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## Does The Application of Kinesiology Tape Aid in Increasing Venous Flow

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# Does The Application of Kinesiology Tape Aid in Increasing Venous Flow

## Abstract

Kinesiology tape has become extremely popular among athletes of all ages. It's bright colors and the unique patterns created by the tape have gained an astonishing amount of attention. KT tape is a highly elastic tape that is advertised to increase muscle proprioception, reduce pain, and increase the space between fascial layers for higher venous flow. There has been a large amount of controversy surrounding KT tape and the placebo effects its usage may have. The purpose of this study is to determine if kinesiology tape actually increases venous flow which will result in a reduction of edema and ecchymosis after injury.

## Introduction

Kinesiology tape is used on a wide variety of athletes to help mediate acute edema and ecchymosis. Unlike many other clinical tape procedures, KT tape is not used to stabilize the aspects of the body, but rather to aid the bodies natural healing process. There are a number of medical professionals who disagree with the usage of kinesiology tape. Many believe the tape is nothing more than a psychological or placebo effect for the patient. However, this theory is proven to hold only partial truth, as there are also a number of studies that support KT tape aiding in the healing process.

### References

1. Stedge, H. L., Kroskie, R. M., & Docherty, C. L. (2012). Kinesio Taping and the Circulation and Endurance Ratio of the Gastrocnemius Muscle. *Journal of Athletic Training*, 47(6), 635–642.
2. Wilson B, Bialocerkowski A (2015) The Effects of Kinesiotape Applied to the Lateral Aspect of the Ankle: Relevance to Ankle Sprains – A Systematic Review. *PLoS ONE* 10(6): e0124214. <https://doi.org/10.1371/journal.pone.0124214>
3. Ferreira, R., Resende, R., & Roriz, P. (2017). The effects of kinesio taping® in lower limb musculoskeletal disorders: A systematic review. *International Journal of Therapies and Rehabilitation Research*, 6(3), 1-13A. <http://dx.doi.org/10.5455/ijtrr.000000266> Retrieved from <http://www.library.umaine.edu/auth/EZProxy/test/authej.asp?url=/docview/1911207916?accountid=8120>

### Photos

1. [https://www.google.com/search?client=firefox-b-1-ab&biw=1440&bih=803&tbn=isch&sa=1&ei=RD2xWtLoMqrNjwSntbGQAg&q=kt+tape+designs&oq=kt+tape+des&gs\\_l=psy-ab.1.0.0.238612.239138.0.240192.4.4.0.0.0.126.414.2j2.4.0...0...1c.1.64.psy-ab.0.4.412...0i67k1j0i24k1.0.UbVV2aYZN14#imgrc=u2naGpxwAnn-eM:](https://www.google.com/search?client=firefox-b-1-ab&biw=1440&bih=803&tbn=isch&sa=1&ei=RD2xWtLoMqrNjwSntbGQAg&q=kt+tape+designs&oq=kt+tape+des&gs_l=psy-ab.1.0.0.238612.239138.0.240192.4.4.0.0.0.126.414.2j2.4.0...0...1c.1.64.psy-ab.0.4.412...0i67k1j0i24k1.0.UbVV2aYZN14#imgrc=u2naGpxwAnn-eM:)
2. [https://www.google.com/search?q=kt+tape&client=firefox-b-1-ab&source=lnms&tbn=isch&sa=X&ved=0ahUKewjtzN-kr\\_vZAhXJ6IMKHwGQDqIQ\\_AUICygC&biw=1440&bih=803#imgdii=rVs42iCntF8AeM:&imgcr=rTCeCQ-sU1tuzM:](https://www.google.com/search?q=kt+tape&client=firefox-b-1-ab&source=lnms&tbn=isch&sa=X&ved=0ahUKewjtzN-kr_vZAhXJ6IMKHwGQDqIQ_AUICygC&biw=1440&bih=803#imgdii=rVs42iCntF8AeM:&imgcr=rTCeCQ-sU1tuzM:)
3. [https://www.google.com/search?client=firefox-b-1-ab&biw=1440&bih=803&tbn=isch&sa=1&ei=gj-xWtXLCEzGjwT28aWIBA&q=kinesiology+tape+edema+results&oq=kinesiology+tape+edema+resul&gs\\_l=psy-ab.3...69262.69262.0.69576.1.1.0.0.0.88.88.1.1.0...0...1c..64.psy-ab.0.0.0...0.VuqUNYU7e\\_0#imgrc=UMaeFPfBN5oPiM:](https://www.google.com/search?client=firefox-b-1-ab&biw=1440&bih=803&tbn=isch&sa=1&ei=gj-xWtXLCEzGjwT28aWIBA&q=kinesiology+tape+edema+results&oq=kinesiology+tape+edema+resul&gs_l=psy-ab.3...69262.69262.0.69576.1.1.0.0.0.88.88.1.1.0...0...1c..64.psy-ab.0.0.0...0.VuqUNYU7e_0#imgrc=UMaeFPfBN5oPiM:)



Figure 1. KT tape comes in various varieties



Figure 2. KT tape is used for all types of injuries



Figure 3. L to R, Day one, immediate application of KT tape, day two post KT tape

## Purpose

The purpose of this study is to review the literature surrounding kinesiology tape and determine its effects on the reduction of edema and ecchymosis after an athlete suffers an injury as well as muscle proprioception.

## Results

Figure 1. shows the various types of KT tape, the vast colors, and patterns that allow for psychological effects to occur. Figure 2. illustrates how KT tape can be used on all types of injuries in every location, including both upper and lower extremities. Research has found that KT tape does enhance the musculoskeletal healing process both physically and psychologically. Figure 3. Provides a visual aid of the progression of KT tape over the course of only two days. There is a notable reduction of edema and ecchymosis which supports the idea that kinesiology tape increases venous flow between the fascial layers.

## Conclusion

In conclusion, KT tape is clinically used to reduce pain, improve circulation between the fascial layers, and enhance proprioception. Research has found that KT tape does enhance the musculoskeletal healing process both physically and psychologically. Often times the pull on the skin that kinesiology tape provides is enough to enhance an athletes proprioception. This can cause an athlete to activate certain muscles during specific movement patterns. The designs KT tape creates can certainly cause a placebo effect for the athlete regardless of the goal of the treatment. Kinesiology tape is definitely not a stabilizing tape and should not be used in that manner. At this time there is not a conclusive amount of evidence to whether or not kinesiology tape actually aids in muscle proprioception or the reduction of edema and ecchymosis.