Recovery from Severe Refractory Complex Regional Pain Syndrome (Type 1) with Interdisciplinary Treatment Model

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Introduction: Refractory Complex Regional Pain Syndrome- Type 1 (CRPS) is a neuropathic pain condition characterized by intense limb pain, autonomic dysfunction, dystrophic changes of the skin, and vasomotor instability. While CRPS has been extensively studied in adult populations, less is known about CRPS in children. Collectively, prior treatments included multiple stellate ganglion blocks, casting of extremities, physical therapy, indwelling cervical and lumbar epidurals, lumbar sympathetic blocks, implantation of spinal cord stimulators, interferential dermatome stimulation, magnatherapy, electro-stimulation, hypnosis, individual psychotherapy, and general anesthetics for manipulation of extremities. In all cases, symptoms worsened, resulting in the "spread" of CRPS to a second extremity and the development of severe contractures in the affected limbs. An individualized, multi-method family-centered approach for the treatment of CRPS may be appropriate in working with complex pediatric populations.

Methods: The data for this study were drawn from a convenience sample of three children and adolescents, aged 13 to 16 years, at a large midwestern children's hospital during the period from September 1998 to March 2003. A multiple case-descriptive design was utilized to compare three patients on variables associated with the treatment experience. These variables included medical history associated with CRPS, psychosocial variables, description of individualized treatment, and treatment outcomes.

Results: All three patients had complete recovery of function in all affected extremities within 6-8 months after initiation of treatment.

Conclusions: A multi-method, family-centered approach may contribute to effective treatment of refractory CRPS-Type 1 in teenagers.