

From the Book:

Chronic Pain: Reflex Sympathetic Dystrophy Prevention and Management

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H. Hooshmand, M.D.

History of Reflex Sympathetic Dystrophy

Year	Author	Contribution
1700	Potts	Burning pain and atrophy in injured extremity
1813	Denmark	Amputation for treatment of pain
1853	Bernard	Role of sympathetic system in temperature control
1878	Bernard	Role of sympathetic system in sustaining the balance of internal environment (Mileu Interne)
1864	S. Weir Mitchell	Erythromelalgia
1867	S. Weir Mitchell	Causalgia
1882	Volkman	Posttraumatic bone rarefaction: "acute atrophy of bone"
1898	Destot	Singular osteoporosis due to longstanding sprained ankle
1900	Sudek	Atrophy and bone rarefaction secondary to nerve damage
1901	Santorio	Thermoscope
1908	Bier	The first regional block
1916	Leriche	Sympathectomy
1923	Orbeli	Antifatigue effect of sympathetic nerves (Orbeli effect)
1926	Leriche	Sympathetic nerve roots dysfunction as cause of pain
1926	Barré	Barré-Lieou syndrome, cervical pathology involving sympathetic nerves surrounding vertebral arteries causing vertigo, blurred vision, and pain in the arms
1928	Lieou	Sympathetic involvement in cervical spine pathology (Barré-Lieou syndrome)
1929	Zue Verth	Peripheral acute trophoneurosis
1931	Morton and Scott	Traumatic angiospasm
1932	Hisey	Brain as an endocrine gland (controlling ovulation)

1933	Fontaine and Herrmann	Posttraumatic osteoporosis and bone rarefaction
1934	Lehman	Traumatic vasospasm
1937	DeTakats	Reflex dystrophy
1940	Homans	Minor causalgia (in contrast to Mitchell's major causalgia)
1940	Ray and Wolff	Trigeminal nerve role in cranial vascular headache
1943	Livingston	Vicious circle of inactivity and pain resulting in RSD
1947	Steinbrocker	1. Reflex neurovascular dystrophy 2. Shoulder-hand syndrome with atrophy of hands as a common form of RSD
1947	Evans	The syndrome of reflex sympathetic dystrophy (RSDS)
1947	Nathan	Multiple level input of pain to the spinal cord in RSD (mitigating against surgery): wide dynamic range (WDR)
1948	Sunderland	Perpetuation of pain and RSD at spinal cord level: "turbulence phenomenon"
1955	Mitchell	Sympathetic preganglionic cell bodies in all levels of spinal cord
1957	Tracey	Postsympathectomy pain (also called sympathalgia pain to the spinal cord in RSD) mitigating against surgery
1964	Weirtz-Hoessels	Paresis and weakness of extremity due to RSD
1970	Akil	SIA (stress-induced analgesia) in rats achieved by endorphines
1971	Melzack	Biasing mechanism of pain in CNS perpetuating RSD pain
1971	Goldstein	Discovered opiate receptors in the brain
1973	Kleinert	"Variable pain syndrome" as symptoms of RSD
1973	Duensing	Thermography in nerve injuries
1973	Bonica	Comprehensive 3-stage classification of RSD; early diagnosis critical in outcome of treatment
1973	Patman	Mimocausalgia
1974	Hannington-Kiff	Gaunethidine regional block with up to 80% relief

1975	Lichtenstein	Loss of vascular tone, vasodilation, and bone resorption
1976	Wallin	Hyperpathic (sympathetic) pain is different from somatic pain; injection of sympathetic amines induces hyperpathic pain in causalgic limb but not in normal limb
1976	Kozin	Bilaterality in RSD; bone scan
1976	Travell	Defined trigger points and trigger point injections in management of RSD
1979	Moskowitz	Role of trigeminovascular structure in vascular headache
1981	Kozin	Diagnostic value of scintigraphy, abnormal in 60% of RSD patients
1983	Poplawski	"The most important factor in predicting improvement was ... less than 6 months between onset of RSD and the administration of therapy"
1984	Basbaum	Descending analgesic endorphin system from periaqueductal gray to spinal cord
1986	Ochoa	ABC phenomenon (angry backfiring c fibers as a source of pain and RSD)
1986	Uricchio	Thermography in radiculopathy
1988	Roberts	Role of peripheral nervous system and CNS in pathophysiology of causalgia
1988	Wexler	Standardized thermography and its use in RSD
1988	Hobins	"Reflex sympathetic Dysfunction"
1989	Yokota	Motor paresis and movement disorder due to efferent manifestation of RSD
1990	Schwartzman	Movement disorders due to RSD
1991	Stein	Peripheral release of lymphocyte-mediated endorphin originates an analgesic system that is in effect in all levels of CNS and PNS