

Notes: Run with Author's pic.

Icon: Physical Therapy and Podiatry

Title: Massage, **Manual Therapy** and Podiatry

Deck: These conservative techniques can add to your armamentarium of treatment options.

Author; Jay D. Segel, D.P.M.

Dr. Jay Segel graduated from the Ohio College of Podiatric Medicine in 1979. He completed his surgical residency at Cambridge City Hospital, a Harvard Teaching Affiliate. After residency, he moved to Martha's Vineyard, where he still practices. He is a member of the American Academy of **Podiatric Sports Medicine**, has been an advisor to shoe companies and holds several utilities patents on footwear.

A podiatrist, a patient, and a Medicare representative walk into a bar..., this may sound like the beginning of another bad joke on the lecture circuit, but what these individuals might say to each other could be quite surprising and beneficial to all. Medicare recognizes the benefits of **manual therapy, manipulation and** massage as a form of physical and/or rehabilitative **medicine** and reimburses for this treatment for many conditions seen in the typical podiatric practice.

Medicare uses the "Scope of Practice" as a benchmark in deciding whether a specific code or bundle of codes should be part of the practitioner's fee schedule. Given that the podiatrist is the ultimate arbiter of the foot, and that massage within our anatomic boundaries is within the "standard of practice" and reimbursable, we should examine this established and well-appreciated practice and see where it might fit into our practices. For the purposes of this article on podiatry-based massage, the focus will be on the "Benefits and Indications," How To Chart It", "**Billing It**" and "How to Do It."

Benefits and Indications

Massage and **manual therapy** have long been used to aid healing, improve circulation, reduce pain, decrease swelling, increase range of motion, extend endurance, normalize gait, re-establish subluxed joints, nourish skin, and break up scar tissue. I have seen peripheral neuropathy patients consistently report more feeling in the lower limbs after massage and **manual therapy** treatments. Combined, these great benefits bring about improved posture, balance and confidence.

After the foot has been housed in an often cramped environment for long periods of time, it accommodates by contracting and existing in an almost tetany-like state. This condensed foot form is a poor shock-absorber and is less able to accommodate uneven surfaces. By massaging, **distracting and manipulating** the foot to a relaxed **and adaptive** state, more surface area is allowed to interact with the ground, improving function and shock absorption while making the foot and body less susceptible to macro-traumatic events such as falling. By relaxing the foot in this manner, the vasculature also eases, leading to increased lumen diameter and improved local arterial blood flow.

The preventative medical and biomechanical benefits should not be underestimated. For those patients or practitioners who may doubt the efficacy of **manual therapy and** massage, nothing proves the point like diagnostic ultrasound. Image an arthritic joint in motion and demonstrate the narrowing or mal-aligned joint space; then, add retrograde traction and watch the joint space open up and range of motion increase. Stretching and re-educating those tissues that would bind the joint becomes a demonstrable goal toward which both patient and doctor can work.

For some time, podiatry schools have been emphasizing the concept of conservative treatment first. Malpractice carriers and lawyers also talk about exhausting non-invasive treatment regimens such as massage, ultrasound, electrical muscular stimulation, shoe change, and orthoses before reaching for the needle or the blade.

Many patient chief complaints can be resolved through a regular course of physical therapies, shoe intervention, and gait alteration. Disease processes I have treated with **manual therapy** and have received Medicare reimbursement include: Degenerative joint disease, plantar fasciitis, tendonitis, vascular disease, diabetes mellitus, hallux **limitus**, contracted digits, hallux abducto-valgus, Parkinson's disease, lymph edema, peripheral neuropathy, polymyalgia and seronegative arthropathies.

Massage, **manual therapy, manipulation and mobilization**, in conjunction with other therapeutic modalities, is also helpful for those patients with overuse syndromes, old injuries, and for status post foot/ankle surgical recipients. It's important to point out that in the patient with severe systemic problems in addition to the podiatric complaint, **manual treatment** may be the only therapy option to consider since modalities like electrical muscular stimulation have a number of contraindications.

How To Chart It

Your **initial charting or progress note** should include: **patient chief complaint, local exam with findings, systems and medication review, diagnosis, onset/duration, and prior treatment**. You **need to** make a therapeutic care plan to include: modality type or procedure, topicals used, level of function, duration and frequency of recommended treatment, medical necessity **stating the belief that the patient's condition will improve significantly**, long-term goals, patient comments and a home care plan. Care plan re-

evaluation must be done at least every 30 days or after every 10 treatments. It should include all of the above plus changes to the plan and an assessment of progress by charting increases in range of motion and decreases in pain in scales such as a 1-10 system. For a more exacting description of charting requirements, see:

http://www.ugsmedicare.com/providers/medical_review/documents/Final%20Therapy%20Guide%202006.pdf

Primary and Secondary Diagnostic Codes

Appropriate ICD-9 primary and secondary diagnostic codes are important to any medical billing process, and many patients will have multiple issues which may benefit from a medical massage treatment regimen. For example, arthritides are often seen in elderly patients with diabetes mellitus and are accompanied by an unsteady or antalgic gait, as well as acquired deformities such as hallux limitus and contracted digits. These diagnoses progressively impact the foot and/or mobility in a negative manner, and would **seem to** be considered viable reasons to treat the foot with massage - **check with your Medicare carrier or non-Medicare payer for their guidelines and requirements.**

Box 21 on the CMS-1500 is the appropriate space to indicate diagnoses. It is suggested to use all four diagnosis lines **when applicable**. So, in the above example, the practitioner might indicate **hallux limitus (735.2) as the primary diagnosis (diagnosis number one) followed by degenerative joint disease (715.17), an unsteady gait (781.2), and diabetes mellitus (250.00) or contracted digits (735.8).**

Billing It

The procedure code is 97140 and is described by Medicare as "manual therapy" techniques to include lymphatic drainage, manual traction, mobilization, myofascial release and manipulation to one or more regions, each 15 minutes. 97124 is another therapy code appropriate when performing say just percussive massage, effleurage (cradling technique), petrissage (kneading and deep tissue work), and/or tapotement (stroking and compression). These type of therapy codes are known as "Timed" codes where units roughly relate to 15 minutes with the practitioner, but more specifically follows the "8 minute rule." The basics of the rule are that the average time spent is 15 minutes and no procedure should be billed when performed less than 8 minutes. The table is readily available on the web as noted below but looks as follows; Time interval(s) vs Units billed: 8-22 minutes = 1 unit, 23-37 minutes = 2 units, 38-52 minutes = 3 units, 53-67 minutes = 4 units and so on. I have had several discussions with Medicare to verify the information presented herein. What might not be immediately noticed when examining this code in your CPT coding manual is that there are a few additional billing hoops to jump through.

1. the procedure code 97140 or 97124 with a GP modifier which indicates to medicare that you have made a care plan,

2. number of units which most frequently are between two and three (15 minutes with Doctor equals 1 unit), are reported in Box 24 G on the same aforementioned form

3. Box 17 requires the name of the referring physician (which can be you) along with the corresponding "UPIN" and "NPI" designators as well as the date the patient was last seen by you. The rest, such as patient name, date, doctor information, holds the same set of requirements as any other form submitted for Medicare consideration.

Another important piece of information to share with your staff and patients is that therapy codes carry with them a combined calendar year cap, \$1,780 in the Northeast, based on what Medicare approves, not the 80% they pay. For certain conditions the "KX" modifier, which goes in Box 24 D, to the right of the procedure code is used to breach the therapy cap. These "automatic" exceptions as they are termed by NHIC for the New England region, are used after the cap has been met and for patients with diagnoses/conditions commonly seen by Podiatrists including; Diabetes Mellitus related ICD-9 codes 250-250.93, obesity, joint replacements, abnormal gait, difficulty walking, Parkinson's Disease, neuropathies, paralytic syndromes, arthritides, contractures and many more. One should not use this modifier indiscriminately as it is reportedly high on the audit radar. Check with your regional Medicare representative before using this modifier.

How to Do It

"First do no harm" is a common quotable among medical educators. The mantra for any manual therapy, including massage mobilization and manipulation, is "lay eyes before hands." In fact, the appropriate preludes to manual therapy and rehabilitative medicine are a systems update, meds review, allergy check, and a local exam. Assuming no breaks in the skin or other contraindications, ask for questions, inform and educate the patient on the care plan, topicals to be used and techniques to be employed.

Medicare neither suggests nor recommends one technique over another, just that the need for skilled therapy be medically necessary, charted appropriately and demonstrate quantitative results. Providing effective treatment begins with a strong knowledge of anatomy, physiology, tissues planes and pathomechanics. Given that the foot is, for the most part, a logical appendage, and the facts are known or knowable, the technique often dictates itself. For example, an arthritic patient may benefit from a distraction focus massage type of manual therapy with an anti-inflammatory

topical, whereas a patient with overuse syndrome might respond better to deep tissue work with defatigant-style topicals.

Patients with edema usually respond well to vasodilatory topicals with drainage techniques; yet those same topicals, in a dependent leg position with percussive techniques, tend to yield an improved local blood perfusion. Often, patients present with multiple related pathologies and so, components of each **technique** may be used to produce any number of beneficial results such as an increase in circulation and range of motion while decreasing edema and pain, all of which lead to improved ambulation and a more stable gait.

All the techniques below are done with the patient seated comfortably in an elevated position, in a clean, conducive room, with lowered lights, mild scents, soft instrumental music and other relaxing cues.

Techniques

I use **seven** basic techniques that I modify and/or combine based on patient history and complaint, along with my observations, assessments and diagnoses. These **manual** maneuvers are distraction, percussion, cradling, drainage, light touch, **myofascial release and manipulation**. These are based on anatomy, physiology, and biomechanic principles. Distractive techniques are used in almost every patient whom I see, because the foot is under constant stress secondary to imbalanced retrograde forces. Combine this with the extraordinary pressures of gravity, motion, shock and body weight and you have a prescription for burden, micro-trauma and the need for constant maintenance. **Manual therapy and massage** are maintenance and rehabilitation, for both foot use and misuse.

Distractive Massage

Distractive massage **is the manual therapy technique** of choice for arthritics, but patients with **hallux limitus**, contractures and peripheral neuropathy report benefit as well. The method involves traction of the joint to resistance with the addition of slow movement within the planes of motion. This is done repetitively and slowly to let the soft tissues relax and elongate much like runners are encouraged to stretch before activity. Two bones in space would have no reason to interact but for the sack that contains them (the foot) and the soft tissues that attach and cause them to function interactively. This imperfectly architectural "bag of bones" is a three dimensional appendage whose job it is to function on and adapt to uneven and unyielding surfaces. This leads to muscular imbalance, asymmetric joint spaces, scar tissue and ligamentous contraction. By making use of the elastic nature of ligaments, capsules, muscles, and tendons that hold joints in contraction and perhaps subluxation, distractive massage can increase range of motion while decreasing inflammation and pain during mobility.

Percussive Maneuvers

Percussive maneuvers are quick and repetitive physical interactions with the foot. Open-handed perpendicular techniques are meant to create an increase in circulation while "spider drumming" (alternating horizontal

motions), are used on the long tendons of the foot to break up scar tissue and increase flexibility to promote neutral joint spacing and increases in range of motion. This is almost always included with pes cavus foot types and patients with compromised arterial systems.

Cradling

Cradling is a two-handed technique that is a favorite among patients. By marrying the three-dimensionality of your hands to the architecture of patients' feet, they are bathed with a sense of security, relaxation, and warmth. This is most often used on the medial longitudinal arch with plantar fasciitis, the lateral longitudinal arch **with peroneal dysfunction**, and on a contracted tendo-Achilles secondary to surgery, short limb syndrome, polymyalgia, trauma, or equinus. **This technique often includes distraction, mobilization and manipulation of the foot structures and so is also used for cuboid and talar subluxations. These two bones have no purchase on the ground and are not an uncommon cause of foot pain and instability.**

Drainage

Of all the methods used, drainage is probably the most dramatic visually. With the patient reclined comfortably and the foot higher than the heart, the edematous limb secondary to venous or lymphatic system insufficiency is manually drained with appropriate compression and very slow and **parastaltic-like** proximal motions. This is another two-handed position where the foot is often lifted higher than the patient's heart. The fluid and blood cells move from the interstitial tissue back into vessels to eventually release toxins and reoxygenate. In addition to treating edema, I find this technique to be quite useful when a patient is observed with venous distention or anterior lower limb staining as often occurs in diabetics.

Myofascial Release

For the podiatrist, myofascial release is, in part, deep tissue work, manipulation, and cross-fiber massage employed to stretch and ease the bonds between the integument, fascia, muscle and bones in the foot/ankle. The goal is to re-orient and reorganize the connective tissue fibers to an elongated and more flexible and functional arrangement to benefit gait. This practice is particularly good for patients with old injuries, localized pain, **imbalances and plantar fasciitis.**

Light Touch

Light touch is a finishing move that is more "Eastern medicine" but it's effective, and patients tend to love it. It is a good way to signal the ending of a session while releasing stress and providing some exercise for the local sensory nerves. With the heel cradled in well lubricated hands and positioned above the patient's heart (when appropriate), allow the foot to return slowly to the footrest below, cushioned between the practitioner's hands and arms.

Manipulation

Though one form of manipulation is part of myofascial release, it is separately at the end of this section because a relaxed foot, post manual

therapy is a more willing participant in proper joint alignment. Because of the dynamic stresses on the 3 dimensional foot and its need to change from a "rigid lever" to a "loose bag of bones" and back again to interact with relatively flat surfaces, 2 bones are particularly at risk for painful subluxation or "going out." This malalignment and pain amplifies problems from the foot right up the connetic change and can be corrected. Chiropractors routinely adjust talar and cuboid deviations, podiatrists trained in manipulation should look for and fix these subluxations when appropriate too. Given that there is little that we can do that our patients can't undo, take care to advise them that properly fitting shoes, custom orthoses and reasonable activity will do much to keep their foot bones in proper alignment.

Topicals

All the above described massage and manual therapy techniques incorporate the use of topical medicines and remedies, both prescription and over-the-counter. Vasodilators, stimulants, relaxants, toners, nourishing massage lubricants, anti-inflammatories, pain relievers, anti-spasmodics and carrying vehicles are used to bring about the desired goals as stated above. Without endorsing any specific products, I use preparations with ingredients such as menthol, camphor, arnica, cortisone, DMSO, Emu Oil, lanolin, capsaicin, lavender, tea tree oil, grape seed oil, eucalyptus, aloe vera, skullcap, urea, waters, amino acids, minerals and vitamins, to name but a few.

The basic philosophy is to open the pores with dilators, then use carrying mediums for penetration of the beneficial active components. After the selected topicals have been worked into the local tissues by appropriate manual therapeutics, I degrease and constrict the pores to seal in the medicines with a toning water spray and blot dry under mild traction. I often suggest such topicals for home use. This keeps the patient focused and actively involved in the treatment plan.

Whichever the techniques and topicals, you can and should revisit your choices based on results, patient response, and the time of the year. I often make changes after a reassessment of goals, results, and even foot temperature. For those of us practicing in cold climates, warming the foot and protecting the skin can make a difference between limb loss and limb salvage, especially in our diabetic, neuropathic and circulatory challenged patients. What we do therapeutically, is very important. Patients tend to love these treatments and appreciate you for it. I often hear that coming for their "massage" treatments is the highlight of their week. An eager and happy patient is a willing partner that, when matched with a skilled and caring practitioner, a welcoming treatment room, and an attentive staff, make for a good healing team that gets results.