

BY PAUL COKER BSC HONS PHYSIOTHERAPY
MSC MANUAL THERAPY

INTRODUCTION

Few people can have failed to notice the rising use of this sometimes brightly coloured tape in recent years. Whether on Gareth Bale's legs, Serena Williams' back or Andy Murray's knee, it's been rapidly gaining popularity with athletes and therapists alike. While some people remain doubtful that it is nothing more than a passing fad, others, myself included, have seen and felt its powerful effects to reduce pain and enhance performance. Every day in clinic I see patients delighted and amazed when I tape them. Every time I teach a taping course I see sceptics become converts by wearing and feeling the tape work on them.

WHAT IS IT?

Kinesiology tape (KT) is made of tightly woven elasticated cotton fibres, and the glue on the back is acrylic, highly durable and waterproof so the tape can be worn for up to a week withstanding vigorous movement, sweat and total immersion in water. The aim is that the tape matches and augments the stretch characteristics of your skin and muscles.

Equally important is what it is not: the tape does not contain any medication or drugs – all the benefits come from the tape's elasticity. The different colours of tape are for purely cosmetic reasons, so all tape gives the same benefits.

WHAT WILL IT DO FOR ME?

Kinesiology tape can be used for a number of conditions and is commonly applied to reduce pain, drain swelling, aid healing, improve function, facilitate early return to activity or sport, and improve sporting performance (Box 1).

WHAT IS THE PROOF?

The popularity of KT has grown and spread worldwide based on its clinical effectiveness to reduce pain and enhance performance, rather than through hard tangible evidence about how the effects are achieved. Although still in its infancy, the early signs from research studies are encouraging, and a body of academic research is growing to support the positive effects of tape. Although nailing down the mechanism by which these effects occur is proving tricky, recent studies have shown kinesiology taping to:

- increase lower back flexibility in healthy people
- improve neck range of movement in patients suffering from whiplash
- enhance scapular rhythm in baseball players with shoulder impingement
- Improve time trial performance in healthy elite cyclists.

HOW DOES IT WORK?

At the moment, nobody is certain how it works. This is my best guess until more research comes along.

1. Vascular/lifting effect

The elastic properties of tape induce vertical lift of the skin from the underlying tissue. This decompresses the capillary bed and the space between skin and muscle, which



Kinesiology taping, first invented in the 1970s, has seen a dramatic, recent increase in popularity. With the Olympics looming could this be the edge our athletes need to heal faster and perform better? But it's not just a treatment for the elite: from postural problems to swollen ankles, a simple roll of kinesiology tape could help almost every patient you treat. I present here a few simple but powerful techniques, and discuss what it is and how it's thought to work.



Calf and achilles taping for pain



Fan taping for a swollen ankle



Tape for mechanical low back pain (wrinkles are a vital part of how the tape works)

Box 1: Taping in action

promotes improved blood and lymphatic flow in the taped area. This allows the removal of injury waste products and pain generating chemicals, and promotes healing.

2. Mechanical/supporting effect

The tape has longitudinal stretch properties of about 180%, which are similar to those of skin, muscle and connective tissue. This helps the body's stabilisation system by adding a little extra stability, spring and awareness of stretch to muscles, ligaments and joints.

3. Neuromuscular optimising effect

Tape placed over weak, sore and injured tissue will act to aid the body's 'active' stabilisation system improving and increasing activity and feedback from nerves and muscles. The result of this is improved functional performance, less pain, and faster recovery.

WHO CAN USE IT?

Kinesiology tape can be worn by almost anyone from children to the elderly, and it can help to treat almost any pain or dysfunction being caused by the body's musculo-skeletal system. It works best at the milder end of the injury spectrum, and is especially good for those problems where you only get pain with activity or exercise. Although the glue is tough and durable, the tape can be removed with very little discomfort and leaves no residue on the skin. Because the glue is acrylic it contains no latex, so it can be used by those allergic to most other tapes. The tape sticks well in all but the hairiest places, and the hair is left behind when the tape is removed so shaving is rarely required.

ANY DRAWBACKS?

Very occasionally the tape can cause an allergic skin reaction, and if too much tension is placed on the ends of the tape the skin can become irritated and inflamed. It's not a miracle cure, and it won't mend broken bones or instantly fix serious injury – it doesn't work like a plaster on a wound. To

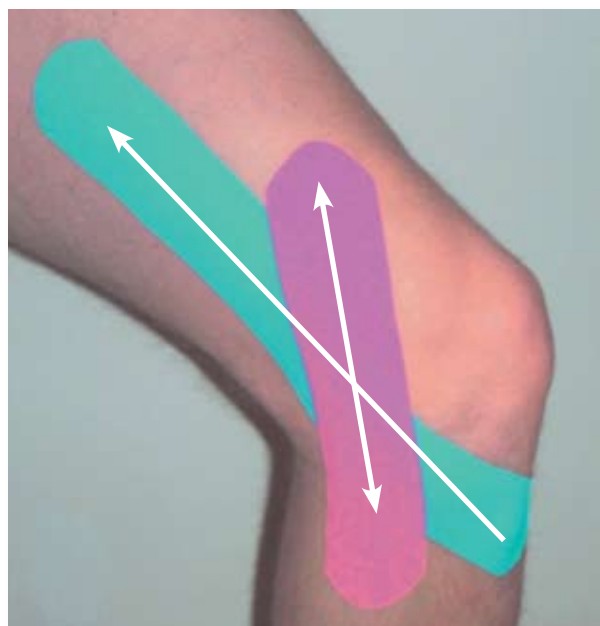


Figure 1a: Taping pattern for relief from inside knee pain

“KINESIOLOGY TAPING IS THE FIRST TRULY THERAPEUTIC TAPING INTERVENTION”

get maximum effect the right combination of tape and tissue stretch is vital.

I'M SOLD; WHAT NEXT?

Firstly if you are in any doubt about what causes your pain, seek the advice of a well-qualified experienced health professional. Kinesiology tape is often used by physiotherapists, osteopaths, chiropractors and sports therapists, and it is a good idea to get them to show you how to best apply the tape for your particular pain/injury. Most significant problems need some other treatment alongside taping, and your friendly health professional can advise you about this.

CAN I TRY TAPING MYSELF?

If you have:

- mild to moderate pain on movement or exercise
- no major swelling or bruising
- no major loss movement or strength,

and you want to give tape a try, go right ahead. First get yourself a roll of tape (www.rocktape.net) and try these basic applications for relief from inside knee pain (figure 1a; follow blue and pink) and lateral elbow pain/tennis elbow (figure 1b; follow green and black):

1. Stretch the tissue in the area you want to tape as much as possible.
2. Cut a longish piece of tape (a minimum of 3 times longer than your sore bit). Tear the backing paper close to one end and stick the end down with no stretch on the tape. Peel the backing paper away as you stick the tape in line with the

“I TELL MY PATIENTS THAT TAPE GIVES THEIR BODY A SUBTLE BUT SIGNIFICANT NUDGE IN THE RIGHT DIRECTION”

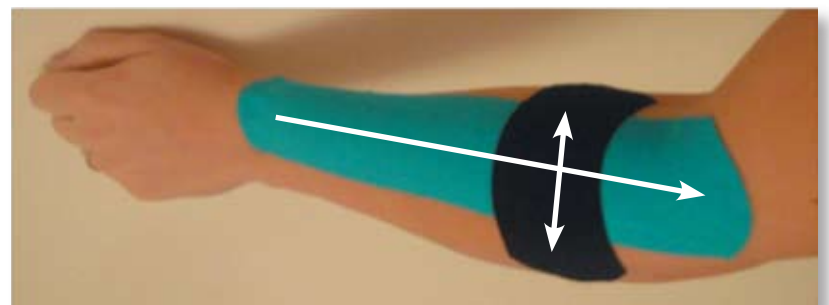


Figure 1b: Taping pattern for relief from lateral elbow pain

tissue with just the amount of stretch that is already on the tape (blue strip; green strip).

3. Take a second short piece of tape, tear the paper in the middle and peel it back so ½ the tape is exposed, stretch it a little and lay it like a plaster right over the sore bit – roughly perpendicular to the first bit (pink strip; black strip).

4. Always lay the first and last 3–5cm of tape with no stretch at all.

5. Rub the tape all over to activate the glue before you start moving about.

6. Hopefully you'll start feeling better right away; if you do, keep the tape on for 3–5 days.

Got a pain that is not getting better? Go see a professional.



- How does kinesiology tape differ from rigid taping?
- Could kinesiology tape be used to enhance athletic performance?
- Could wearing kinesiology tape help to improve compliance to home exercises?

ADDITIONAL RESOURCES

- www.rocktape.net
 - www.movementsolutions.org
 - Kinesiology Taping Fundamentals DVD £36.40
- Buy on Amazon <http://spxj.nl/zS013w>



THE AUTHOR

Paul Coker is a specialist musculoskeletal physiotherapist, medical director for RocktapeUK, tape geek, a below par runner and very average surfer. Paul graduated from Robert Gordon University in 2001. He completed a masters in manual therapy from University of Western Australia in 2007. He teaches taping seminars nationwide but lives and practises in sunny Cornwall.



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Video: Introduction to kinesiology taping by Paul Coker



Video playlist 1: Video playlist of common kinesiology taping techniques



Video playlist 2: Additional videos on kinesiology taping techniques

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