

Editorial

Reflex? Sympathetic? Dystrophy? Paradigm Shift?

*For thence,—a paradox
Which comforts while it mocks,*
Robert Browning

Reflex sympathetic dystrophy (RSD) is a comforting term that has been in use for decades and, like many other concepts, "I can't define it, but I know it when I see it." Points of view expressed by two respected and insightful researchers in commentaries in this issue illustrate the paradoxical gulf between "clinicians" and "basic scientists" when discussions turn to RSD or other pain syndromes in which the sympathetic nervous system is thought to be implicated, such as sympathetically maintained pain (SMP). These commentaries raise issues related to apparent shortcomings perceived in both the "clinical" and "laboratory" models of the "disease." This discussion is not new, and has been enunciated elsewhere (1-4). However, it is becoming increasingly important, as the early recognition and treatment appear to have an impact on the outcome of the condition. These commentaries by Ochoa and Jänig urge clinicians to define the syndrome (or syndromes) they are treating. Basic scientists are urged to refine the animal models of the condition. Both authors recognize the deficits in the published information in both fields.

The clinical literature is replete with case reports, anecdotal experience, uncontrolled treatments, and outcome studies with short-term subjective rather than long-term objective criteria. Many clinical reports do not appear to enumerate diagnostic criteria for the syndrome under discussion. When diagnostic criteria are mentioned, authors may differ in their requirements to make the diagnosis of RSD. For example, a recent study (5) of sensory testing of patients with RSD accepted as few as two criteria (aching + sudomotor changes; burning + edema) and also patients who had burning + aching + throbbing pain + edema + sudomotor changes + vasomotor changes + atrophy + trophic changes + weakening + cold sensitivity. There are other workers who might question the inclusion of such a broad range of clinical presentations as RSD (6),

although the authors admit a heterogeneity of sensory symptoms in their group. They suggest that no single sensory abnormality, with the exceptions of persistent pain and mechanical allodynia, can be used as a criterion for diagnosis of RSD. They further imply that RSD patients can have SMP, but also include two patients who tested negative for SMP by response to sympathetic block. These comments do not diminish the importance of the findings, but highlight the taxonomic dilemmas. This group also minimized the importance of placebo blocks.

Another group (7) defined RSD as the presence of a type II or type III response on isolated cold stress testing and "dramatic" temporary pain relief from stellate or lumbar sympathetic blockade. Not surprisingly, eight of the 12 patients responded to i.v. regional bretylium for a mean of 20.0 (± 17.5) days (seven patients completed the study). Parenthetically, these authors may have answered Fields' question (6) about the systemic effects of lidocaine, by showing that there was no benefit.

Objective measurements of the physiological derangements are rarely made because of the difficulty, complexity, and expense of such measures (particularly in a busy clinic). Objective measurements of the functional changes produced by the condition are also rarely reported, for the same reasons. Changes in these variables with treatment are also rarely reported. It is not surprising, therefore, that at least 30 disparate treatment modalities for RSD may be found in the peer-reviewed literature [partially summarized earlier, (8), and reminiscent of the treatments used for phantom limb pain, (9)], all with "success" rates of 60-100%. It would seem curious that most of the new treatments are developed in response to failures of established treatments: if they are all so effective, why try new ones? It is also no wonder that insurance companies and other third-party payers are beginning to disallow reimbursement for some treatments that they claim do not produce functional improvement (and savings to the payer). A further example has just occurred as a result of this problem. Until now,