of FM adversely affects the patient's quality of life, performance and mood. Cognitive behavioural therapy and antidepressant drugs are useful in FM treatment, suggesting a close link between the syndrome and psychiatric, psychological and behavioural factors. Our aim was to evaluate the personality profiles of FM patients, as well as the aggregation and relationships between FM and psychiatric disorders (PD), reviewing the available evidences in current literature on this comorbidity. Personality variables associated with psychological vulnerability are frequent in FM patients. Personality disorders are rarely reported. Compared with controls, FM patients show

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European Journal of Pharmacology 560 (2007) 1–8

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www.elsevier.com/locate/ejphar

Review

The neuronal 5-HT_3 receptor network after 20 years of research — Evolving concepts in management of pain and inflammation ☆

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summary

- Fibromyalgia is a medical condition, affected patients share common clinical symptomatology
- The condition is likely caused by reduced inhibitory function i.e. is a dysfunctional disorder
- novel pharmacological agents effective on neuropathic pain (Duloxetine and Pregabaline) are also effective on fibromyalgia
- From a therapeutical perspective do dysfunctional disorders benefit by being classified as neuropathic?

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- Even classical neurology considers migraine and related headaches a neurological “organic” disorder.
- Why shouldn't fibromyalgia be accepted within the realm of “organic disorders?”
- And if we do so where will be located the shadow line between “organic and psychogenic?”