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1. Historical Perspective – Changing Nomenclature, Changing Diagnostic Criteria

- a. Pre 1993
- b. 1993-2003
- c. Post 2003

2. Pre 1993-1864 Mitchell

1942 Sudeck and many others

3. RSD = SMP

Sympathetically maintained pain coined 1980

4. 1993-2003

IASP Forms Task Force
Redefine RSD

- a. New Name: Complex Regional Pain Syndrome Type I & II
- b. New Diagnostic Criteria

5. CRPS

A term describing a variety of painful conditions following injury which appears regionally having a distal predominance of abnormal findings, exceeding in both magnitude and duration the expected clinical course of the inciting event often resulting in significant impairment and slowing variable progression over time.

CRPS Type I (RSD)

- a. A syndrome that develops with an initiating noxious event
- b. Spontaneous pain or allodynia/hyperalgesia, is not limited to the territory of a single peripheral nerve and is disproportionate to the inciting event
- c. There is or has been evidence of edema, skin blood flow abnormality or abnormal sudomotor activity in the region of the pain since inciting event
- d. This diagnosis is excluded by the existence of conditions that would otherwise account for the degree of pain and dysfunction

CRPS Type II (Causalgia)

- a. Type II is a syndrome that develops after a nerve injury
- b. There is or has been evidence of edema, skin blood flow abnormality or abnormal sudomotor activity in the region of the pain since inciting event
- c. This diagnosis is excluded by the existence of conditions that would otherwise account for the degree of pain and dysfunction

6. **Diagnosis of CRPS**

This consensus conference also removed the requirement that one must/should have pain relieved by a sympathetic block as a diagnostic criteria

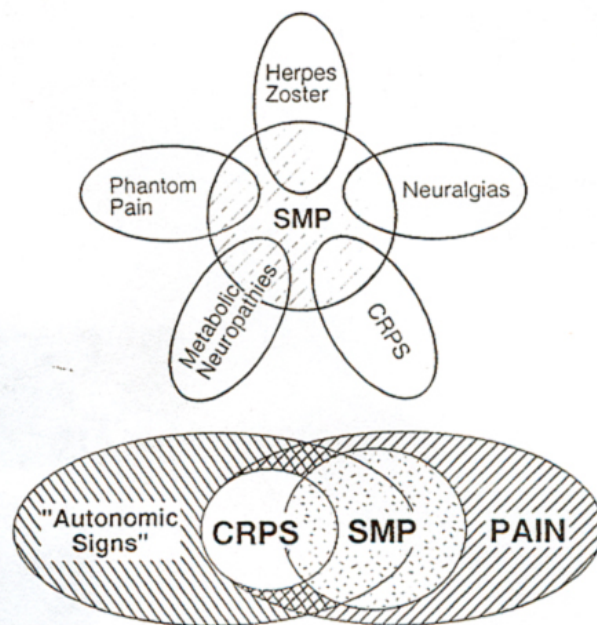
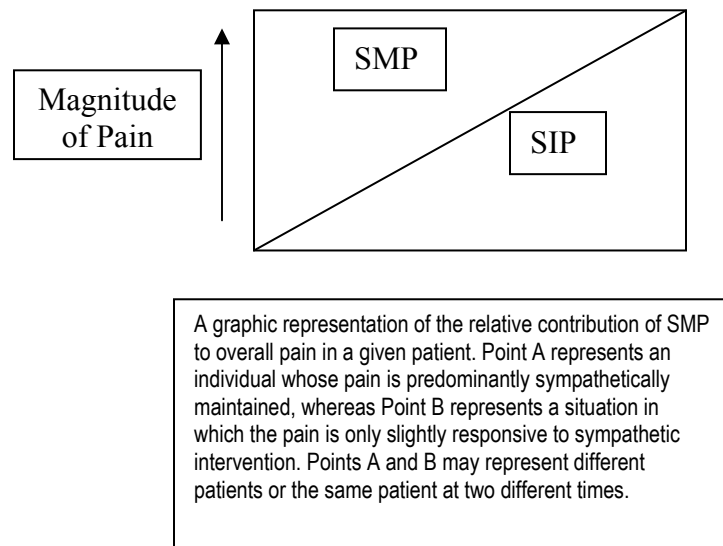


Fig. 1. Relationship between SMP and selected painful conditions. This is meant to be a conceptual framework and the magnitude of the intersection between sets is not intended to represent a quantitative relationship. SMP may exist as an entity not associated with any other condition. The list of associated conditions is not meant to be exhaustive.

7. **Between 1993-2003 several studies were published which yielded inconsistent results**

- a. Van de Beek et al. (2002) evaluated impact of IASP criteria:
 - found 107 studies,
 - only 3 used IASP criteria
- b. Reinders 2002 undertook a similar project
 - reviewed 125 papers (1996-2000)
 - excluded 60 because they were case reports, editorial comments, or included in less than 10 patients
 - of the remaining 65 none met IASP diagnostic criteria
- c. Growing understanding that many patients exhibit motor signs (tremor, dystonia) as part of their CRPS symptoms

8. **Proposed changes to diagnostic criteria**

General Definition of the Syndrome

CRPS describes an array of painful conditions that are characterized by a continuing (spontaneous and/or evoked) regional pain that is seemingly disproportionate in time or degree to the usual course of any known trauma or other lesion. The pain is regional (not in a specific nerve territory or dermatome) and usually has a distal predominance of abnormal sensory, motor, sudomotor, vasomotor, and/or trophic findings. The syndrome shows variable progression over time. There are two versions of the proposed diagnostic criteria: a clinical version meant to maximize diagnostic sensitivity with adequate specificity, and a research version meant to more equally balance optimal sensitivity and specificity.

9. **Proposed Modified Research Diagnostic Criteria for CRPS**

- a. Continuing pain, which is disproportionate to any inciting event
 - b. Must report at least one symptom in *each of the four* following categories;
 - Sensory: Reports of hyperesthesia and/or allodynia
 - Vasomotor: Reports of temperature asymmetry and/or skin color changes and/or skin color asymmetry
 - Sudomotor/Edema: Reports of edema and/or sweating changes and/or sweating asymmetry
 - Motor/Trophic: Reports of decreased range of motion and/or motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair, nails, skin).
 - c. Must display at least one sign* at the time of evaluation in *two or more* of the following categories:
 - Sensory: Evidence of hyperalgesia (to pinprick) and/or allodynia (to light touch and/or deep somatic pressure and/or joint movement).
 - Vasomotor: Evidence of temperature asymmetry and/or skin color changes and/or symmetry.
 - Sudomotor/Edema: Evidence of edema and/or sweating changes and/or sweating asymmetry.
 - Motor/Trophic: Evidence of decreased range of motion and/or motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair, nails, skin)
 - d. There is no other diagnosis that better explains the signs and symptoms
- * A sign is counted only if observed at time of diagnosis

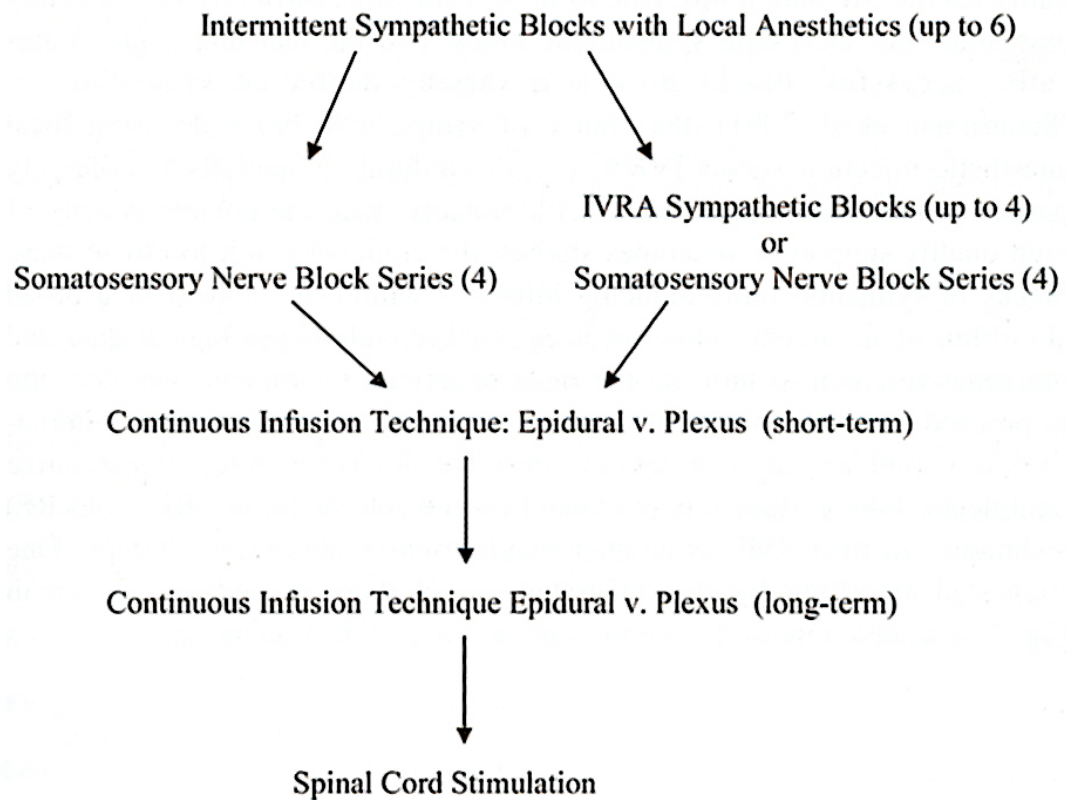
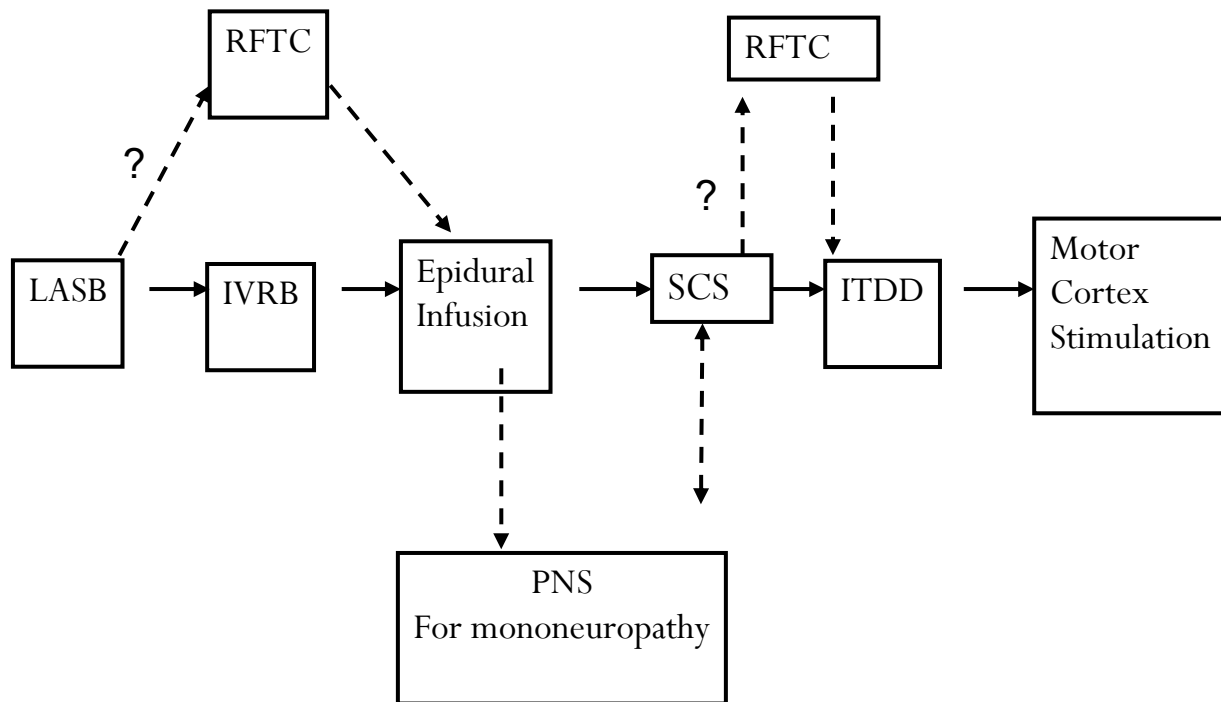


Fig. 3. Clinical algorithm for the use of regional blocks in the treatment of CRPS.

CRPS Clinical Algorithm



References

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2. Birkelein F, Handwerker HO. Complex regional pain syndrome: how to resolve the complexity? International Association for the Study of Pain. Elsevier Science.
3. Stanton-Hicks M, Janig W, Hassenbusch S, et al. Reflex sympathetic dystrophy: changing concepts and taxonomy. Pain 63:127-133, 1995.