

La CRPS

il punto di vista dell'algologo

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The IASP classification of chronic pain for *ICD-11*: chronic primary pain

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Abstract

This article describes a proposal for the new diagnosis of chronic primary pain (CPP) in *ICD-11*. Chronic primary pain is chosen when pain has persisted for more than 3 months and is associated with significant emotional distress and/or functional disability, and the pain is not better accounted for by another condition. As with all pain, the article assumes a biopsychosocial framework for understanding CPP, which means all subtypes of the diagnosis are considered to be multifactorial in nature, with biological, psychological, and social factors contributing to each. Unlike the perspectives found in *DSM-5* and *ICD-10*, the diagnosis of CPP is considered to be appropriate independently of identified biological or psychological contributors, unless another diagnosis would better account for the presenting symptoms. Such other diagnoses are called "chronic secondary pain" where pain may at least initially be conceived as a symptom secondary to an underlying disease. The goal here is to create a classification that is useful in both primary care and specialized pain management settings for the development of individualized management plans, and to assist both clinicians and researchers by providing a more accurate description of each diagnostic category.

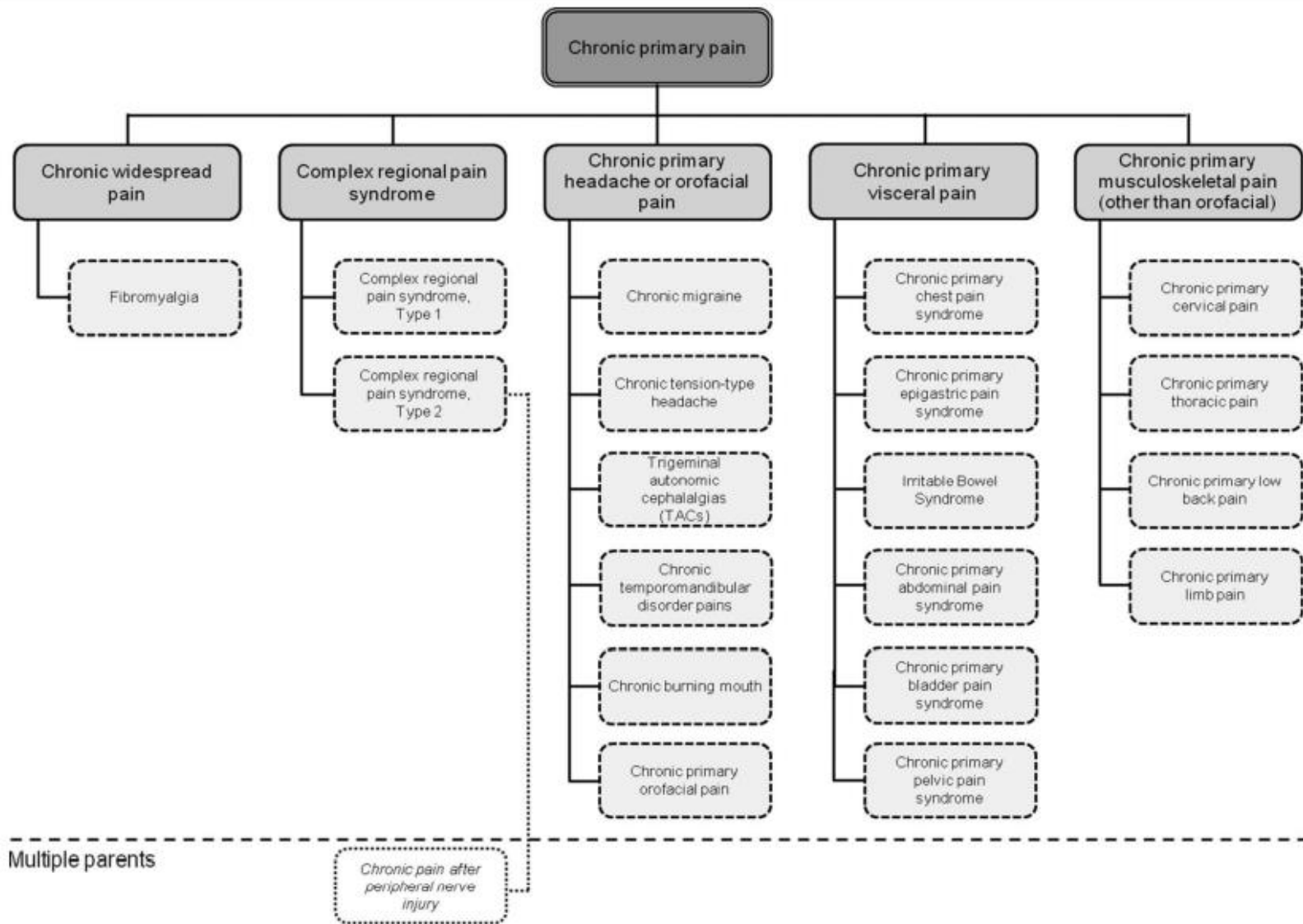
Keywords: *ICD-11*, Classification, Chronic pain, Chronic primary pain, CRPS, CWP, Fibromyalgia, Headache, Orofacial pain, Visceral pain, Musculoskeletal pain, Idiopathic pain, Functional pain

1. Background on chronic primary pain

There are 2 main diagnostic classification systems used internationally for chronic pain, apart from headaches: the *Diagnostic and Statistical Manual (DSM)* published by the American Psychiatric Association (APA), and the *International Classification of Diseases (ICD)* published by the World Health Organization (WHO). However, both have been found wanting in their accounts of chronic pain conditions. In particular, neither system reflects the developments in pain research over the last 2 decades, and they do not have clear treatment or management implications.^{10,15,16,38,61} To illustrate,

ICD-10 refers to pain attributable exclusively to an underlying pathophysiological mechanism.¹⁹ In the absence of a clear (pathophysiological) etiology, and when biological, psychological, and social factors seem to be contributing to a chronic pain presentation,¹⁵ *ICD-10* offers only the option of "somatoform pain disorder." However, this classification cannot be used when pathophysiological factors are also considered to be contributing to the pain problem.³⁹

These distinctions have important treatment implications. As Taylor and colleagues pointed out, if we accept that chronic pain is



Multiple parents

Legend

Top (1st) level diagnosis

2nd level diagnosis

3rd level diagnosis

Additional parent of the diagnosis

Directly subordinate

Additional parent

CRPS-CPP

Persiste da almeno 3 mesi

Disagio emotivo (ansia-rabbia-depressione-frustrazione
catastrofismo)

Disabilità funzionale (attività quotidiane-ruolo sociale)

Diagnosi: esclusa malattia di base

CRPS

Prevalenza: 5.4-26.2 /100.000 abitanti

Estremità distali

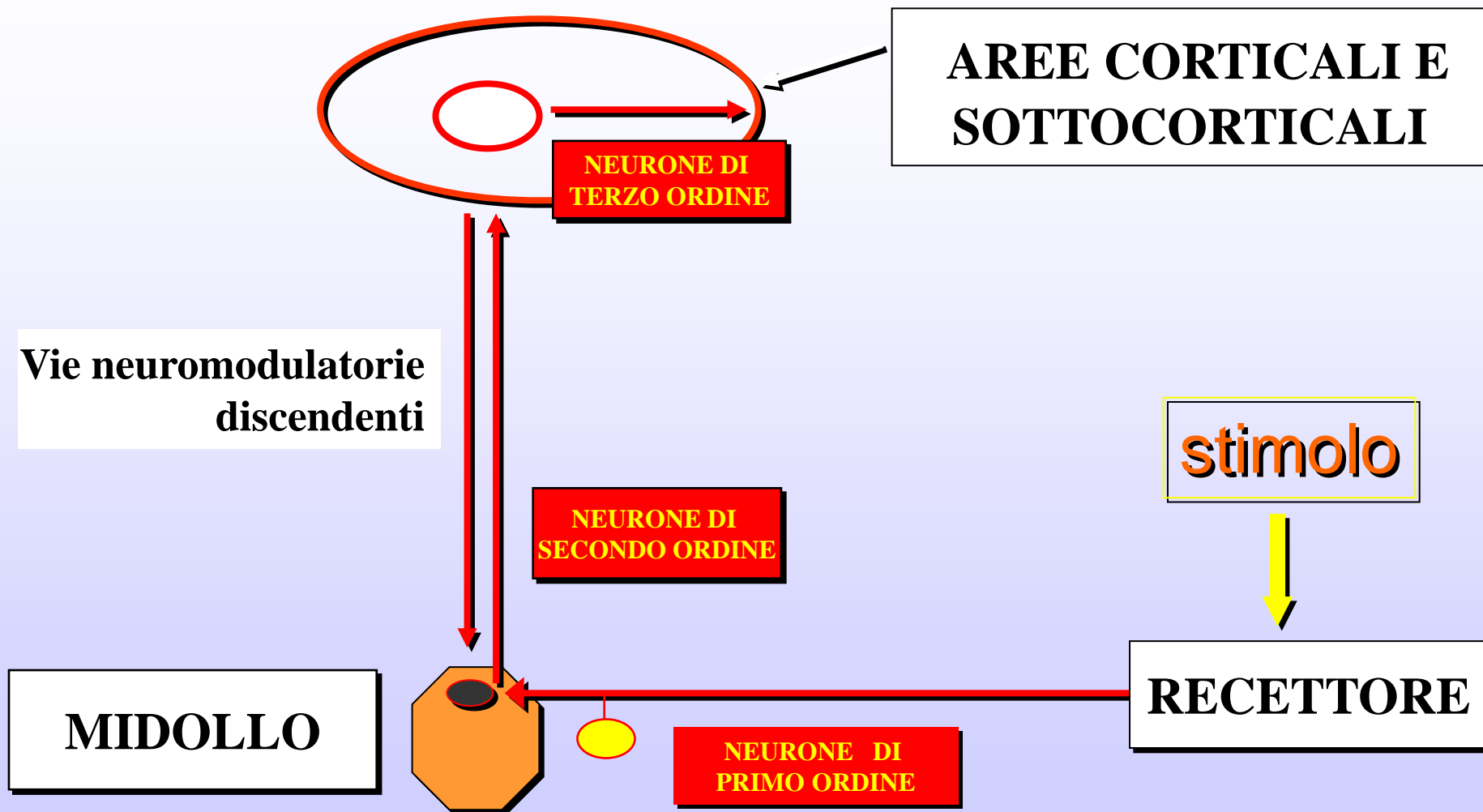
Trauma

Trattati chirurgicamente

Anestesia generale prolungata-non ALR

Genere femminile

Strutture nervose e Dolore

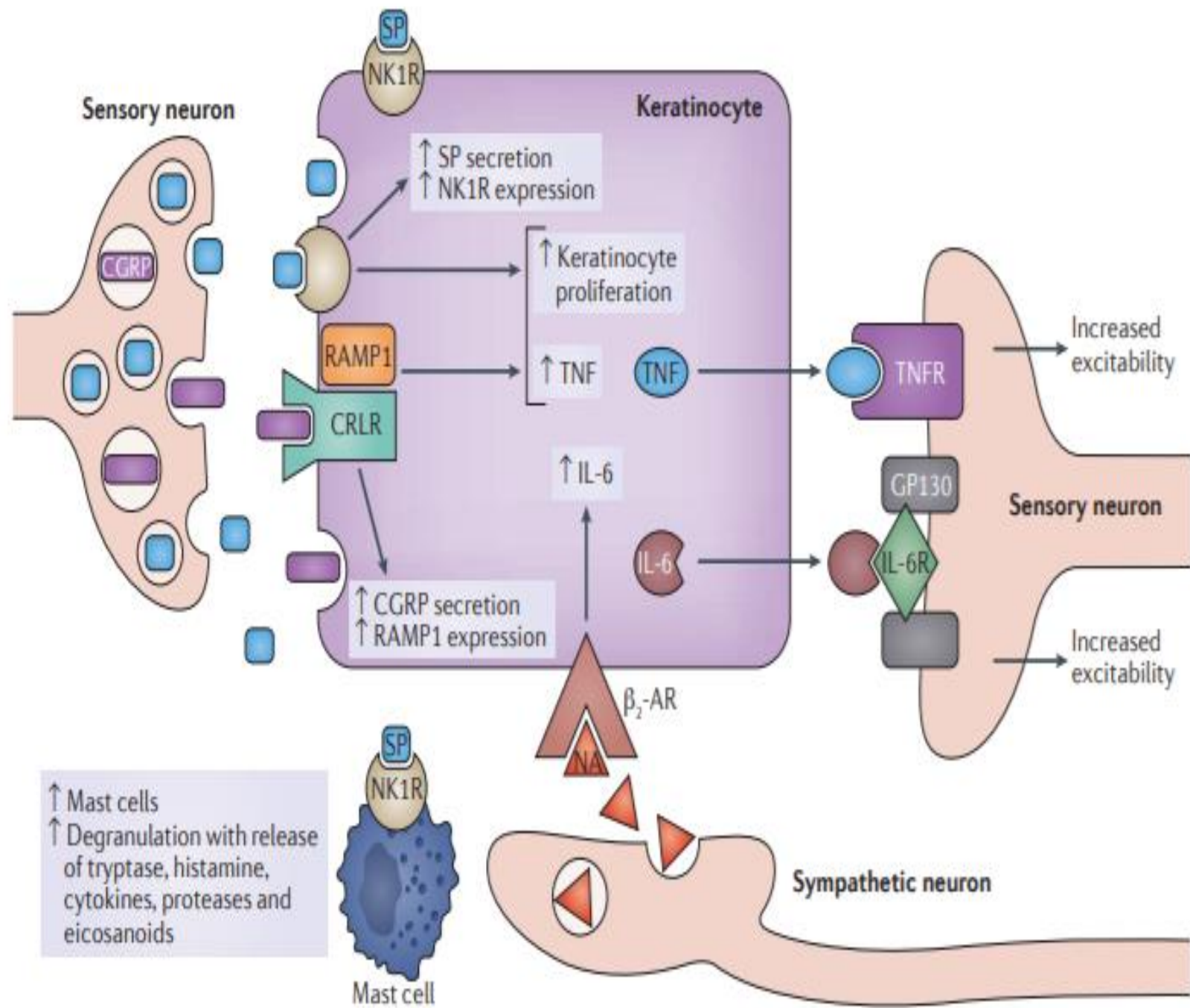


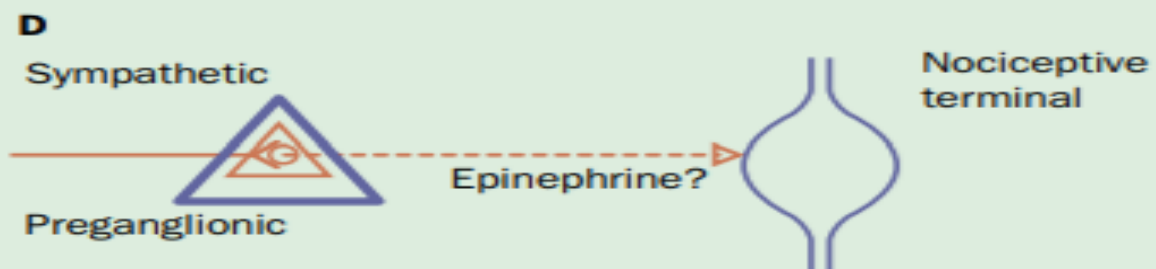
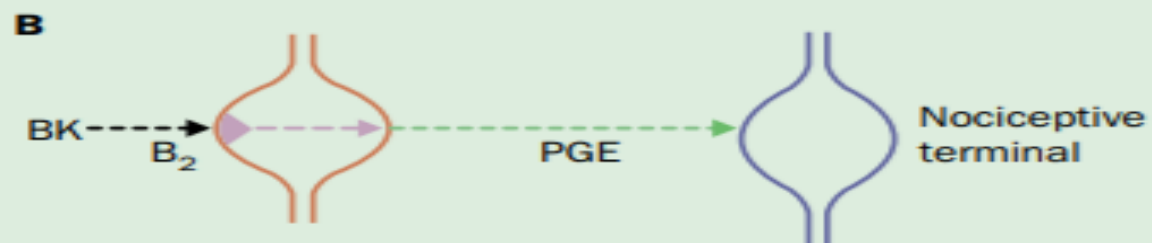
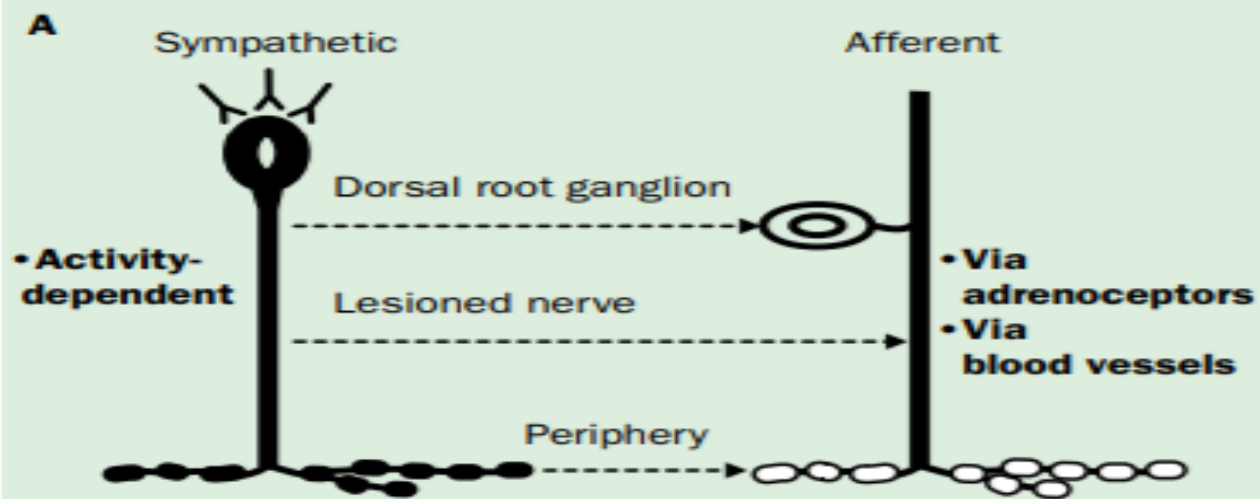
FISIOPATOLOGIA

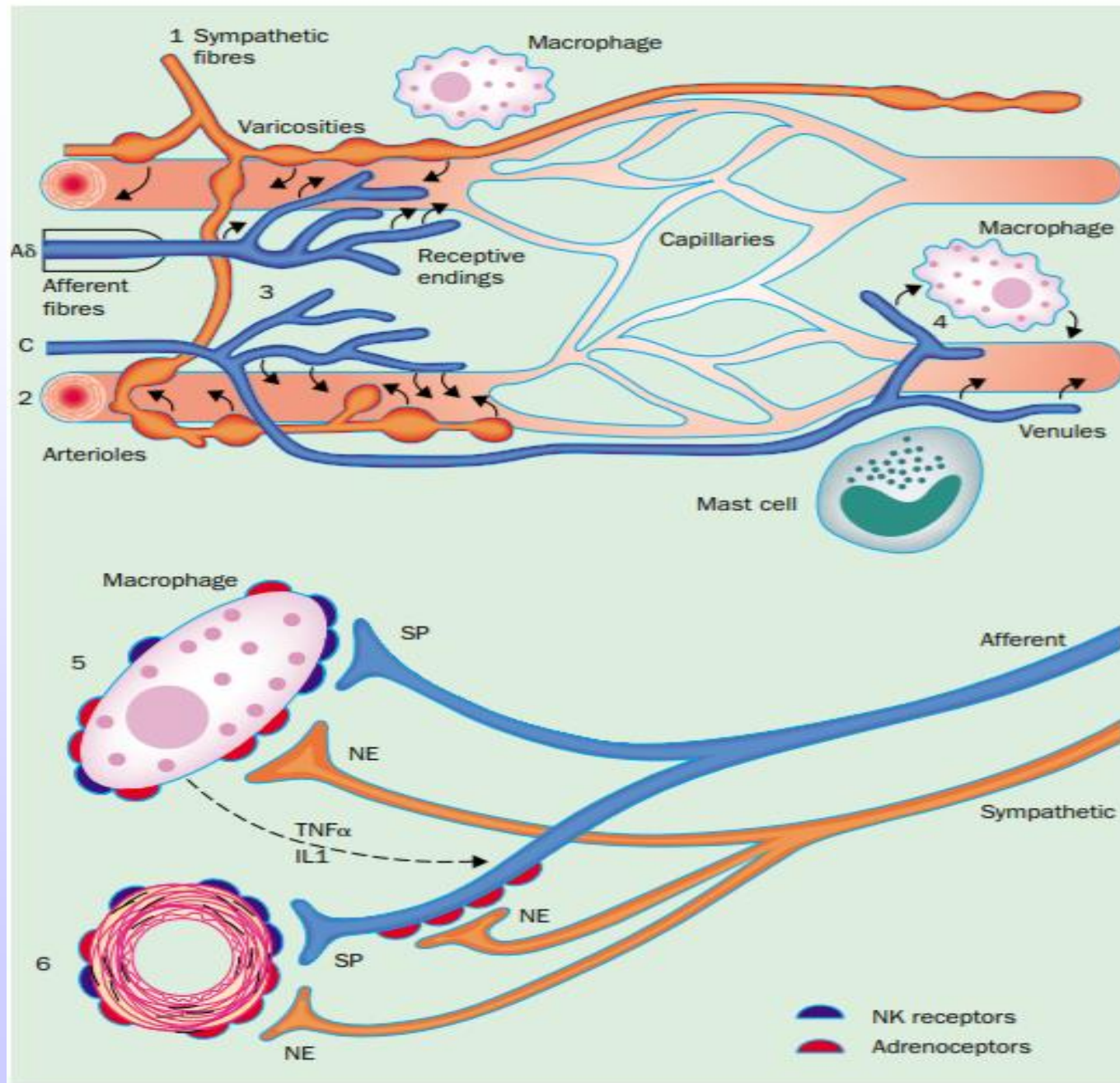
Flogosi neurogena

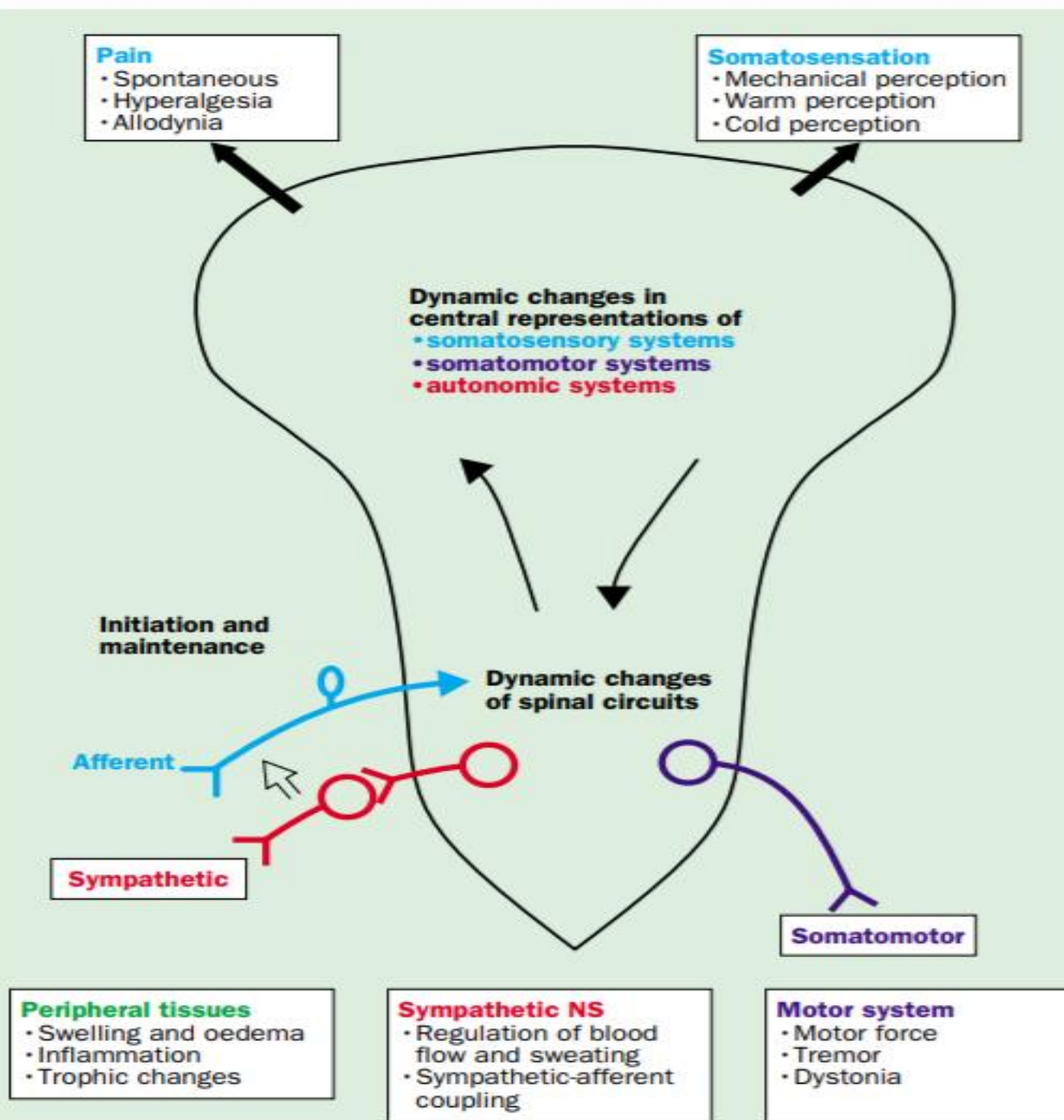
Disfunzione autonoma

Sistema immunitario









Evento regionale, la complessità è sistemica



Cortical reorganization and atrophy

Neruoinflammation

Neglect

Disuse

Avoidance

Pain

Fear

Increased production of neurotoxic mediators

Central sensitization

Astrocyte activation

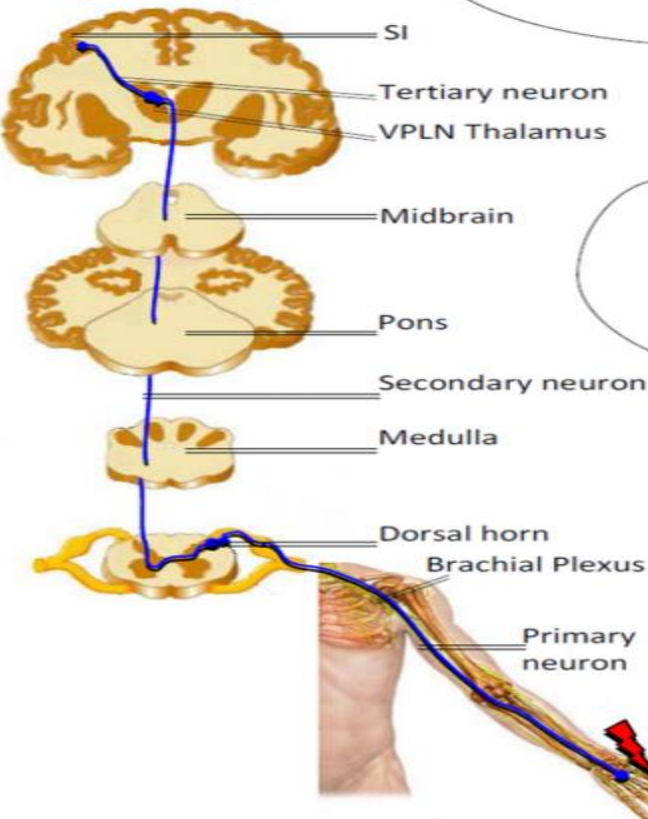
IL-1 β , TNF- α , IL-&, Chemokines

Sympaticus, Humoral alteration

Microglial transformation, migration and activation

Release of microglial stressors: K⁺, Na⁺, Ca²⁺, ATP, substance P, NGF, bradykinin,

Swelling, Glossy skin, Increased nail and hair growth



DIAGNOSI

Table 2 Initial International Association for the Study of Pain (IASP) criteria for complex regional pain syndrome, 1994³².

Presence after an initial inciting event.

Allodynia or hyperalgesia out of proportion for the inciting event.

Evidence of skin changes, sudomotor dysfunction, or oedema.

The absence of any other syndrome that would otherwise explain the presenting syndromes.

Table 3 Budapest Criteria for CRPS, 2003.³² CRPS, complex regional pain syndrome.

Continued pain that is disproportionate to any inciting event

Patient must report one symptom in three of the following four categories:

Sensory: allodynia or hyperalgesia

Vasomotor: temperature asymmetry, skin colour changes

Sudomotor: oedema, changes in sweating

Motor/trophic: decreased range of motion, motor dysfunction, changes in hair and nail growth

Must display one sign at the time of evaluation in at least two of the following categories:

Sensory: evidence of hyperalgesia and allodynia

Vasomotor: evidence of temperature asymmetry or skin colour changes

Sudomotor: evidence of oedema or swelling

Motor: motor weakness/dysfunction

There is no other diagnosis that explains the patient's signs or symptoms

CRPS 1 - Without evidence of major nerve damage

CRPS 2 - With evidence of major nerve damage

Meta-analysis of Imaging Techniques for the Diagnosis of Complex Regional Pain Syndrome Type I

Zachary J. Cappello, BS, Morton L. Kasdan, MD, Dean S. Louis, MD

Purpose To compare the effectiveness of imaging techniques in aiding and confirming the diagnosis of complex regional pain syndrome (CRPS) type I.

Methods We conducted a meta-analysis of randomized controlled studies that evaluated the effectiveness of 3 different imaging techniques in aiding the diagnosis of CRPS type I. A systematic search in bibliographical databases resulted in 24 studies with 1,916 participants.

Results To determine the effectiveness of each imaging technique, we determined the average specificity, sensitivity, negative predictive value, and positive predictive value and then statistically compared them using the analysis of variance statistical test, which indicated that compared with magnetic resonance imaging and plain film radiography, triple-phase bone scan had a significantly better sensitivity and negative predictive values. However, there appeared to be no statistical significance between imaging techniques when we evaluated specificity and positive predictive value using the analysis of variance test.

Conclusions The findings of this meta-analysis support the use of triple-phase bone scan in ruling out CRPS type I, owing to its greater sensitivity and higher negative predictive value than both magnetic resonance imaging and plain film radiography. (*J Hand Surg* 2012;37A:288–296. Copyright © 2012 by the American Society for Surgery of the Hand. All rights reserved.)

Type of study/level of evidence Diagnostic I.

Key words CRPS type I, TPBS, MRI, imaging.

TERAPIA

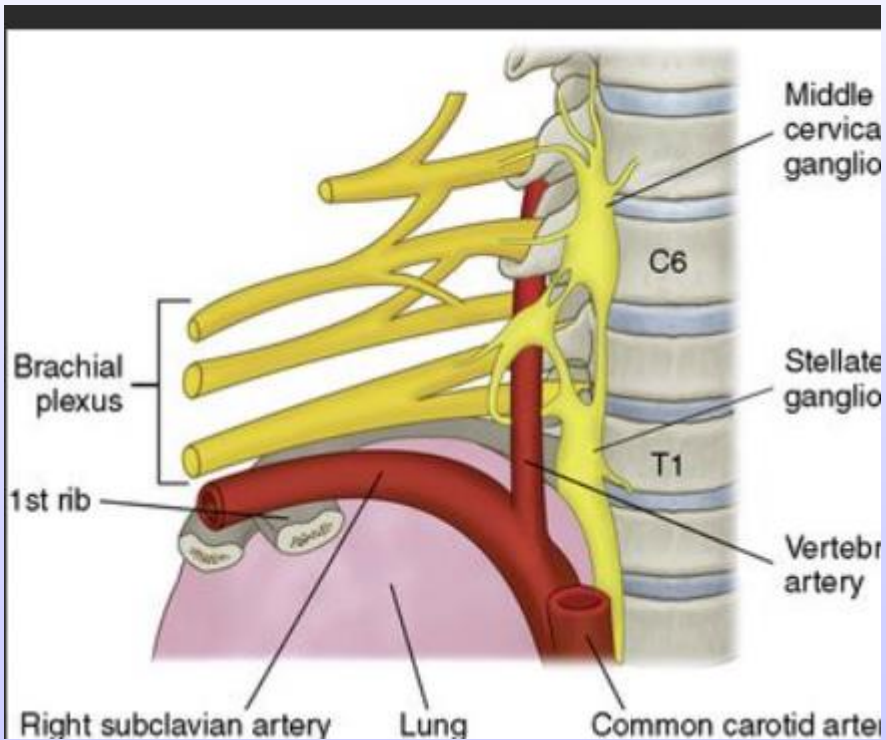
3 linee di trattamento

- Terapia riabilitativa e psicologica
- Terapia farmacologica
- Terapia locoregionale infiltrativa e interventistica

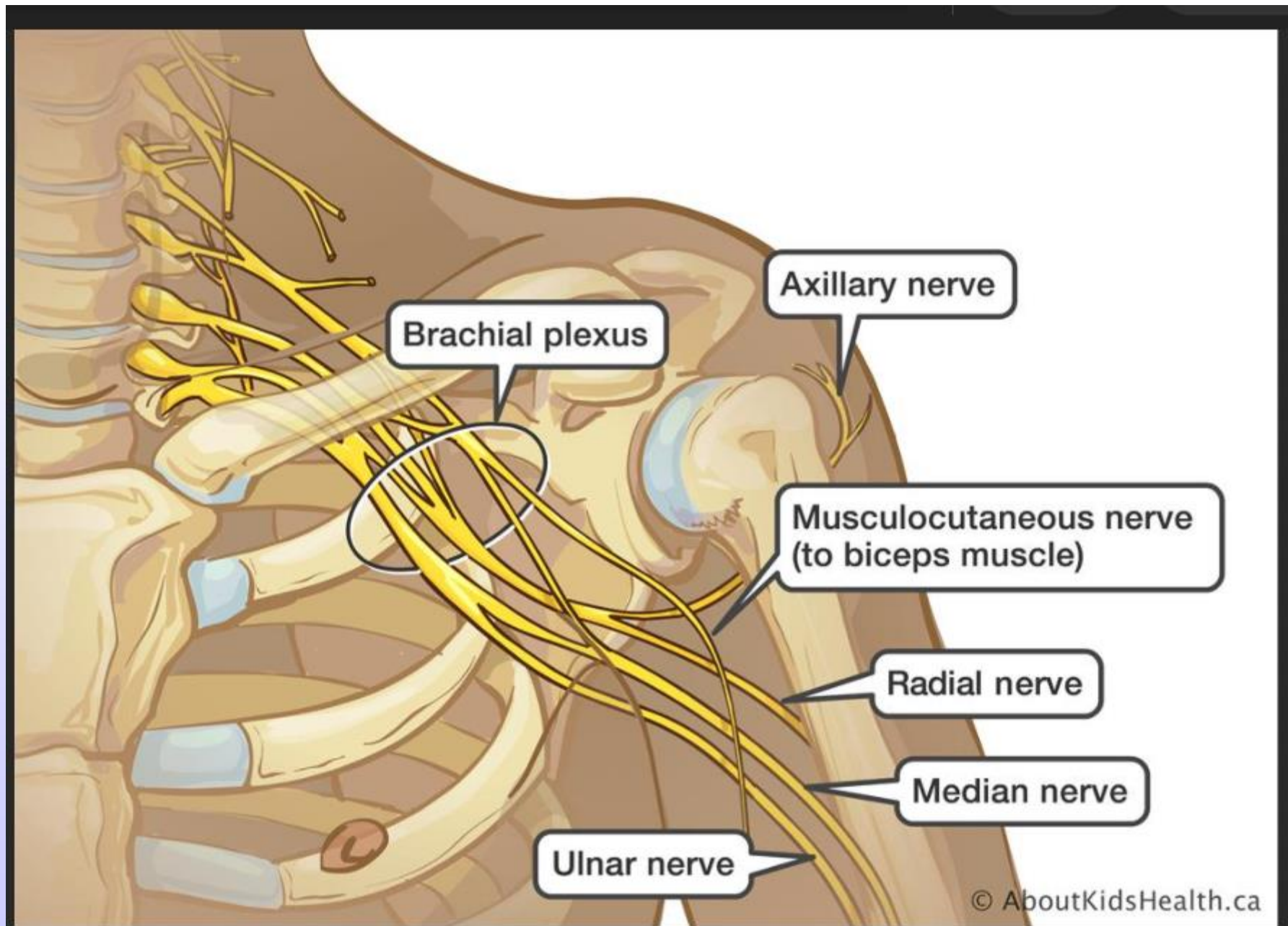
Terza linea di trattamento terapie interventistiche

- Blocco del simpatico
- IVRA
- Blocchi anestetici
- neurostimolazione

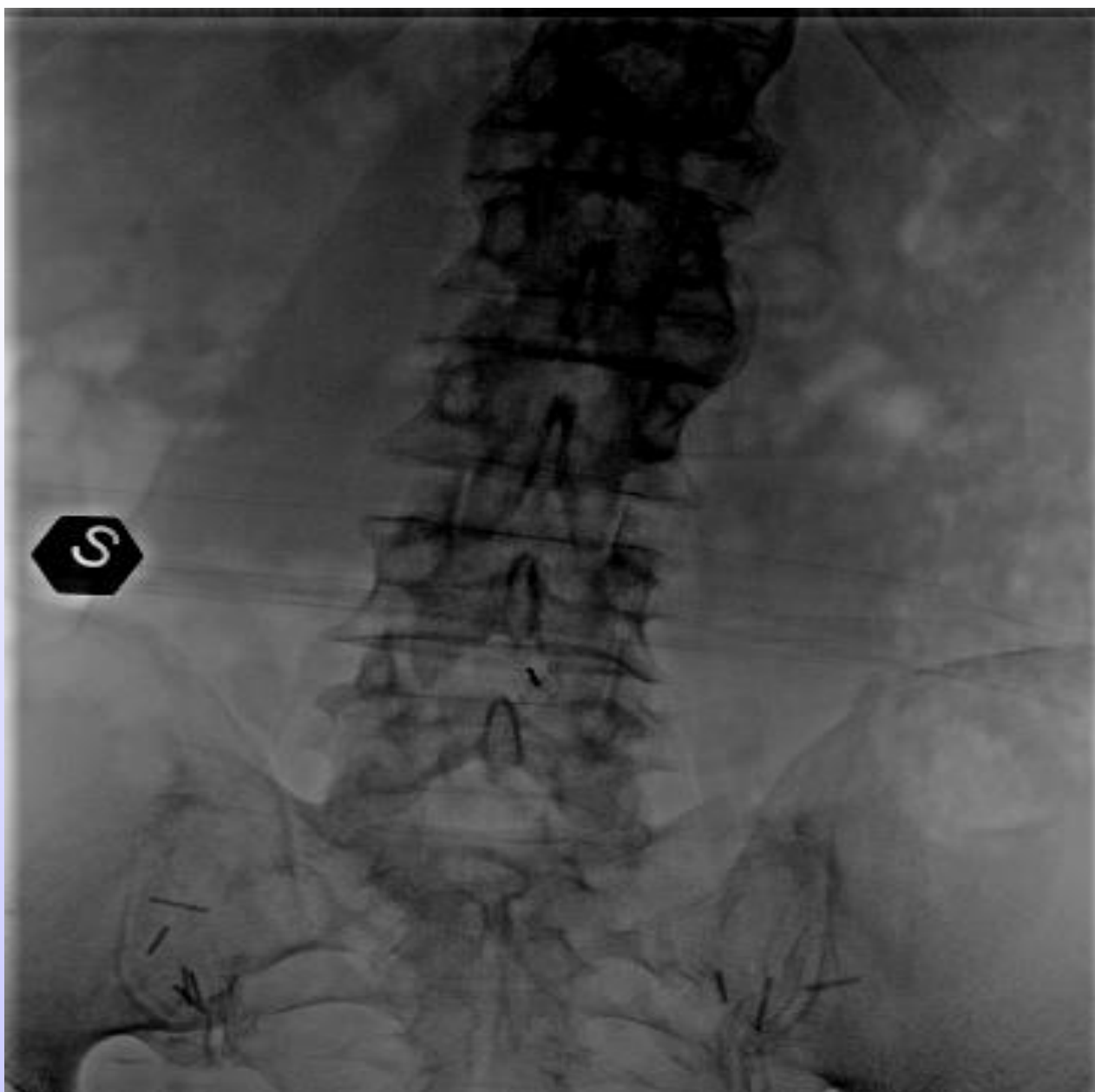
BLOCCO NERVOSO SIMPATICO

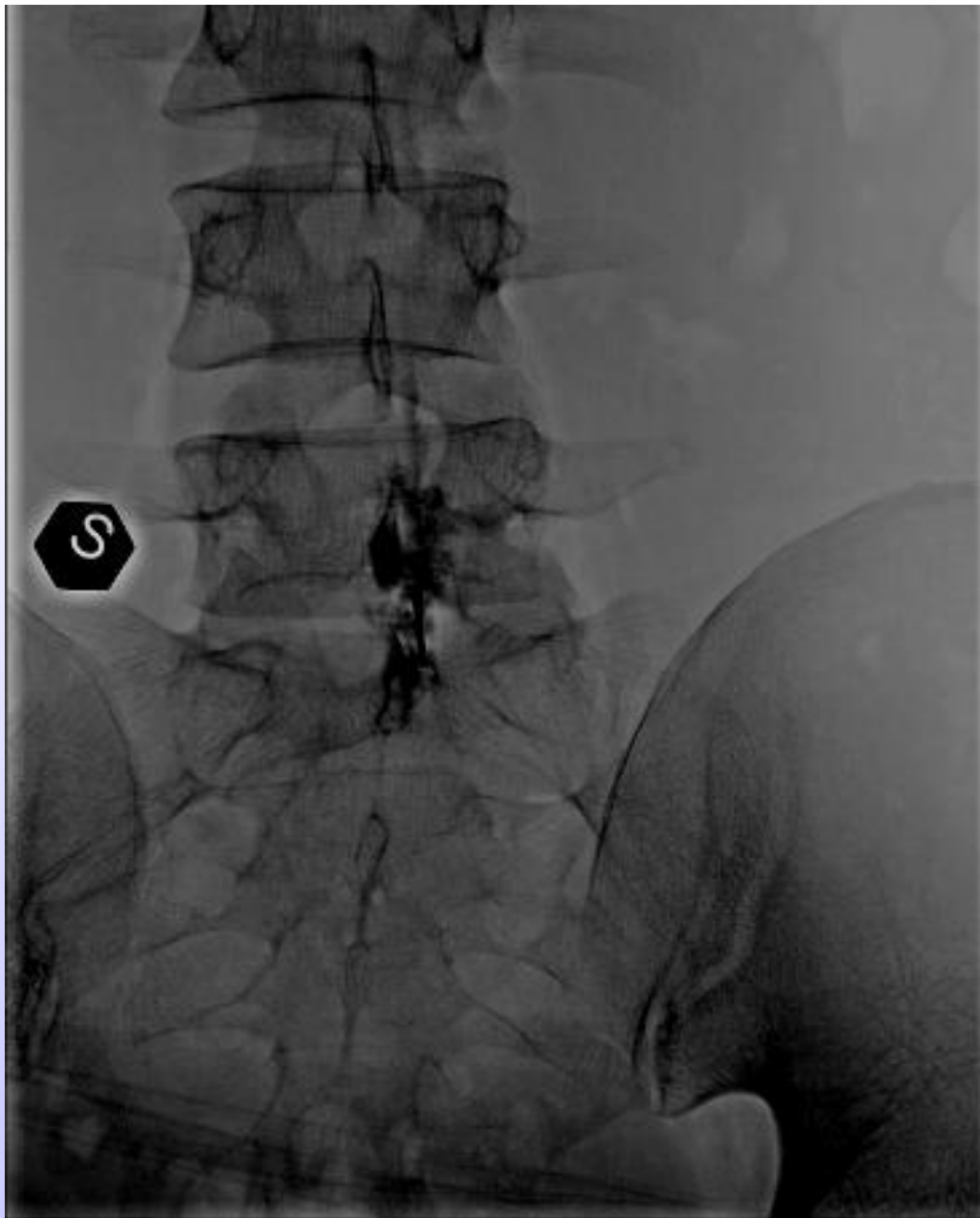


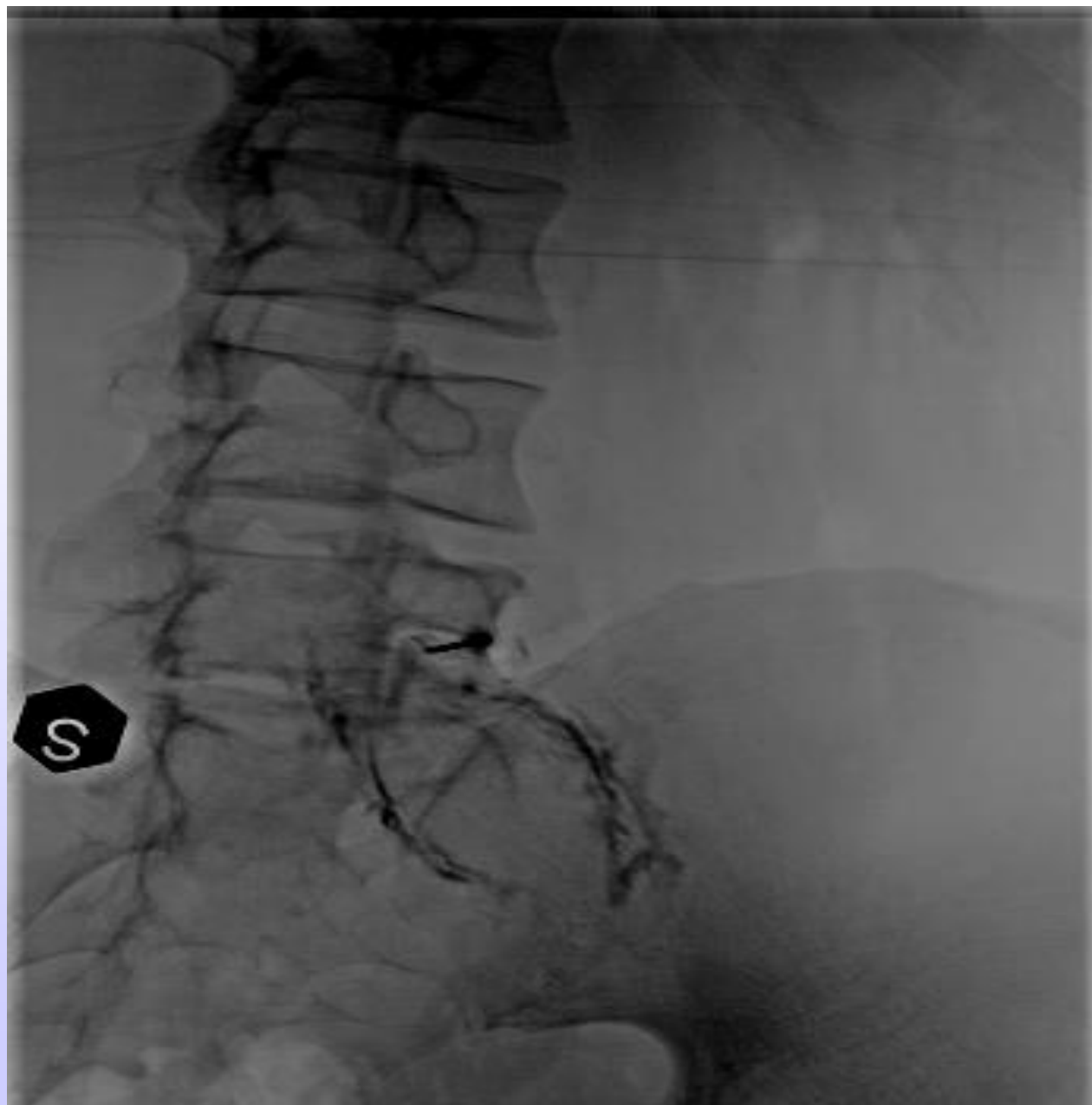
PROCEDURE LOCOREGIONALI









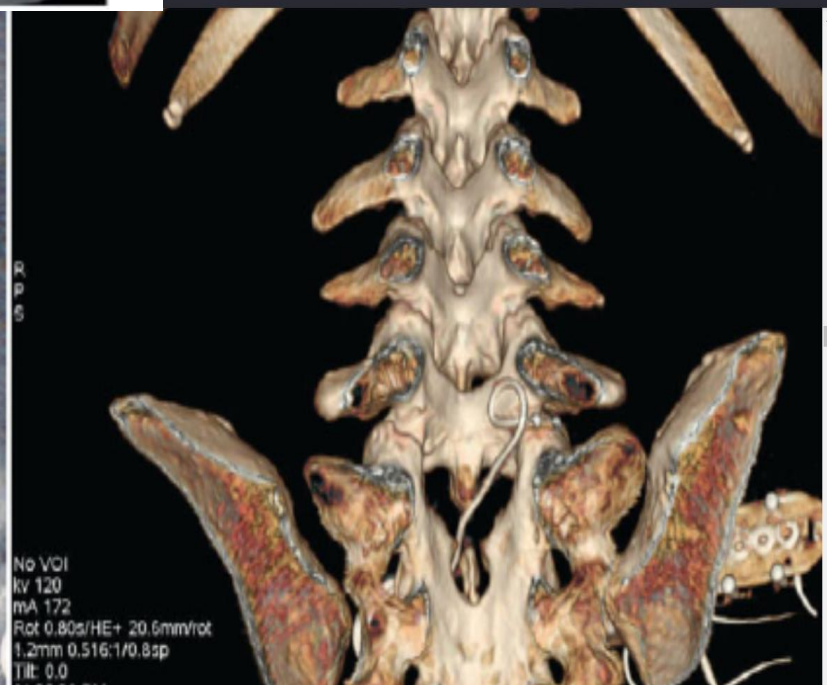
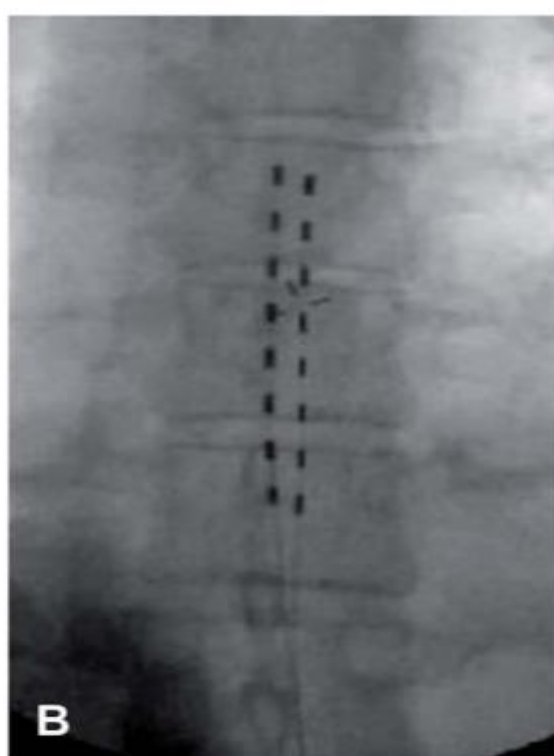


ENDOVENOSA REGIONALE



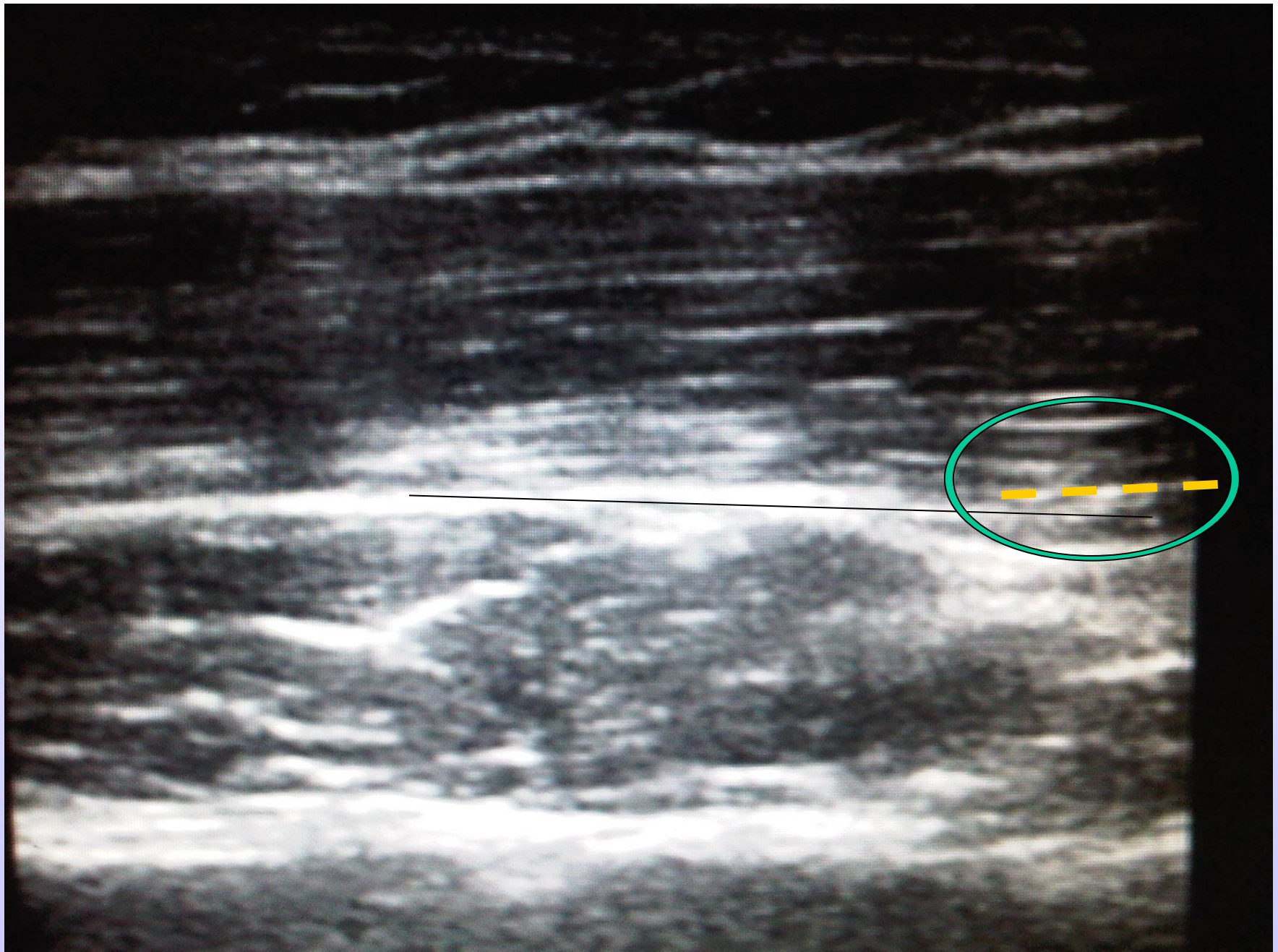


Neurostimolazione elettrica midollare e periferica









Neurostimolazione

- Elevato livello di evidenza con prove di efficacia e sicurezza

REVIEW ARTICLE

A Comprehensive Outcome-Specific Review of the Use of Spinal Cord Stimulation for Complex Regional Pain Syndrome

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■ Abstract

Background: Complex regional pain syndrome (CRPS) is a painful, debilitating affliction that is often difficult to treat. It has become common international practice to use spinal cord stimulation (SCS) for the treatment of CRPS as other therapies fail to provide adequate relief, quality of life, or improvement in function. This comprehensive out-

comes. Of 30 studies selected, seven systematic reviews were excluded, as were four studies reporting combination therapy that included SCS and other therapies (ie, concurrent peripheral nerve stimulation, intrathecal therapy) without clear delineation to the effect of SCS alone on outcomes. A total of 19 manuscripts were evaluated.

Results: Perceived pain relief, pain score improvement, quality of life, and satisfaction with SCS were all rated 1B+;

Table 3. Summary of Outcome-Specific Evidence for Spinal Cord Stimulation (SCS) Therapy in Complex Regional Pain Syndrome (CRPS)

Outcome	Score	Implication
Perceived pain relief	1B+	Recommended
Pain score improvement	1B+	Recommended
Resolution of CRPS signs	0	Study-related application
Functional status improvements	2B±	Considered, study related
Quality of life	1B+	Recommended
Psychological effects	2B±	Considered, study related
Sleep hygiene	0	Study-related application
Analgesic requirements	2C+	Considered, study related
Satisfaction with SCS	1B+	Recommended

Per riassumere

- Evidenze scarse o nulle
- I clinici devono quindi essere guidati dai risultati di RCT per altre neuropatie dolorose sugli studi a disposizione per la CRPS e sulla propria esperienza clinica
- Scelta terapeutica: sulla base delle caratteristiche del singolo individuo
- l'identificazione clinica della fisiopatologia
- SCS non è l'ultima spiaggia

Table 4 Symptoms included in the CRPS Severity Score, 2010.⁴⁰ CRPS, complex regional pain syndrome.

Symptoms that were self-reported

Allodynia
Temperature asymmetry
Skin colour asymmetry
Sweating asymmetry
Trophic changes
Motor changes
Decreased range of motion
Asymmetric oedema

Symptoms observed at the time of examination

Hyperpathia to pinprick
Allodynia
Temperature asymmetry to palpation
Skin colour asymmetry
Sweating asymmetry
Asymmetric oedema
Trophic changes
Motor changes
Decreased active range of motion

INTERVENTO ALGOLOGICO

- Intervento algologico: difficoltà ad iniziare o progredire nella riabilitazione a causa di una CRPS di severità medio elevata
- Diagnosi -Terapia- Gestione
- Timing valutazione multidisciplinare

Grazie