

Functional Dry Needling: An innovative minimally invasive tool for the skilled physical medicine practitioner.

Functional Dry Needling (FDN) is a variation of dry needling that emphasizes the neuro-developmental movement patterns that are hardwired into the brain and are often compensated for through life from habitual postures and response to injury/injuries.

Previous injury is the greatest predictor of future injury, so, that should give us pause in how we address the current problem/dysfunction/pain that the patient we are evaluating is presenting to us..

It is important for all physical medicine practitioners to understand proper functional movement patterns and have the ability to diagnose when those patterns are dysfunctional. It is imperative that physical therapists understand how to address those dysfunction patterns to restore proper functional movement and for the physician to know when and where to whom to refer their patients for the most optimal outcome.

It is not the job of the physician to address the cause of the current tissue breakdown, as that is the PT's role, but to recognize that the tissue being treated with regenerative techniques has a dysfunctional/functional reason for breaking down. If the physician can work with a PT trained in understanding how the tissue pathology occurred and how to support and change the etiology of that tissue breakdown, you then have the most optimal way of treating that current pathology.

Simply put, the regenerative physical medicine physician treats the "What" and the well-trained, functionally based PT, treats the "Why."

Direct trauma related injuries are different as they are a likely an injury imparted upon the body/tissues that the person could not control. For example: an athlete hit with a valgus force on their knee while planted does not have the functional ability to control that range of motion nor the force imparted upon it. But, if the athlete had solid functional strength prior to the hit, they may have been able to minimize the damage, and will have a significant advantage in the rehab of such injury.

Functional Dry Needling is a tool used in a theoretical model of movement that allows the tool to effectively reset poor patterns allowing the therapist to retrain, reinforce, and reload the tissues effectively to maximize the persons return to activities.

Kerkhoffs, Gino M M J, Nick van Es, Thijs Wieldraaijer, Inger N Sierevelt, Jan Ekstrand, and C Niek van Dijk. "Diagnosis and Prognosis of Acute Hamstring Injuries in Athletes." *Knee Surgery, Sports Traumatology, Arthroscopy: Official Journal of the ESSKA* (May 24, 2012). <http://www.ncbi.nlm.nih.gov/pubmed/22622781>.