

"There is no crying in softball"-Chronic Upper Extremity Pain ----PBLD Title

Presentation Date/Time: Sunday, March 15, 2015; 7:00 – 8:10am: PBLD Table #: 35

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Goals:

At the end of this discussion, participants will be able to:

- Review goals of chronic pain management in the pediatric population
- Describe management strategies for chronic pain in children with complex medical diagnoses
- Learn the importance of adopting a multidisciplinary, multimodal approach when treating chronic pediatric pain.

Case description:

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13 year old Caucasian female presented to our multidisciplinary pain clinic with chief complaint of bilateral upper extremity pain. She was referred to our multidisciplinary pain clinic by an Orthopedic Surgeon with diagnosis of Complex Regional Pain Syndrome for Stellate Ganglion block. She was 5 foot 4inches, 52Kg an avid soft ball player with history of generalized musculoskeletal pain, affecting different joints and muscle groups for last 3 years. She started experiencing worsening pain after she started pitching about 4 months ago. She described pain as sharp to burning in character, radiating from her hands up to her shoulder area, with increased intensity of pain in right upper extremity than left. She also reported her arms feel cold to touch. She denied any significant injury or trauma. During bilateral upper extremity examination, arms were equal in length and size with symmetry, no atrophic changes of hair or nails was noted, pulses were equal in all extremities with no change in temperature but patient reported pain on performing range of motion exercises. Grossly motor and sensory examinations were normal with deep tendon reflexes of 2+ in both extremities with normal Cranial Nerve Examination. A series of two Stellate Ganglion blocks were performed on each upper extremity followed by intensive physical therapy sessions which resulted in relief from pain lasting for only 3 weeks. After failure of therapy and discussion with family patient was referred to General Pediatric service which admitted the patient. During patients hospital admission she was seen by Neurology, Rheumatology, Psychiatry and underwent extensive blood work up with CT scan, MRI, bone scan and nerve conduction studies, all of which were normal. During her hospital course she was started on opioids and non-steroidal analgesics for pain, and also amitriptyline for depression associated with pain. Patient was referred to genetics after the hospitalization during with she was found to have Ehlers-Danlos syndrome.

After the diagnosis of Ehlers-Danlos syndrome she was seen back at our multi-disciplinary pain clinic for pain management. Patient required analgesics to alleviate pain symptoms. Neurontin and Tramadol were added to her regimen to decrease opioid consumption. Opioids were reserved for severe painful episodes. Our patient was already on Amitriptyline for depression, we recommended switching to Nortriptyline in an effort to reduce amitriptyline related orthostatic hypotension. Physical therapy was started with low resistance exercises as suited for these patients. Aquatic therapy or pool therapy promotes muscle development and co-ordination. These patients should be cautioned to avoid contact sports and to avoid strenuous activities or repetitive lifting that can produce undue stress or strain on their already hypermobile joints. Psychotherapy utilizing coping mechanisms, cognitive behavioral therapy and relaxation techniques are important part of treatment plan to help these children deal with their chronic pain. Other measures useful in treatment of these patients are, TENS Unit, vitamin C supplements, and massage therapy with acupressure or acupuncture. Subsequent follow up over month's patient reported decreased pain score with no narcotic requirement and enhanced function and stable mood.

Model discussion:

1. What is Ehlers Danlos syndrome?
2. How is Ehlers Danlos syndrome classified?
3. Describe the physical examination findings in a patient with EDS
4. How is EDS diagnosed?
5. List the goals of chronic pain management in children
6. Discuss the epidemiology of chronic pain in children
7. What are the effects of chronic pain in children?
8. Outline the commonly employed management strategies for chronic pain in children
9. Discuss the benefits of adopting a multidisciplinary approach when managing chronic pediatric pain
10. Discuss the complex presenting features of EDS.
11. Discuss pain management options in a child with EDS.
12. Case reports discussing possible link between CRPS and EDS

References:

Patients with Ehlers Danlos syndrome and CRPS: A possible association?; Joan M. Stoler a, Anne Louise Oaklander. Pain 123 (2006) 204–209

Pediatric pain management: the multidisciplinary approach; Shannon Odell and Deirdre E Logan. J Pain Res. 2013; 6: 785–790.

Parents' Initial Perceptions of Multidisciplinary Care for Pediatric Chronic Pain; Ayala Y. Gorodzinsky, Susan T. Tran, Gustavo R. Medrano, Katie M. Fleischman, Kimberly J. Anderson-Khan, Renee J. Ladwig, and Steven J. Weisman. *Pain Research and Treatment*, Volume 2012 (2012), Article ID 791061