

Dolore Neuropatico ASPETTI EPIDEMIOLOGICI E APPROPRIATA CLASSIFICAZIONE

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DEFINITION OF NEUROPATHIC PAIN

VIEWS & REVIEWS

Neuropathic pain

Redefinition and a grading system for clinical and research purposes



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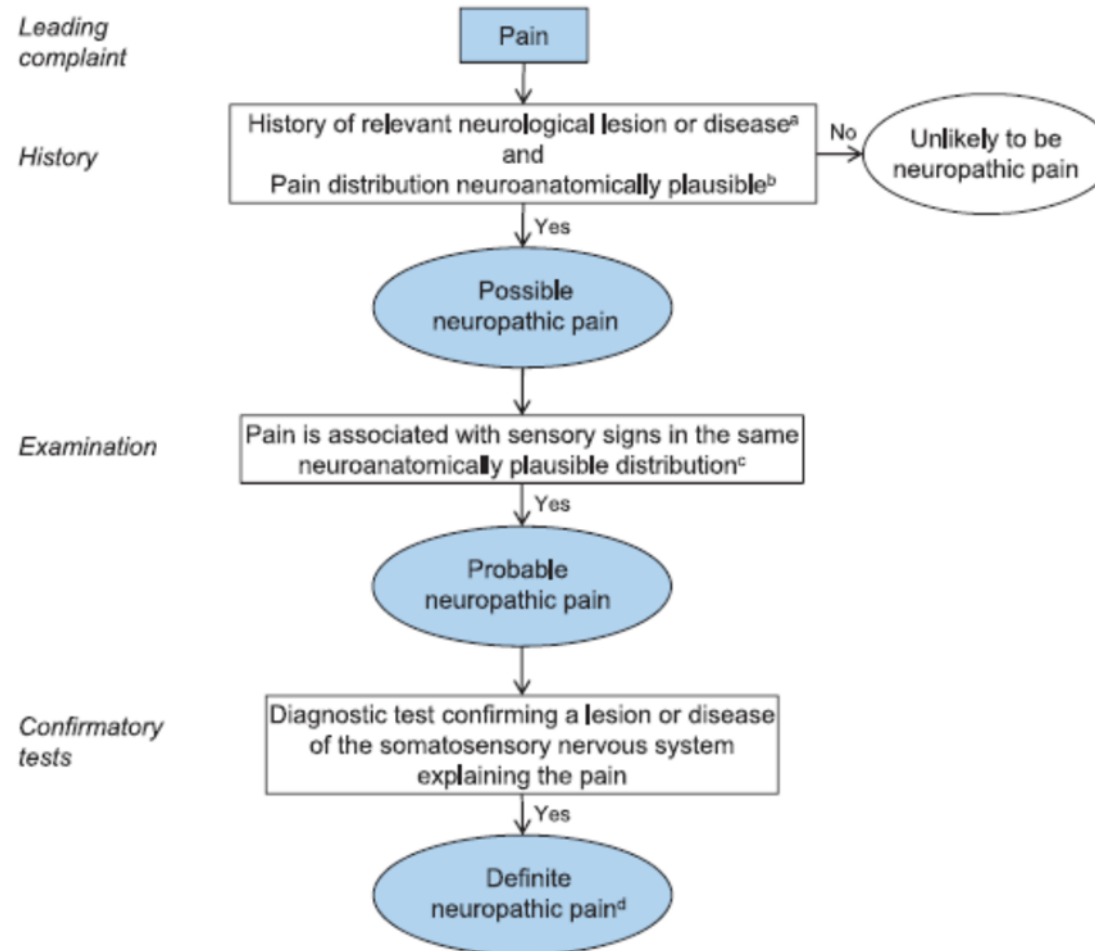
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ABSTRACT

Pain usually results from activation of nociceptive afferents by actually or potentially tissue-damaging stimuli. Pain may also arise by activity generated within the nervous system without adequate stimulation of its peripheral sensory endings. For this type of pain, the International Association for the Study of Pain introduced the term neuropathic pain, defined as "pain initiated or caused by a primary lesion or dysfunction in the nervous system." While this definition has been useful in distinguishing some characteristics of neuropathic and nociceptive types of pain, it lacks defined boundaries. Since the sensitivity of the nociceptive system is modulated by its adequate activation (e.g., by central sensitization), it has been difficult to distinguish neuropathic dysfunction from physiologic neuroplasticity. We present a more precise definition developed by a group of experts from the neurologic and pain community: pain arising as a direct consequence of a lesion or disease affecting the somatosensory system. This revised definition fits into the nosology of neurologic disorders. The reference to the somatosensory system was derived from a wide range of neuropathic pain conditions ranging from painful neuropathy to central poststroke pain. Because of the lack of a specific diagnostic tool for neuropathic pain, a grading system of definite, probable, and possible neuropathic pain is proposed. The grade possible can only be regarded as a working hypothesis, which does not exclude but does not diagnose neuropathic pain. The grades probable and definite require confirmatory evidence from a neurologic examination. This grading system is proposed for clinical and research purposes. *Neurology*® 2008;70:1630-1635

Pain arising as a direct consequence of a lesion or disease affecting the somatosensory system

THE DIAGNOSIS IS NOT EASY ...





International Association for the Study of Pain

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Editor-in-Chief

Jane C. Ballantyne, MD, FRCA

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Diagnosis and Classification of Neuropathic Pain

The exact prevalence of neuropathic pain
is not known.



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Haanpää and Treede
Diagnosis and classification of neuropathic pain
Pain Clinical Updates , 2010



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**Journal of
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Neuropathic pain screening questionnaires have limited measurement properties. A systematic review

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NEUROPATHIC PAIN, QUESTIONNAIRES, EPIDEMIOLOGY

- 1) The Douleur Neuropathique 4 (DN4)
- 2) ID Pain,
- 3) Leeds Assessment of Neuropathic Symptoms and Signs (LANSS)
- 4) Pain- DETECT
- 5) Neuropathic Pain Questionnaire

Although these screening questionnaires may provide an indication of the presence of neuropathic pain, **they cannot replace a clinical assessment.**



PAIN[®] 155 (2014) 654–662

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www.elsevier.com/locate/pain

Comprehensive review

Neuropathic pain in the general population: A systematic review of epidemiological studies



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PROBLEMS OF NEUROPATHIC PAIN EPIDEMIOLOGY

Epidemiological research in this area **can be problematic**, and the reasons for this are multifactorial:

- 1) the **lack of agreed**, valid case definitions that truly reflect the condition(s) under consideration and that are feasible to apply in population-based studies;
- 2) **heterogeneous studies** of variable quality, using different means of case ascertainment;
- 3) inclusion or exclusion of cases in which **pain is not a primary presenting complaint**

BETWEEN 6.9% AND 10% ...

A best estimate of population prevalence of pain
with neuropathic characteristics
is likely to lie
between 6.9% and 10%.



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CLASSIFICATION OF NEUROPATHIC PAIN

Table 1 Classifications of neuropathic pain
<i>Location:</i> peripheral (nerve, plexus, dorsal root ganglion, root) central (spinal, brainstem, thalamus, cortex)
<i>Etiology:</i> trauma ischemia or hemorrhage inflammation neurotoxic neurodegeneration paraneoplastic metabolic vitamin deficiency cancer
<i>Symptoms and Signs:</i> pain quality sensory loss sensory gain
<i>Mechanisms:</i> ectopic discharges loss of inhibition peripheral sensitization central sensitization

NEUROPATHIC PAIN?

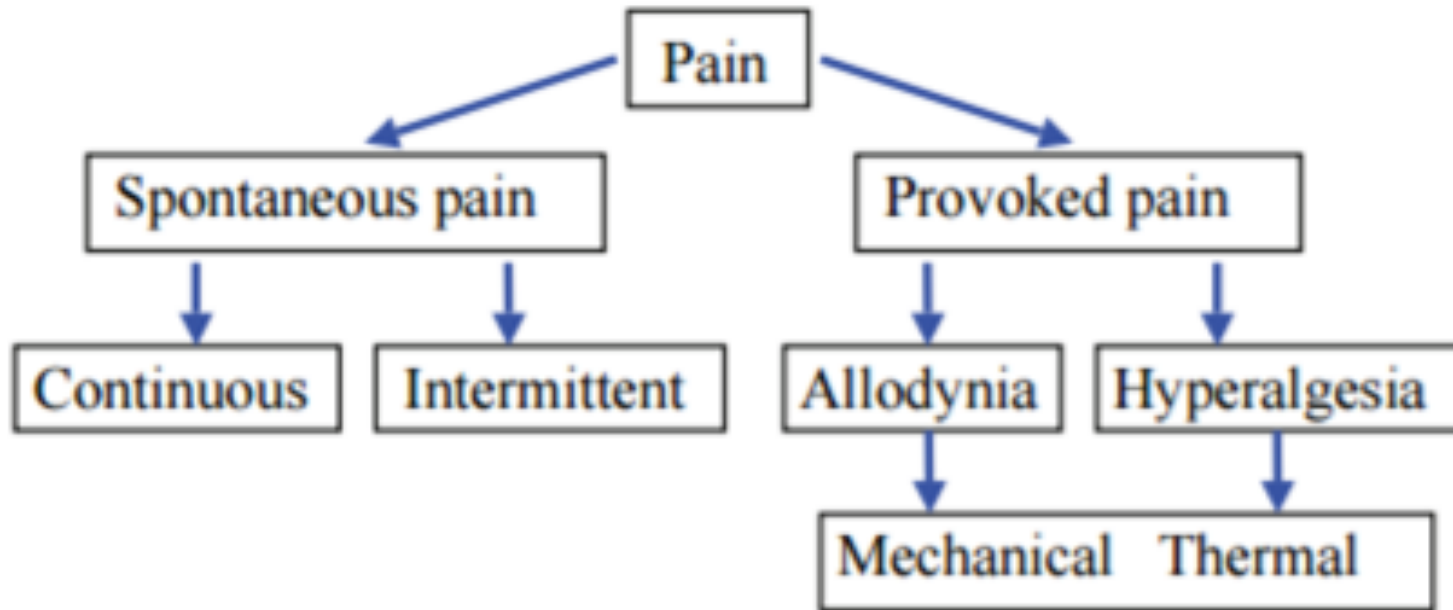


Fig. 1. Components of neuropathic pain.



PAIN

Pain 77 (1998) 227–229

Editorial

Towards a mechanism-based classification of pain?

Clifford J. Woolf*, Gary J. Bennett, Michael Doherty, Ronald Dubner, Bruce Kidd,
Martin Koltzenburg, Richard Lipton, John D. Loeser, Richard Payne, Eric Torebjork

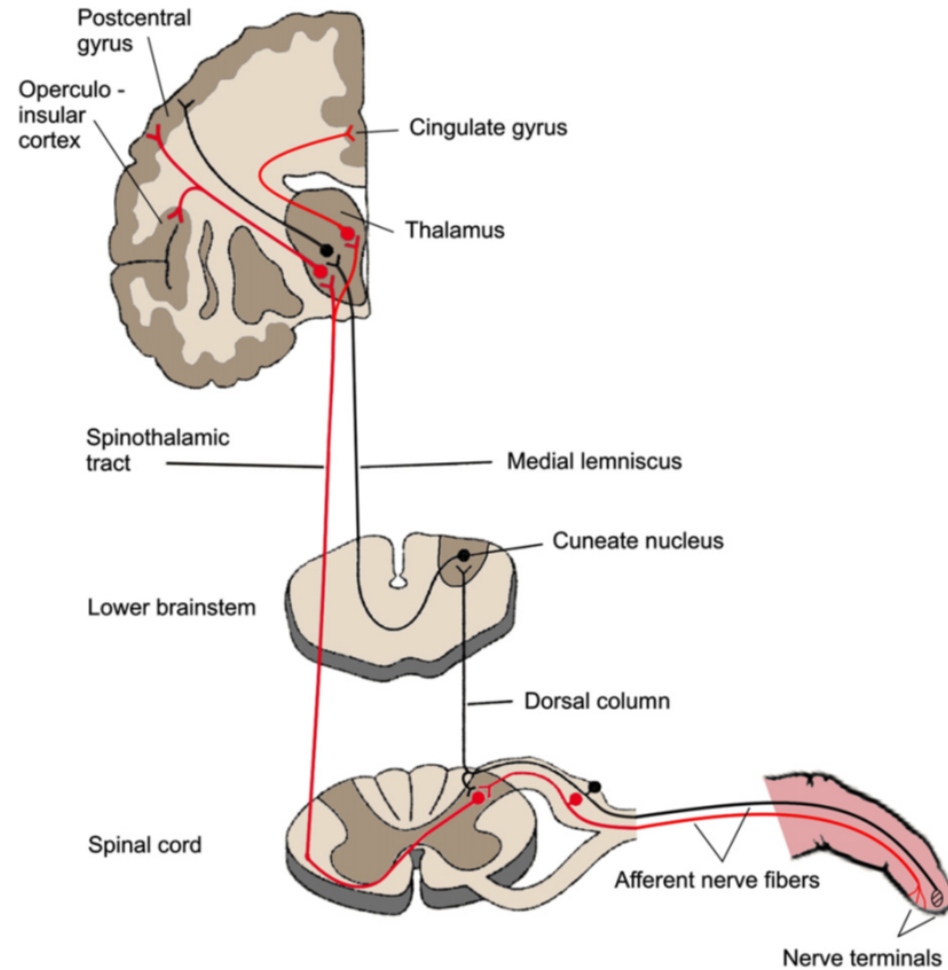
Received 18 May 1998; accepted 1 June 1998



CLASSIFICAZIONE DEL DOLORE NEUROPATICO E SISTEMA SOMATOSENSORIALE

Se il DN è legato ad un coinvolgimento del sistema nervoso somatosensoriale, allora la classificazione del DN dovrà tenere conto delle differenze anatomico-fisiologiche che caratterizzano tale sistema.

SOMATOSENSORY SYSTEM: 2 PATHWAYS

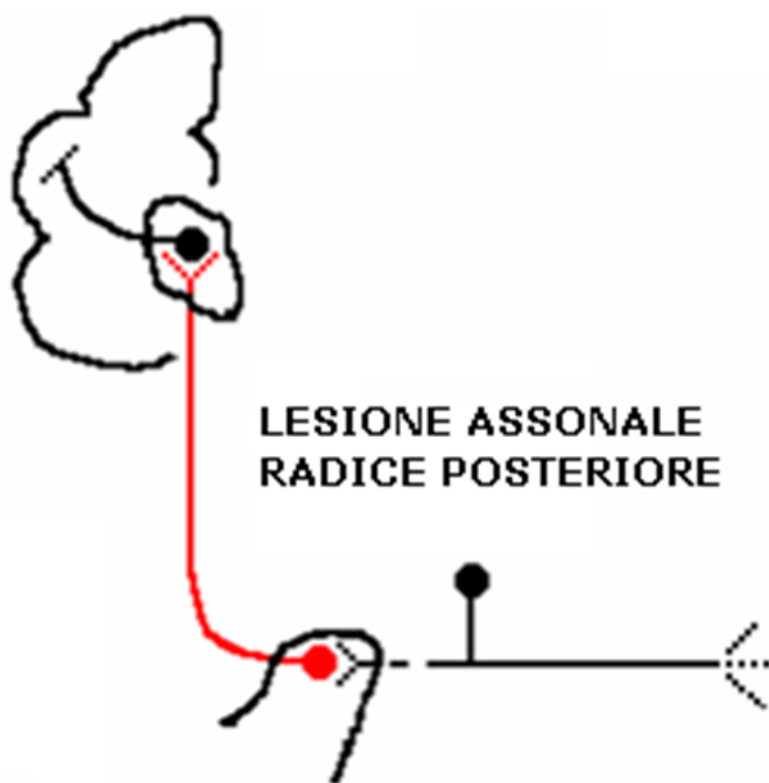


ALCUNI MECCANISMI SONO UBIQUITARI

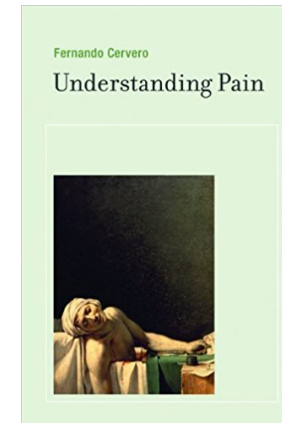
Lo stesso meccanismo puo' essere presente sia nel sistema nervoso periferico che nel sistema nervosa centrale

Ad esempio, la moltiplicazione di impulsi

ALTRI MECCANISMI DIFFERISCONO IN BASE ALLA LORO LOCALIZZAZIONE



THE NEEDS OF FURTHER CLASSIFICATIONS ...



We must make further distinctions and sub-classifications to accommodate all the various forms of abnormal and normal pain.

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