Post traumatic Dystrophy or Reflex Sympathetic Dystrophy Syndrome

About the author
Annet Post Grootenboer started in 2004 with her first IMT courses in Rotterdam, taught by Wilma Seedorf-Silos. She combined several studies which are integrated in the practice. She has a practice in Delft, The Netherlands.

Abstract
Post traumatic Dystrophy or Reflex Sympathetic Dystrophy Syndrome is the result of a complex combination of tissue damage. Dystrophy is difficult word used to mention the malfunctioning of body tissue. Post Traumatic Dystrophy is the malfunctioning of body tissue after an injury. Sympathetic Reflex is an indication that the automatic neurosystem plays a role. This case study demonstrates the use of Integrative Manual Therapy in the treatment of Post Traumatic Dystrophy.

Key words
Post traumatic Dystrophy, Reflex sympathetic Dystrophy Syndrome, pain, tensegrity, fascia.

Introduction
Fascia is one of the most fascinating tissues in our body. The tensegrity leads us to combine old school medical therapies, such as classic massage therapy, as new school intervention like matrix energetics. Everything is connected. Disconnection in fascia is called Post traumatic Dystrophy or Reflex Sympathetic Dystrophy Syndrome. These can be caused by fractures, surgical wounds, sprains, bruises, wounds on arms or legs. It can also develop in an arm after a stroke, a heart attack or if someone is very stressed. This particular symptom is also called the shoulder-hand syndrome. Sometimes the cause of the injury is difficult to identify. The people who treat the disease should be careful that it is not a actually another disorder.

Because of the complexity of the fascia, and the extreme pain suffered by patients, the treatment demands a highly skilled therapist. For further detailed information please read through the Master Thesis of Anton van Berkel1.

Review of relevant literature
To understand the mechanics and functional circumstances of the fascial role in connecting, conveying stresses, and proprioception, it is more important to know the architecture of the connective and muscle tissue than the regular anatomical order or topography. This applies to every fascial layer in the human body.2
Fascia is the biological fabric that holds us together. We are about 70 trillion cells all humming in relative harmony. Fascia is a 3-D spider web of fibrous and gluey tissues. Wet proteins hold them all together. How fascia works as a whole - our biomechanical regulatory system - is highly complex and under-studied. Understanding fascia is essential to the dance between stability and movement - crucial in high performance, central in recovery from injury and disability, and ever-present in our daily life, from our embryological beginnings to the last breath we take.

The definition of fascia is all the collagenous-based soft-tissues in the body, including the cells that create and maintain that network of extra-cellular matrix (ECM). That definition includes all the tissues traditionally designated as ‘fascia’ in classical anatomy. It also includes all the other very similar tissues, i.e. tendons, ligaments, bursae, and all the fascia in and around the muscles - endomysium, perimysium, epimysium. It also encompasses the fascia found around the organ, i.e., the coelomic bags that hold the organs in the peritoneum and mesentery in your abdominal cavity, the mediastinum, pericardium, and pleura that hold the organs in the chest cavity, and the membranes - dura and pia and perineuria - that surround the brain, spinal cord, and peripheral nerves.³

Statement of clinical hypothesis
Integrative Manual Therapy consists of numerous treatment options. To determine what the most effective and efficient techniques are, experience in the field is essential. The extreme pain that the patient lives with drives a therapist to find an effective treatment. The thesis of Anton van Berkel states that Hands-on techniques to release sustained muscle spasms⁴ are the best way to begin. We learned from Anton that treatment in a specific order, combined with stretching the fascia, lead to the best results. This should only be done when the total limb is treated. Repeating the same technique for several treatment sessions delivers the best results. Essential for recovery is to use the IMT techniques for motilities.⁵

My hypothesis is that after surgery the tensegrity and fascial layers of the bone are interconnected. The pain patients suffer from Post traumatic Dystrophy or Reflex Sympathetic Dystrophy Syndrome is so intense that it seems that there are two pain initiating processes going on. This bone-sharp pain inside the damaged tissue is combined with pain of the superfascial nerves. This makes it hard to differentiate the progress. The fascia of the soft tissues and the bone lost its tensegrity and integrity and become interconnected.

Case study
T.E, male, age 41, teacher and musician, fell down the stairs. He shattered his
right calcaneus and tore his ankle ligaments. Paramedics gave him, shortly after the fall, Valium to stop shaking. Surgeons used screws to support the shattered bone. Dystrophy is diagnosed one year later after intensive rehabilitation therapy. The screws are removed, hoping to resolve the pain and swelling of the ankle and foot. Unfortunately, the patient suffered for almost three years. The patient was anesthetized with an epidural during the two operations.

His general practitioner, who has attended several IMT classes in The Netherlands, treats T.E. with Lymphatic drainage techniques. The success of this treatment led T.E. to me for further treatment.

Review of the patient’s past includes, multiple ear infections on his right side. All during childhood. Also a fractured maxilla on his right side into the orbit.

Examinations
First evaluation shows a tired man, wearing thick sole shoes with a limbing walking pattern of his right leg.

The initial examination showed an ultrastrong left leg. The tissue around the right ankle and calcaneus was thin. After recovery of the wound and revalidation, there is significant pressure on the scar tissue when walking. The foot was swollen and painful and the scar is a red and purple color. A high liver tension was also identified.

Intervention
The patient was sedated right after the incident with Valium. This was done to stop his shaking. Reading the work of Peter A. Levine PhD named Somatic Experience makes me understand the effect of repressed traumatic experience by not being able to let go of the stressload through shaking. This seems to be the first to set off the fascial information. The two epidurals accentuated the disconnection even more.

This patient suffered from dystrophy following surgery. The scar tissue was red/purple and swollen. To relieve the pain, the patient drank excessive amounts of alcohol. Mentioning the liver tension, he felt trapped. Non judgemental explanations helps him to change his behaviour.

Treatment of the serie hands-on techniques as described in the thesis of Anton van Berkel provided a great recovery. The function of the ankle, foot and leg improved. The superfascial pain was solved by the re-filling the fascia of the whole limb.

Releasing the soft tissue from the bone with Template Therapy seemed to decrease so effectively that the template was given as home work Further treatment of the calcaneus with Bone solved the deep bone-sharp pain.
Outcome
By re-filling the fascia, all the tissues in the ankle were able to recover. The unique IMT techniques of Bone made this musician a very happy man again. He has 80% less pain. He walks normal. He is able to play music again without any worry of pain and swelling.

Conclusion
By understanding the numerous aspects of fascia, the Integrative Manual Therapist can reduce or eliminate the dysfunctions, which cause one of the most misunderstood possible results of surgery: Post traumatic Dystrophy or Reflex Sympathetic Dystrophy Syndrome.

References
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