Pediatric CRPS Q&A

By Robert Wilder, MD, PhD

Q: What is the incidence of recurrence of CRPS after successful treatment and resolution of an acute episode in a 14 year-old girl? What are the outcomes after recurrences?

A: According to the literature on pediatric CRPS, a significant portion of children with CRPS will have a recurrence after successful resolution of the first episode. Sherry et al [1] cite a 31 percent incidence of recurrence of pain in those followed for more than 2 years. All of these cases resolved with reinstitution of the exercise program used to treat the initial episode. In another study [2], the investigators followed patients for 12 to 18 months after initial treatment with biobehavioral techniques and outpatient physical therapy one or three times per week. They found a high recurrence rate, with 12 of 25 patients having another episode affecting the same limb and 5 having recurrence in another limb. They comment, however, that "although recurrent episodes were frequent, in the majority of cases they responded more quickly to PT and related treatments than with the original episode."

Multiple case reports also exist of CRPS recurring in the same or other limbs in children and adolescents after, or even during, treatment of the initial episode [3-6]. A common theme is that these recurrences are generally, although not universally, successfully treated with a regimen similar to that used for the initial episode.

On the other hand, Petje et al [7] reported no recurrence of CRPS with 30 month follow-up after an initial treatment regimen consisting of physical therapy, psychological counseling, and temporary sympathicolysis with Iloprost, a prostacyclin analog. Likewise, although with only very short follow-up, Dadure et al. [8] reported no recurrence over two months following a regimen consisting of intravenous sympathetic block followed by continuous peripheral nerve block for four days to allow active participation in twice daily physiotherapy.

The incidence of recurrence in children and adolescents appears to be higher than that reported in adults. Two large series report ranges from 2.4%[9] to 10 %[10]. This view is challenged by two studies that found a high percentage of adults with long-standing pain and disability several years after treatment of CRPS[11, 12].

> **"Children** and **adolescents** who **have had** an initial episode of **CRPS** may be at **risk for recurrence** in the same or another **limb**."

In summary, children and adolescents who have had an initial episode of CRPS may be at risk for recurrence in the same or another limb. These subsequent episodes tend to be less severe than the initial episode. This is likely because the symptoms are quickly recognized, and treatment is initiated with a therapy that has already proven efficacious for the patient.

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