Massage therapy has been available for use by athletic trainers and therapists since the inception of athletic training and athletic therapy. Unfortunately, in the last 20–30 years, the use of manual manipulation (massage therapy) has declined for a variety of reasons. Included in those reasons are development of electrical modalities, athletic trainers and therapists thinking that their massage skills are not adequate, the question of who to massage and who to not massage (there are only so many hours in the day), lack of scientific proof that massage works, time constraints, and others. Fortunately, over the past couple of years, massage therapy is making a strong comeback in the world of sports medicine. Massage can be used with positive results when applied appropriately, using the proper techniques, and with knowledge of any existing skin condition. It is essential that the skin condition be accurately assessed before the application of any treatment protocol (Lowe, 1997).

Massage is an important tool in athletic training and therapy. In the broad definition of the word, it is used on a daily basis, sometimes unknowingly, to help relieve a variety of symptoms. There are positive and negative effects that should serve as guidelines for practitioners to follow when applying this modality. Although most people think of massage as something that just feels good, there are changes that it can cause in the body that might affect the treatment of an athlete, and they should be carefully considered before one recommends this course of treatment. In a recent survey, it was reported that over 50% of the responding schools used massage therapy as a treatment protocol in their athletic department’s health-care system. In addition to the schools that incorporated massage therapy as a part of their program, another 10% indicated that their athletes sought out massage therapy at their own expense (Mignano, 2001). We strongly suggest that for the best quality health care, massage therapy should be a formal component of the health-care program and not left to the discretion of either the individual athlete or the coach.

Athletics involves many different forms of contact, and with that come contusions of all shapes and sizes. An injury that involves inflammation poses many problems to the athlete and the athletic trainer or therapist. The injured area is painful, it is inflamed, and usually because of these factors, it has a decreased range of motion. This affects the athlete’s ability to compete at an optimal level. The athletic trainer or therapist must work to help restore the athlete’s functional capabilities as soon as possible.

One rehabilitation goal would be to decrease the pain level of the athlete. A major
contributing factor to pain is the pressure added to the sensitive nerve endings around the injury site. Decreasing the amount of fluid present at the injury site will help decrease the amount of pain associated with the injury. This can be done in many ways, through medication, motion, and massage. When we use the modality of massage, fluid is manually pushed away from the injury site and removed by the lymphatic system. When there is no inflammation, the range of motion can increase, which will help the athlete return to normal function. The decreased pressure will ease the aching and soreness associated with the injury (Prentice, 1999).

On a cellular level, a massage triggers specific responses from the body. An increase in vascular flow from the site helps remove remnants of the injury. Metabolism will increase on the site being massaged, which can help replenish nutrient supplies for the body and speed the phagocytosis process (Beck, 1999).

In addition to its use in cases of injury, massage can aid in decreasing body soreness (Beck, 1999). After an intense workout an athlete creates a buildup of lactic acid, which is a byproduct of muscle contractions. Massage can be used to help disperse lactic acid (Beck), which creates a better chance that the lactic acid will be reabsorbed into the bloodstream and disposed of properly. This process will help decrease postworkout soreness.

When deciding a path of treatment for an athlete, the clinician should consider massage in the plan. It is an effective, inexpensive modality that can speed the athlete's recovery. The uses of massage in sport are recognized and redefined daily, with a community of clinicians applying different techniques in their protocols. The use of hands-on techniques can always be beneficial to the athlete, if it is done in the right setting by a clinician skilled in the proper techniques of massage.

Many of the rules that athletic trainers and therapists work under, concerning skin conditions, are the same that a massage therapist would also observe. Recently, the massage world has begun to rethink the use of massage therapy with cancer patients. Up until the early 1990s, massage therapy was considered a contraindication with cancer. Within the last few years, that position has changed, and there is no evidence that light massage causes cancer cells to spread (MacDonald, 2001). Massage now provides one additional alternative to the treatment of skin conditions in the athletic population. Once again, the clinician must be well trained in very specific types of massage, that is, Reiki, therapeutic touch, and polarity therapy. Another item to consider when dealing with cancer patients or general skin conditions is the use of lubricants. One must be very careful to understand that some lubricants (e.g., lotions, creams) leave a coating on the skin and would therefore be contraindicated with some skin conditions (MacDonald).

Another type of massage that can be used with skin conditions is lymphatic drainage. The lymph system helps regulate interstitial fluid volume and pressure in the body. The proper movement of lymphatic fluid allows for more rapid healing and tissue regeneration. Blockages of this system can actually enhance infection, so the athlete should benefit from the lymphatic-drainage session (Chikly & Welfley, 2001). When applied to skin tissue that has scarred, lymphatic massage used in conjunction with hydrotherapy can be one of the more effective modality combinations in relieving blockages and helping break up scar tissue. Massage, in general, and lymphatic-drainage massage, in particular, helps muscles “let go,” which in turn allows for greater range of motion and more efficient function (Curties, 2001). In essence, massage, when applied to the body in relation to present skin conditions, can help relieve underlying conditions by relaxing the connective tissues and allowing greater stretch within those tissues (Young, 2001).

Fortunately, massage therapists have some techniques that allow them to work with certain skin conditions without exacerbating them. Included in this category is the pressure-point therapy of Shiatsu. This Eastern philosophy works on the premise that a series of meridians balances the body and its functions (Figure 1). These 12 meridians are channels of energy that can become blocked and can be manipulated by applying pressure to predetermined sites along them (Stillerman, 1996). This technique can be applied through clothing and without irritation to skin conditions such as open wounds, infection sites, and sutures because the skin-condition site might not be the Shiatsu pressure-point site. This technique does not limit itself to initiating change solely over the affected area. The premise is that the flow of energy through these channels is essential to the well-being
of the individual. Blockage of any of these channels compromises the health of the individual, and therefore a Shiatsu session would benefit the athlete and that athlete’s overall health. This technique is radically different from the Western techniques of Swedish, connective-tissue, and sport massage, and the clinician must be well trained in Shiatsu technique in order to produce optimal results.

Reflexology is another type of massage that therapists have at their disposal to use on athletes with skin conditions without negatively affecting those conditions. Reflexology, which is centuries old, uses the foot as the primary site of touch (Figure 2). This technique is applied “to normalize body functions, maintain optimum health and restore energy” (Stillerman, 1996, p. 190). The concept of reflexology is similar to Shiatsu, in that various pressure points are stimulated to promote change in another part of the body. It allows for the athlete to be treated without disrobing, only removing the shoes and socks. In addition, athletes can administer this modality to themselves after being given instructions by a qualified massage therapist. Once again, this work allows for indirect application without compromising the affected skin-condition site. Reflexology is “considered to be a safe adjunct treatment, with no known side effects” (Vanderbilt, 2001, p. 97).

**Specific Conditions and Massage**

The following is a list of skin conditions and their respective symptoms. The proper application of massage in the treatment of each condition is also noted.

**Dermatitis.** Dermatitis is an inflammation of the skin. Its usual signs include redness, itching, unusual warmth, flaking, and swelling. Dermatitis caused by chafing is not contagious, but massage is contraindicated because of the added irritation. A localized type of dermatitis, eczema (dandruff), is also not contagious, and massage can be applied to the scalp and head region without any harm.

**Poison Ivy.** Poison ivy causes painful, itchy dermatitis. Massage on the localized site is definitely contraindicated and can spread this form of dermatitis.

**Fungal Infections.** Generally speaking, fungal infections occur in warm, moist, concealed places on the body. The athlete can administer this treatment to themselves after being given instructions by a qualified massage therapist.
the body. Most can be successfully treated with topical ointments but can be quite contagious. In particular, an athlete with tinea corporis (ringworm) should not have any type of body work done because of the infectious nature of this fungal infection. Tinea cruris (jock itch) is also contagious, but just as important, it occurs in a region of the body usually considered too private to have body work done on it. Therefore, jock itch would not be a site for massage therapy. Tinea pedis, or athlete’s foot, is also a contagious fungal infection and therefore would be locally contraindicated for massage work. In fungal infections, the local area is typically contraindicated, but the remainder of the body is open for massage techniques. Folliculitis is a condition that affects the hair follicles that is caused by either fungal or bacterial infection. If the fungus involves tinea barbae, then the use of massage would be locally contraindicated. If, on the other hand, it is not oozing, massage would be permissible.

Bacterial Infections. Most bacterial infections are caused by either staphylococcus or streptococcus, both of which are extremely contagious and would make direct contact with massage contraindicated.

A boil that is caused by a specific type of bacterial infection is off limits for massage. Impetigo, also a contagious form of bacterial infection, is usually associated with broken or open skin, and the probability of spreading the infection makes the use of body work unwise.

In treating these forms of skin conditions, the athletic trainer or therapist must avoid most of the local sites of infection, but trained massage-therapy professionals can substitute alternative sites for benefit. Examples would be the Eastern technique of Shiatsu (Figure 3), working the appropriate meridians of the body to help detoxify the body and improve the overall well-being of the athlete, and reflexology, working the feet to provide improvement of the condition (Werner, 1998).

With all these advantages of massage, why is it not used all the time? One main factor is that massage is a hands-on modality that takes dedicated time on the part of the clinician. In an athletic training or therapy setting, one-on-one time can be difficult to schedule; time can usually only be dedicated when other treatments are not taking place. Contraindications of massage arise when there are abnormalities present.
Massage would be detrimental to an athlete with an injury that involves infection. Dispersing the bacteria through the body could increase its effects and cause injury or illness to the athlete.

**Conclusion**

The indication or contraindication of massage therapy in the athletic setting must follow the guidelines for the entire health-care team. Understand what condition is present and do no additional harm. How can the athletic training or therapy staff incorporate massage therapy into their existing health-care program successfully? The answer is relatively simple. First, understand the limitations of massage therapy—it is not a cure-all (nothing is). Second, study the various techniques and understand the potential of each massage specialty. Third, work with a massage-therapy professional to obtain the expertise that your staff might lack. Fourth, explore the benefits of massage with an open mind. Finally, the athletic training or therapy staff must decide which athletes would benefit from massage and keep the decision-making process with the health-care provider, not the athletes or coaches.

**References**


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