

## **The Tendon Guard Reflex**

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### **Abstract:**

The TGR is an unconscious reflex triggered from the reptilian part of the brain. It is part of the built-in survival mechanisms of the body. To understand the impact on the body I will go thru the progressive systemic impact in the fascia, ligaments, muscles and connective tissue. We will learn the theory plus practical physical application.

The Tendon Guard Reflex (TGR), also known as the Shock Reflex, is an unconscious response by the body to messages transmitted by the reptilian part of the brain. The oldest part of the brain and responsible for survival instincts and reflexes, the reptilian brain is believed to have evolved from the time when people were under constant physical stress for survival in the world. When the body encounters a real or a perceived threat, the TGR reflex automatically activates and causes the tendons at the back of the ankles to contract. The purpose of the tendons contracting is to hold us back until we are neurologically organized and it is safe for us to choose to take flight or stand and fight. The TGR serves the dual purposes of preparing the body for action and of the subsequent reflex decision to stand and fight or turn in flight. The TGR protects the legs and enables them to perform efficiently regardless of the action (“fight or flight”) chosen.

Although today these same survival needs may not be physically present, other forms of stress remain which can and do trigger the TGR response. The dilemma in today’s society is that there is often so much stress in people’s lives that the TGR can be constantly

over-stimulated and remain locked in the contracted or stressed position without a person’s conscious awareness.

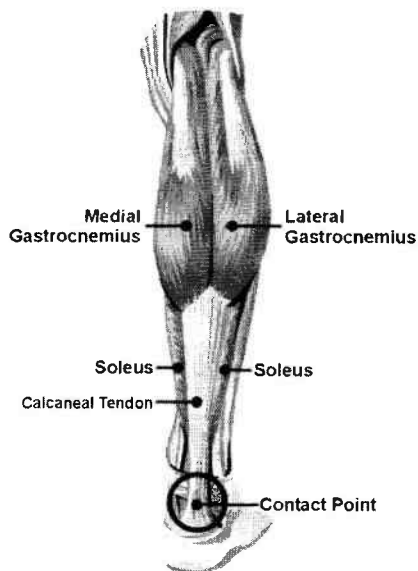
Although at first this may seem like a small occurrence, it has significant systemic ramifications. When the tendons at the back of the ankle tighten, a chain of events occurs:

- the muscles of the lower leg contract, resulting in
- the tendons at the back of the knee contracting, resulting in
- the knees locking, resulting in
- the muscles, fascia and connective tissue of the upper leg and thigh contracting, resulting in
- the lower back tensing and contracting, resulting in
- the complete spine becoming stressed and under tension, resulting in
- the neck muscles becoming tightened and shortened, resulting in
- the head being pulled back.

For efficient functioning of the vestibular system, which keeps a person balanced, the eyes must remain parallel to the ground. When the neck muscles tighten and shorten,

the head is tilted back triggering a counter reflex--the Oculomotor Reflex--which exerts a counter pressure partly through the muscles of the TMJ (jaw joints) to assist the return of the head to its proper position.

This simplified description shows an overview of the whole happening and the systemic pattern that can be addressed in a session. From one neurological impulse response, the whole body's physiology becomes involved--from the top to the bottom and back again. It's just like that old song... "The knee bone's connected to the thigh bone, the thigh bone's connected to the..."



When tissues tighten, the resulting effect resonates into the life energy of the cerebrospinal fluid (CSF) found in the sacrum, spine and brain. When the tissues surrounding the spine contract, the system must work harder to keep pumping the CSF to maintain its' own rhythm and pulse. Bringing relaxation to this response of the tissues and subsequent tension allows any work that follows to go deeper and for the body to be receptive to the muscle balancing of Touch for Health.

In the field of Educational Kinesiology, Dr. Carla Hannaford Ph.D. in her book "Smart Moves" discusses the far-reaching effects of releasing the TGR. She gives examples of working with school age children who were not talking and after release of the TGR, started to talk. Many children with learning difficulties are often toe walkers. When the TGR is released, they start to walk normally and their disabilities improve. Dr. Hannaford teaches parents how to apply pressure to the tendons to release them and encourages the parents to flex and extend the feet of their children while they are sleeping. Encouraging results have been noted.

In my own practice, I often start with work on the TGR. I am still in awe of the results that clients vocalize. Some immediately report their TMJ muscles relaxing, and many times, that they were unaware of how tight they were before I started holding the tendons. Or, they may state that they are aware of their low back, knees, neck or the area between their shoulder blades releasing. Often times they will release a deep sigh as their whole system commences to relax, release and unwind. This simple application, I find, has such a wide systemic influence.

One way to assist the system to release the TGR is to grasp each ankle and apply a firm pressure on the posterior aspect of the Achilles tendon in an anterior direction, within the client's tolerance. It is important to keep the thumbs on the lateral side of the ankle while applying pressure to the tendons found on the posterior aspect of the lower calf just superior to the anklebones, all the while encouraging the client to breathe.

In fact, some clients, with a little encouragement, may be willing to make loud sighs, groans or toning sounds on exhale. Sound often assists the movement of energy, so much so, that when feelings are repressed, clients have been known to begin sobbing. During a session, the legs may start to tremor as excess energy in the tissues is released. This technique is often to the body system what a valve is to a pressure cooker. Flexing and extending the foot after applying pressure to the tendons brings more releasing, as does applying a lengthening movement to the toes in a downward motion. Where the practitioner and/or client notice

congestion and/or release of energy, affords valuable insight or information as to what area might possibly benefit from more direct work during the session.

As an application in private practice or as a home activity for clients, the results of this work have been very dramatic. With a clear intention, visualization of relaxed tissues, presence, and the ability of the practitioner to be with the client, a safe, sacred space is created for the client to unwind, let go and release.

#### **About the Author:**

Sher Smith, is a Registered Nurse, Registered Polarity Practitioner, Registered Cranial Sacral Therapist, Educational Kinesiology Instructor and Touch For Health Instructor who has been involved in the holistic health field since 1979. Sher was the founding President of the Ontario Polarity Therapy Association and is a member of the American Polarity Therapy Association, the Craniosacral Therapy Association of the United Kingdom and Director of the RYP school of Polarity Therapy. Currently serving as a Vice President on the BOD of the American Polarity Therapy Association and is the Canadian Faculty for Brain Gym®. Her website is: [www.realizingyourpotential.ca](http://www.realizingyourpotential.ca)

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