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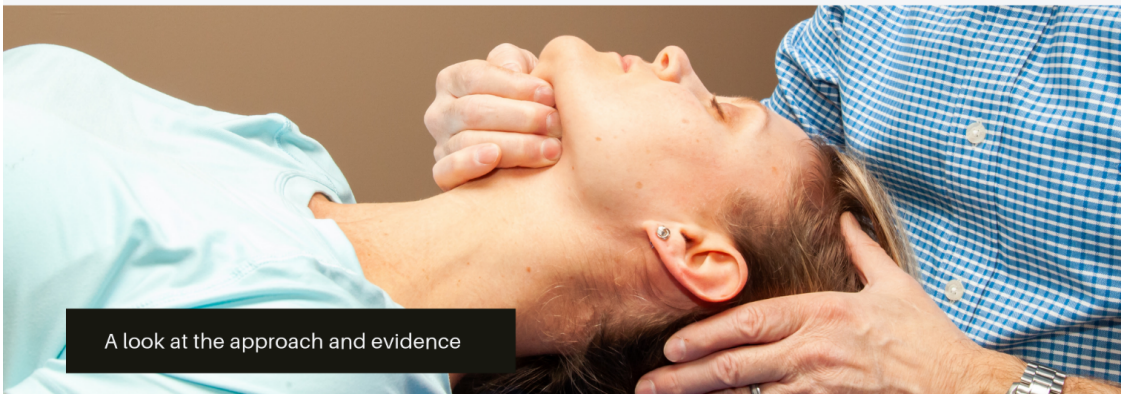
Myofascial release in the speech-language pathologist patient population



To expand the professional knowledge-based of the speech-language therapist/pathologist (SLP/SLT), I wish to introduce you to the use of myofascial release/manual therapy as a means of evaluation and treatment for a broad range of disorders familiar to you. Myofascial release (MFR) is a style of therapeutic intervention that falls under the more general umbrella of manual therapy. Earlier versions of MFR were first developed in the early 1900s by the osteopathic profession, including Andrew Taylor Still, and expanded upon in the mid to late 1900s by Ida Rolf, Robert Ward, and John Barnes. Ward is said to have coined the term myofascial release, though accurate records are sketchy (23). Traditionally implemented by physiotherapists and massage therapists, MFR did not begin making inroads in the SLP/SLT scientific literature until the 2000s (1, 3, 5, 6, 14, 15, 21). Roy (17) describes techniques for muscle tension dysphonia that are remarkably similar to those used by many in the application of myofascial release in the late 1990s. The overall similarity of manual therapy and myofascial release (and other named modalities including manual lymphatic drainage) bears elaboration as if one looks at the dozens of individually named manual therapy modalities the explanatory narratives would seem entirely dissimilar. Though many distinguish one type of manual therapy from the next by describing the specific tissue or pathology it is thought to target; there is controversy whether it is possible to singularly and selectively impact one tissue/pathology to the exclusion of all else. Each seems to claim novel tissue/pathology targets, citing different explanations for causation and remediation. Each would also claim specific domain over what is being impacted with the application of the therapy. However, when one observes each modality in action, seeing what the clinician does with their hands, there is often little appreciable difference across the spectrum of modalities.

Historically, myofascial release was thought to target tightness (restriction) within individual aspects of the fascia (connective tissue) or between layers of fascia that were believed to be at cause in a wide range of issues of pain and movement dysfunction. Scarring and fibrotic changes might fall under the umbrella of such fascia-related claims. Through various intervention strategies, it was thought that such restrictions were loosened, or released, through either slow, prolonged stretching or more direct and aggressive soft tissue manipulation. Though these beliefs are prevalent within each MFR community, little credible evidence exists to show that fascia is and can be selectively and singularly impacted in the manner described, nor has it been shown to be of sufficient importance as a causative factor.

If I am acknowledging that these issues of credibility exist, why do I continue to teach myofascial release? Most of the published scientific literature describes a hands-on action; a type of manual therapy that is traditionally viewed as MFR, meaning what the therapist does with their hands, was the useful piece of the study's outcome. Little rigorous research has been done to prove/disprove the above-mentioned fascial components and their relevance or plausibility. The studies referenced in this article describe the hands-on results of the work rather than determining that fascial restriction and its remediation are the effects. I no longer believe most of what I was taught, beginning in 1992, in regards to how I am selectively and singularly impacting restricted fascia, but I do see that the results of the style of engagement that I use have a positive impact.

Moreover, this style of engagement that I continue to use and teach is what I call myofascial release. Based on the published evidence, the actual manual engagement/hands-on stretching has shown to be effective. However, how and why it works is the unknown. I teach this work by introducing a layered range of plausible possibilities, starting with central nervous system processing and skin-based neurological narratives (skin being the only tissue one can be sure of impacting). The narrative evolves through nerve-based descriptions of dysfunction and remediation, flowing along through potential contextual factor and even placebo explanations, finally acknowledging that individual tissue-based mechanisms of action may be present. Despite claims, one cannot apply preferential targeting of one tissue for intervention.

Manual therapy has been a part of the intervention strategies of the SLP/SLT for many years, though its usage seems to vary from country to country. The works of the UK-based Jacob Lieberman, D.O, US-based Nelson Roy, Ph.D., and others in the manual circumlaryngeal intervention world may be familiar to many, as they and others have shown manual therapy to be one of many useful strategies for the treatment of various types of dysphonia. (13, 17) While its use is less commonly associated with dysphagia, it has

drifted into the literature (3). For two discussions of the potential use of a myofascial release type of engagement, both citing evidence to support the work, please give a listen to, 1. An interview that I recently made with US-based SLP, Theresa Richard, on her podcast, "Swallow Your Pride" (16) and, 2. A discussion on the blog, Dysphagia Café, where I join the conversation on the evidence to support the use of myofascial release in the treatment of dysphagia (7).

My entry into the speech-language therapist community began with frequent referrals from SLPs and ENTs in Rochester, New York, where I have my physical therapy practice. Many had heard of the potential benefits of myofascial release with dysphonia and dysphagia, and some SLPs may have even taken a more general introductory training but felt ill-equipped to perform the work. Working with these patients allowed me to see for myself how the work could be transformed to meet the needs of issues of voice and swallowing. In 2013 Jan Potter Reed, SLP approached me with regards to participating in a continuing education seminar she was putting together to expose the national SLP community to the use of complementary modalities. This brought Benjamin Asher, MD (1) and myself together to teach a one-time workshop which formed the spark for the seminars that I now teach to SLPs/SLTs and Voice Professionals around the world. While I do not profess to have the education and training to fully understand the complexities of the diagnoses an SLP/SLT faces, I have found a place for myself introducing a strongly patient-directed method of evaluation and treatment using manual therapeutic engagement for a wide range of disorders and conditions. While traditionally used with the dysfunctional patient, such manual therapy can also be used quite effectively with the vocal athlete. (20)

Though lacking an entirely acceptable narrative of tissue effect, which is quite similar for nearly all types of manual therapy, myofascial release has been demonstrated to have efficacy in the treatment of radiation fibrosis disorder (10), increasing jaw/mouth opening (2, 19), temporomandibular joint issues (4), chest wall expansion (6, 8), reducing pain during the course of radiation treatment for HN cancer (12), and reducing esophageal pressures, allowing faster learning of esophageal speech after total laryngectomy (14),

In teaching this work, I stress the role MFR plays as a subset of the work we do. While it can be used as a stand-alone intervention, it is better used as a part of the larger piece of therapeutic intervention and with substantial patient-driven home follow through. Feedback from professionals who have trained under me shows that they will frequently begin a session with MFR, with stated goals of improving awareness and reducing local tension, be it muscle, nerve tunnel-based, fascial tension, or driven from a top-down (brain and central nervous system), while allowing the patient to feel impact and change, and follow it with their more typical interventions. I am a strong proponent of working under a patient-centered model, one that is in better alignment with the dictums of evidence-based practice (EBP). In EBP (24), a full one-third of the practice model should be formed and influenced by patient preferences and feedback. In a traditional manual therapy/MFR setting, the onus of diagnostics lays upon the practitioner, in that they are expected to determine what is wrong and to determine what interventions are best suited to the problem. Though the decisions are intended to be dictated by the available evidence, the treatment decisions more often rely on the expertise (ego) of the therapist. While this has adequately served patients, I require more of the therapeutic engagement. My knowledge does often reveal issues (tightness, scarring, apparent soft-tissue changes) that historically have been an issue; I require patient validation from my findings to determine if treatment is warranted. I use the available evidence, as listed on this page, applying that evidence in the context of my professional experience, but entirely framed by the feedback of my patients. I've made a video available to see this process in action, presented in the context of a singer with tension and pain while performing. (25)

The results of myofascial release intervention may be a result of higher centers in the brain, altering sensation and action to the periphery, or due to what is seen as simple soft-tissue changes, but they may also due to changes in the patient's perceptions, sensation, and potential. (22). Newer narratives of explanation show that skin neurology may be sufficient to drive changes seen in manual therapy (11), myofascial release included, though there is still no consensus as to an entirely accepted explanation. A 2019 study by Nelson Roy, et al (18), paints what might be seen as a more plausible explanation for both causative effects of primary muscle tension dysphonia, as well as the multifactorial nature of the therapeutic impact we create, with changes being much less due to tissue-specific effects and more about perceptual, brain-based change. If, after a short period of MFR-type stretching my patient feels different and can perform a task in an improved manner, then following this up with functional tasks may result in even more overall gains. Myofascial release may be applied with the patient laying down or seated and while quiet/at-rest or while performing a functional task. I've now taught this work to thousands of SLTs/SLPs and collect their feedback for inclusion into future editions of the course syllabus. From this, I am in awe of the ways these therapists have taken this work and improvised new and exciting strategies to help their patients. Their referral sources are envisioning new ways that the patient may benefit, and it is forming new channels of possibility.

Walt Fritz is a physical therapist in New York State, USA, who teaches his patient-directed version of myofascial release to professionals around the world. In 2019-2020, he will be presenting his Foundations in Myofascial Release Seminar for Neck, Voice, and Swallowing Disorders throughout the USA, Canada, England, Scotland, Australia, New Zealand, and Macau. For more information, including how to host a seminar, refer to www.WaltFritz.com.

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25. Longer format video showing an interview, evaluation and treatment with a singer: https://youtu.be/yIYUBiFpQlo

You may find a full list of evidence and references used to support the use of myofascial release and manual therapy with the patient population of the speech-language therapist at the following page: https://waltfritzseminars.com/neck-voice-and-swallowing-seminars/