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## ***Physical Therapy Update***

*The clinical staff at Frederick Sport and Spine Clinic regularly reviews articles, discusses the content and implements the information into our patient treatments. As a service to the local medical community, we are offering a summary of these articles to Physicians and Medical Practitioners. It is our intention to provide only the most pertinent info in these ½ page summaries. Further info is available at the clinic. Please take a moment to peruse the information below and contact us if you have any questions about the subject matter. Enjoy!*

### **Complex Regional Pain Syndrome**

Research report by: G. Vacariu, Disability and Rehabilitation, 2002; Vol 24, No.8, 435-442.

The term RSD, Reflex Sympathetic Dystrophy, draws a lot of important questions; this is why the term has been changed to CRPS, Complex Regional Pain Syndrome. The concept was changed in an attempt to describe the painful condition without presuming the cause. The term RSD suggests that the sympathetic nervous system is to blame for the pain, which then indicates that a sympathetic nerve block is the solution; however this does not always relieve the pain.

The clinical characteristics of CRPS can range from minor to severe. Obviously the number one characteristic is pain, which is often expressed as aching/ burning sensation that is aggravated by movement or lowering of the affected limb. Also, sensory disturbances to mechanical and thermal stimulus commonly occur. In earlier stages, autonomic dysfunctions in the affected limb include red, warm, mottled discoloration, and distal edema. Later stages often result in skin temperature differences. Impairment of motor function is prominent, causing substantial muscle weakness in the affected limb. Trophic changes, such as brittle grooved nails, increased hair growth, thin and glossy skin commonly occur. Progressive changes include limited ROM, and muscle wasting.

As the term RSD has been changed, so has the concept for Physical Therapy; thus making the sympathetic nerve block a secondary option. Now, the primary goal is functional restoration, which is best achieved with exercise and analgesics. Physical Therapy should consist of active assisted exercise to regain ROM. When appropriate, this should be combined with proprioceptive neuromuscular facilitation (graded resistance), to improve muscle contraction. Biofeedback is also a wonderful tool, to help the patient reestablish mental awareness to tactile proprioceptive stimuli as well as retraining motor patterns. Desensitization training is also crucial to avoid hypersensitivity to touch. Lymph drainage and CO2 baths are also options in therapy to help decrease edema and minimize pain.

All of these options for Physical Therapy are wonderful, but the key to a quick recovery is early detection. The problem arises because these symptoms can resemble other orthopedic, neurological, and internal disorders, making the diagnosis difficult. Unfortunately, most of the severe cases receive this treatment too late, making it impossible to restore normal function.

**Reviewer: Paula Smith, PTA**