



Peak Physical Therapy and Wellness News . . .

November 29, 2013, Norwell MA

[For Immediate Release . . .](#)

Contact: Margaret Cook, Peak Physical Therapy 781.267.6755, Margaret@peaktherapy.com

Kinesiology Taping: Method and Clinical Applications by Katy Mercurio, DPT, CSCS

In recent years, many people have come to notice their favorite professional athletes and Olympians sporting colorful tape on their arms, legs, and backs. This type of tape is called Kinesio Tape and was first invented by Japanese chiropractor Kenzo Kase in the late 1970s. The method of application is called kinesiology taping and is believed to have several benefits ranging from pain relief and edema reduction to performance enhancement. This specific taping technique can be very helpful, not only in helping athletes perform at the top of their game, but also in assisting physical therapy patients in the rehabilitation process.

Kinesio Tape is different from traditional white athletic tape in that it is designed to lift the layers of skin to increase blood flow and allow for greater motion. Traditional athletic tape is often used to immobilize rather than assist movement. Kinesio Tape is also thinner and made of cotton with an acrylic, heat-activated adhesive. This cotton fiber design allows for evaporation and quick drying so that it can be worn for up to 2-3 days, even through sweating and showering. The tape is also more elastic, allowing for it to stretch up to 140% of its original length. This taping method involves cutting the tape into different shaped strips depending on the desired effect. A straight cut is referred to as an "I" strip, while other cuts include "X," "Y," and "fan" shapes. Tape is often applied in one of two directions. For injured muscles that need to be inhibited, tape should be placed with minimal tension from the distal point of the tendon to the proximal origin of the muscle. If seeking to facilitate a muscle and improve range of motion, the tape should be applied proximal to distal with light tension, usually of about 25% stretch. Once the tape is in the proper position, the adhesive must be activated by rubbing the tape for a few seconds.

Kinesiology taping has several important effects that make it a useful tool in the rehabilitation and athletic arenas. It helps to decrease pain and inflammation while also improving circulation and lymphatic transport by lifting the layers of skin. This increase in blood flow also helps to improve range of motion of muscles and joints. As a result, a patient or athlete can experience improved mobility of a sore or injured muscle, as well as improved endurance and proprioception. For example, a person experiencing soreness in the neck may benefit from tape to inhibit the upper trapezius muscle and to lift the tissue over a specific trigger point. Traditional athletic taping does the opposite in that it restricts circulation and lymph transport and thus, movement. It is believed that the stretching property of the tape allows it to recoil when applied to the skin, thus elevating layers of skin and allowing for enhanced blood flow. When taping specifically for edema, fan-shaped strips are used. This shape creates a pressure differential between the strips of the fan permitting better lymphatic transport. This technique is particularly beneficial in the acute stages of injury. For example, an athlete with a severe ankle sprain can experience a significant reduction in swelling by having the fan-shaped strips of tape applied immediately after injury.

There are some precautions and contraindications to using Kinesio Tape. The most notable contraindications include open wounds, allergic reactions to tape, deep vein thrombosis, infection, diabetes, and active cancer. Some precautions include avoiding areas where lymph nodes have been removed, sensitive skin, and extremely thin skin, often seen in the elderly population. Kinesio Tape is latex-free which helps reduce the likelihood of adverse allergic reactions. It can also be removed easily and with little discomfort by lifting one end of the tape and simultaneously applying pressure in a downward direction along the length of the tape.

Kinesiology taping has been successfully used for over 30 years; however, much research continues to be done on the effectiveness of the taping method and the optimal application. For athletes and patients with injured muscles and joints, as well as those with significant swelling, Kinesio Tape can be very beneficial in improving symptoms and aiding in performance. While it is still necessary to participate in a comprehensive rehabilitation program that includes manual therapy, therapeutic exercise, and neuromuscular retraining, kinesiology taping can serve as an excellent adjunct to the process by allowing patients and athletes alike to heal faster and with less pain.

By Katy Mercurio, DPT, CSCS of Peak Physical Therapy & Wellness, Norwell MA.
For more information please visit, www.peaktherapy.com.