

Taking a Look at Kinesiology Taping



chiropractors and other health care providers put kinesiology taping into practice. Over the next 10 years, Japanese Olympic volleyball players and other select athletes discovered the benefits of this type of taping. Today, medical practitioners and high-profile athletes around the world, such as professional beach volleyball player Kerri Walsh, seven-time Tour de France winner Lance Armstrong, and professional tennis player Serena Williams, use kinesiology taping.

Kinesiology tape, also known as elastic therapeutic sport tape, is a cotton strip that has an acrylic adhesive used to treat athletic injuries and physical disorders. Mimicking the qualities of human skin, kinesiology tape is applied and pulled to different degrees of tension depending on the desired effect and end result.

This non-restrictive taping technique facilitates full range of motion and can be used for reversing the effects of muscular facilitation or inhibition in children, carpal tunnel syndrome, lower back strain/pain, knee conditions, shoulder conditions, hamstring, groin injury, rotator cuff injury, whiplash, tennis elbow, plantar fasciitis, patella tracking, pre- and post-surgical edema, ankle sprains and more.

Physical therapists and other health care providers use kinesiology tape to pull back a hunched-forward shoulder, decrease swelling in a joint, or create a low-pressure area for fluid to move and drain.

Kinesiology taping has a variety of therapeutic benefits, including psychological, structural, microcirculatory and neurosensory.

Psychological: Patients often develop an improved perception of stability through kinesiology taping, which allows them to persist with training and competition.

Structural: When just the tape, not the muscle, is stretched, the structural kinesiology taping technique provides support while allowing

the muscle or joint to move through range of motion safely.

Microcirculatory: Stretching both the tape and muscle in the microcirculatory taping method leads to a dramatic reduction in swelling and inflammation and enhances blood flow to injured areas.

Neurosensory: The muscle, not the tape, is stretched in neurosensory applications. This results in instant, long-term pain relief, so long as the tape is in contact with the injured area.

Though the kinesiology taping method has gained considerable popularity in recent years, there is little evidence on its use. One study conducted in 2008 explored the effects of kinesiology tape (KT) when applied to college students with shoulder pain compared to sham tape application. In this randomized, double-blinded, clinical trial published in the *Journal of Orthopaedic & Sports Physical Therapy*, 42 subjects clinically diagnosed with rotator cuff tendonitis/impingement were randomly assigned to either the therapeutic KT group or the sham tape group.

For two consecutive 3-day intervals, subjects wore the tape and measured themselves for pain, disability and pain-free active ranges of motion at multiple intervals. After applying the tape, the therapeutic KT group demonstrated instant improvement in pain-free shoulder abduction. The results found no other ROM, pain or disability score differences between groups at any time interval.

The *Wall Street Journal* reported that a 2009 study on 41 whiplash patients “found statistically significant pain relief and improvements in range of motion with kinesiology taping compared with a sham tape. Effects were seen immediately and continued a day later.” ■

Resources

1. *Journal of Orthopaedic & Sports Physical Therapy*. The Clinical Efficacy of Kinesio Tape for Shoulder Pain. (2008) 38(7): 389-95.
2. Johannes, L. *Wall Street Journal*. How Does Kinesiology Tape Work? April 2010.

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Kenzo Kase, DC, spent years in the mid-1970s researching and testing taping methods. The well-known Japanese chiropractor who trained in the United States went on to develop kinesiology taping, an effective modality that facilitates the body's natural healing process.

Commonly used as an adjunct for treatment and prevention of musculoskeletal injuries, kinesiology tape is used to treat assorted orthopedic, neuromuscular, neurological and medical conditions. It can be applied in a variety of patterns depending on the patient's injury and provides stability to both joints and muscles so that pain and inflammation are reduced, tired muscles are relaxed and consistently moving muscles are supported.

Standard athletic taping, meanwhile, is designed to restrict the movement of the affected muscles and joints by wrapping a joint and obstructing the flow of bodily fluids. This is why standard tape is used only during sporting events and activities, whereas kinesiology tape—which facilitates normal biomechanics—is usually worn for 2 to 5 days.

During its first decade of use, orthopedists,