Successful treatment outcome for an eight year old hemophilia boy with Chronic Regional Pain Syndrome (CRPS)

Authors: Tiktinsky R*, Kenet G*, Sher-Lurie N^, Martinowitz U*

Hospital: *National Hemophilia Center, Sheba Medical Center, Tel Hashomer, Israel
^Safra Pediatric Orthopedic Center, Sheba Medical Center, Tel Hashomer, Israel

Background

Complex regional pain syndrome (CRPS) or Reflex Neurovascular Dystrophy (RND) is a chronic neuropathic pain disorder with autonomic features which typically develops in an extremity after acute tissue trauma.

Neuropathic pain such as burning, hyperalgesia, and allodynia may occur. CRPS may have local edema, altered sweating, skin temperature and skin color, loss of strength, decreased active range of motion and tremor.

Case Description

An 8 year old boy with severe Hemophilia B presented with a painful left ankle.
Examination showed limited range of motion, allodynia and minimal weight bearing.
Physical therapy treatment consisted of ultrasound, soft laser, active movement, kinesiotape placement and exercises to improve weight bearing.
Three weeks following his first presentation, the patient's symptoms worsened. The entire foot was edematous, the skin shiny and pale, allodynia was severe, no active movement was obtained and there was no weight bearing. The patient refused to wear shoes and socks. He ambulated with a walker.
The quality of the pain and objective findings were consistent with the diagnosis of CRPS.
Using the Children's Hospital of Philadelphia's protocol, we were able to achieve successful results within a short 6 week period of treatment.

Treatment

Physical therapy treatment consisted of the Reflex Neurovascular Dystrophy Philadelphia program.
Treatment included intense exercise to the area affected by the pain syndrome. It promotes increased strength, endurance and agility, reduces hypersensitivity and helps return full functionality to the affected area. The main goal is to return to full daily activities. Each child is educated on how to progress their activities and home exercise program once discharged from the program.
Exercises and activities include hopping, wheelbarrow races, steps, jumping like a frog and hydrotherapy. Each activity must be performed faster and better that the time before.

ACTIVITIES

CONCLUSIONS

The treatment program designed by Children's Hospital of Philadelphia is a composite program including physical therapy, occupational therapy and psychological treatment. Together with the patient's return to his home environment, school and friends, the program intervention is successful.

The intense program of exercise, aerobics and de-sensitisation with the mantra "you can't say I can't" proves worthy.

Our patient's treatment lasted 6 weeks. He improved in all the activities, desensitization and hydrotherapy. He ambulated with full weight bearing, donned socks and shoes and returned completely to his daily activities.

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Corresponding author: R. Tiktinsky: tikoti@netvision.net.il
National Hemophilia Center and International Hemophilia Training Center, Sheba Medical Center, Tel Hashomer, Israel

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