

Advanced Kinesiology Taping for Pain, Posture, Swelling and Scars



This e-book is aimed at a medical audience – those practitioners trained to recognize and manage people who present with pain. If this is NOT

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Advanced Kinesiology Taping for Pain, Posture, Swelling and Scars

When you think of “*taping*” what comes to mind? Athletic tape wrapped around a sprained ankle? “*Strapping*” a shoulder to “*hold it in place*”?

The reality is that in the past few decades, “*taping*” has evolved to become so much more.

Pioneered in the 1970s, kinesiology tape is now commonplace not just in clinical settings, but also in school athletic departments and average households.



With increased use comes new theories and research into why this modality may work as an adjunct to movement, therapy and exercise.

This e-book touches on some lesser-known uses for kinesiology tape and provides some examples to kick-start you as newbie practitioner or offer some new thoughts if you are a veteran of kinesiology tape.

After all, as TapeGeeks, we are all about hacking, learning and re-learning. If we aren't consistently tweaking our concepts, we aren't growing the pool of knowledge.

CHANGING THE PAIN GAME WITH KINESIOLOGY TAPE

There are many reasons to use kinesiology tape but the first would be to reduce pain.

Pain is the most common stress response associated with injury. While pain is often a first symptom, there are other things that signal injury and often before the onset of pain.

Reduced range of motion, compensatory actions and weakness are all signs that pain may be next! Needless to say once someone is in pain, the situation can become more complicated as time goes on. Understanding the source of pain early can be a game changer.

This multifactorial human pain response has been cited in the literature by researchers, Lorimer Mosley and Peter O’Sullivan, who have studied the implications of chronic pain at length. Much of their work has been dedicated to how the brain changes information surrounding pain over time. Pain becomes embedded in our brain and immune system and is no longer perceived as “just a sore arm”.

People who struggle with pain, can experience carry-over into their work, sports and activities of daily living. With the general use of prescription medication at an all time high, the search is on for alternatives to manage, and reduce pain.

The question is, *“can kinesiology tape on it’s own reduce pain”?*

As a solo intervention, kinesiology tape has shown no more favorable results than a placebo. Interestingly however, when kinesiology tape is used in conjunction with other interventions such as functional movement, rehabilitation and strengthening, they perform better than those where kinesiology tape was not used.

The current theory is that kinesiology tape creates a change in the sensory receptors in the skin. These receptors alter information that is sent to the brain.

A great example, which everyone is familiar with, is when we hit our “funny bone”.

What is the first thing we do? Rub our elbow, of course. And people do this instinctively- but why?

The tactile input from rubbing helps provide an interpretive change between the arm receptors and brain.



While there continues to be debate as to exactly how the signal to the brain is changed, we know there is change when a stimulus is presented.

Kinesiology tape acts similarly to rubbing the skin by acting as a new stimulus and helps to reduce pain, perform a specific task or simply provide relief during the pain/injury cycle.

Take for example, Paul. He works at a grocery store and has experienced back pain intermittently throughout his life. Recurrent bouts of back pain have made him more tentative about the lifting aspect of his job. As his activity has decreased, Paul has gained weight which leads to even less inclination to be active – and so goes the vicious cycle.

Paul, like most people recognize the downward cycle so he heads to the gym to resume his previously scheduled activity. He finds after using a kinesiology taping protocol for his low back, he has reduced perception of pain. This reduction in pain allows him to regain more range of motion with each workout. The increased activity also naturally reduces the perception of pain. He finds he is more fatigued at night from his increased activity. He goes to bed earlier and sleeps well. When he experiences some weight loss, he starts to make better eating choices.

Yay! Paul is now in an upward improvement cycle and while it is not solely the use of kinesiology tape, something as simple as reduction in the perception of pain can shift the user towards positive change.

The intervention of kinesiology tape is low cost and when used as part of multi-step program, can help change a person's injury trajectory.

So, in general, how do we suggest you tape for pain?

1. Locate the area of greatest discomfort and apply a **compression strip**. This strip should be initially applied with only 25% additional stretch.
2. The second step is to apply one or two **support strips** with zero stretch surrounding the area of pain.

While we offer protocols, we encourage the user to experiment with variations.

Remember that pain is very complex and can be a sign of something significant or serious. If you are not trained to manage or treat pain, you should always have it evaluated by a qualified professional.

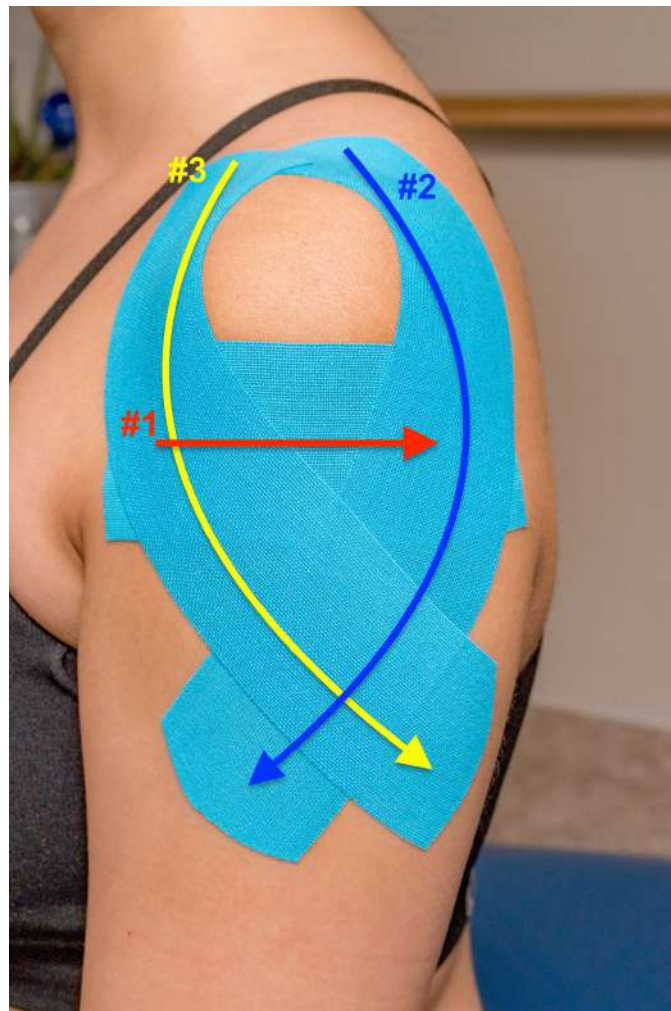
Here are 3 simple, and common, applications we think may help change the pain game!

Cradle The Shoulder

#1- Apply a compression strip with 25% stretch at the area of greatest discomfort

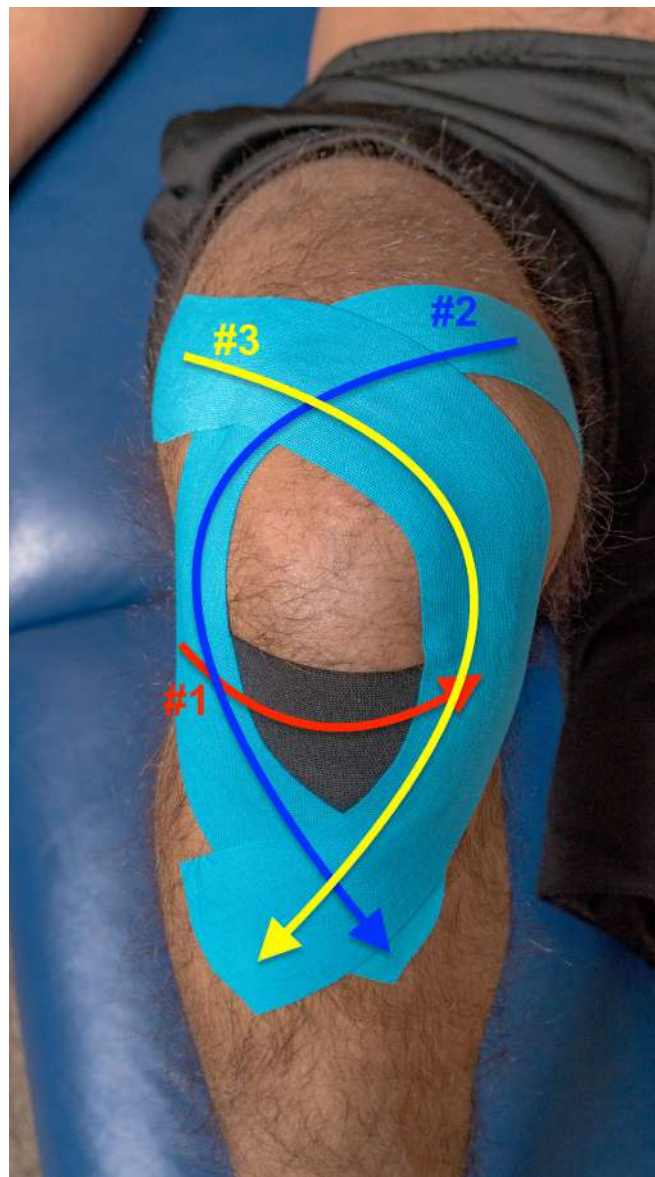
#2- Apply the first support strip with no stretch from the top of the shoulder, around the back of the deltoid and end at the top of the biceps

#3- Apply the second support strip with no stretch from the top of the shoulder, around the front of the deltoid and end at the top of the triceps



Frame The Knee Cap

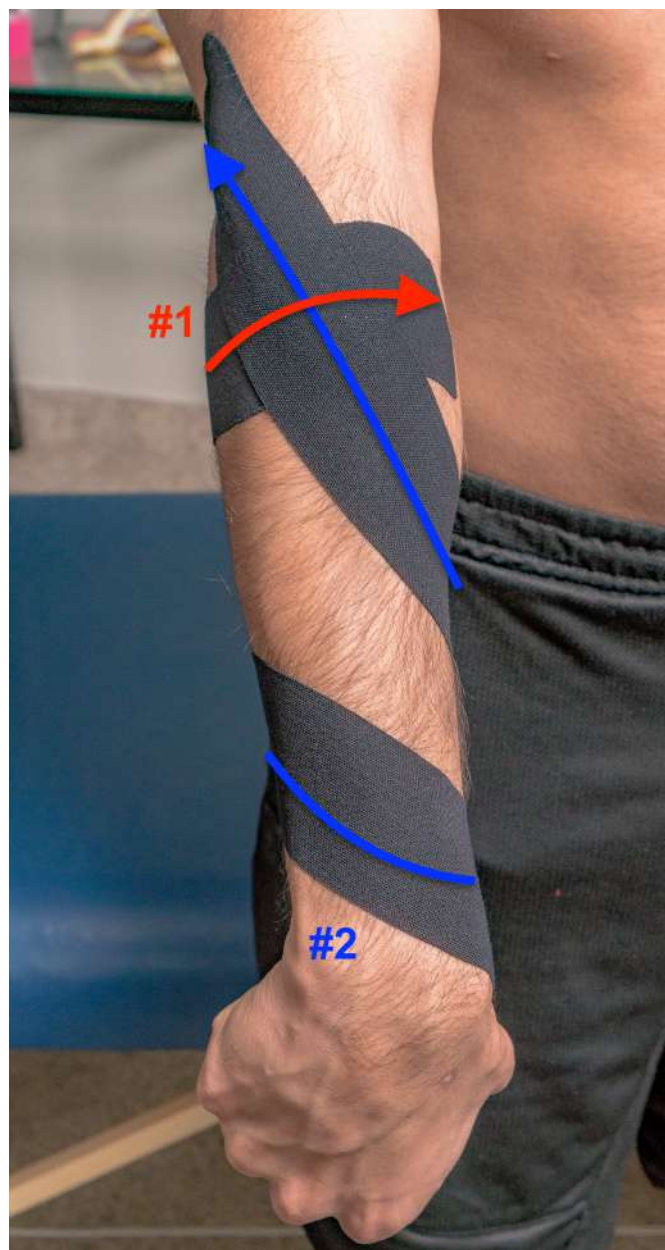
- #1- Apply a compression strip with 25% stretch at the area of greatest discomfort (typically along the patellar tendon)
- #2- Apply the first support strip with no stretch from the VMO, around the lateral side of the patella and end at the top of the medial gastrocnemius
- #3- Apply the second support strip with no stretch from the vastus lateralis, around the medial side of the patella and end at the top of the lateral gastrocnemius



Top Spin that Tennis Elbow

#1- Apply a compression strip with 25% stretch on the brachioradialis at the point of greatest discomfort (ask the patient to make a hard fist to locate the point)

#2- Apply a spiral support strip with no stretch from the inside of the wrist, wrapping around once, overlapping the centre of the brachioradialis and ending at the lower triceps



“PERFECT” POSTURE

“I need to correct my posture” or *“I have bad posture”* may be one of the most frequent comments therapists hear from patients.

People generally think that posture -good or bad- may be the root cause for some of their aches/pains but in reality, there really isn't an ideal posture for all humans.

Take Usain Bolt for example, the world's fastest man. When running coaches analyze his form many say he is running with poor form / posture. His knees fall in too much and he has too much upper body movement. But who can really argue with his posture given the fact that he has dominated his field for years?

For the most part, posture is hard to define. Webster's dictionary describes it as, *“The way in which our body is positioned while in sitting or standing”*. OK...but don't we do more than sit and stand? We bend, crawl, squat, lunge and twist and we move both fast and slow.

Posture is static, dynamic, fluid, evolving, and individualistic. So how do we decide if posture matters?

Pavel Kolar, a clinician from Prague, defines posture as, *“a composite alignment of all the joints of the body against gravity or any external force at any given moment in time. Posture is not a synonym of upright stance, but is an essential component of any movement in any position of the body”*. From a therapist's perspective, this seems to be a more accurate definition of posture.

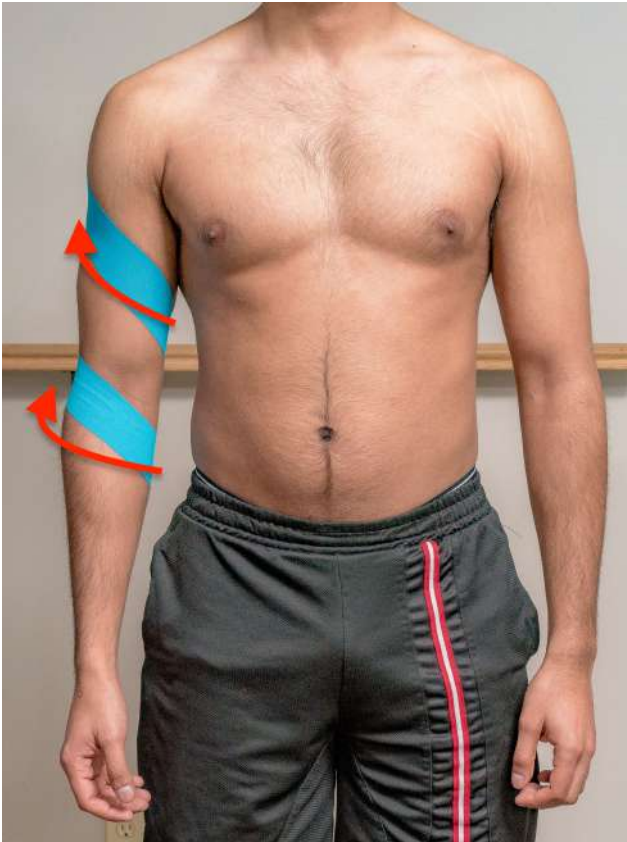


The first question to ask about posture and pain is, *“Is the pain during the task I am doing, improved by a position or positions”*. If the answer is yes, changing the way you're moving or maintaining a position may be of benefit. While we are attempting to standardize this position in what we consider to be ideal, we should instead individualize them based on the above.

When taping for posture, we first want a person's movement to be fully assessed. This should be done by someone with experience in analyzing movement especially where pain is involved.

Once it has been established which position(s) allow for reduction of pain, this becomes the position in which to *“tape for postural correction”*.

Here's a successful application for throwers and overhead athletes.



The **Humeral Fault** Taping Application is an example of using one continuous strip of tape with only slight stretch (up to 25%).

#1 - Start at the inside of the elbow, then over the brachioradialis to the back of the arm, spiraling back onto the front of the biceps and onto the posterior deltoid.

Finish the application by crossing along the scapula of the affected arm and end on the opposite scapula.



THE NOT SO SWELL PART OF SWELLING

Have you ever twisted an ankle? Most of us have and it is one of most common injuries suffered by humans. It hurts like a son-of-a gun immediately and usually you can't walk at all.

You look down, after limping around for a few minutes, and it's likely already starting to swell (the deeper bruising tends to take a few hours to a day).



Swelling, or edema, is part of the acute inflammatory phase and is often joined by heat, redness and pain. Believe it or not, the acute inflammatory phase is necessary for the body to initiate the healing process. This phase will vary in duration, and intensity, depending upon the extent of injury.

Medical intervention attempts to control, or assist, the body as rapidly as possible through this phase, given the damage it can cause if managed poorly. Longstanding edema can lead other complications.

Patience is necessary during this phase of an injury as there isn't much that can be done other than R.I.C.E.

- **Rest**
- **Ice (lightly)**
- **Compress (also lightly)**
- **Elevate the injured tissue**

Using kinesiology tape for the purpose of dispersing edema, and bruising, is probably the most visual evidence that “*something*” is happening due to the kinesiology tape.

If there is significant bruising, the areas under the tape may start getting lighter than the un-taped areas. For this reason, we suggest alternating the direction of the tape with each new application.

The application of kinesiology tape in an overlapped **basket pattern** theoretically provides areas of higher and lower pressure as the tape stretches the skin in different directions, thereby allowing the microcirculation under the tape to move fluid more efficiently.



For large areas, 2 pieces of 2” tape may need to be used side-by-side (on a thigh for example).

For angular areas like ankles, there’s more flexibility in cutting a 2” wide piece into 4 fingers, leaving roughly 2” at the end as an anchor.

#1 - Start on either side of the shin, with the anchor. Individually place the fingers over the area of swelling to form a fanned-out pattern.

#2 - Start the second strip of tape fingers, from the opposite side of the shin and run them across the first strip.

There should be minimal tension on the tape the first day.

For acute injuries, we suggest changing the kinesiology tape daily.

SCARRING

Several years ago a patient named Joanne, who had given birth 3-months earlier via C-section, came to our clinic with pain along her scar.

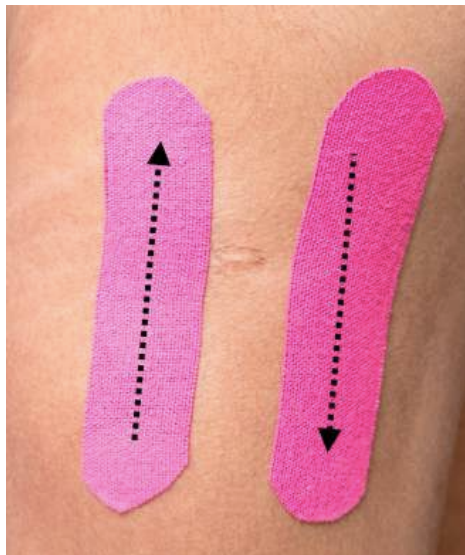
Following the C-section, Joanne was in some pain but she returned to her activities of daily living fairly quickly. Over a period of months, one side of her scar started to give her sharp pain that she rated as 9/10. She also complained of tightness in the same area when reaching overhead.

Joanne was frustrated because she was starting to increase her activity to get back to her pre-pregnancy condition but she found it increasingly difficult to lift her baby.

The first step was a proper “Scar Assessment Protocol” (which we teach in our level one TapeGeeks Seminar).

Following the assessment of the scar, the restricted direction was determined. This established the direction in which the tissue should be taped and/or manipulated (if you have manual therapy training).

When taping a scar, cut multiple strips of 1” pieces of tape. Measure the tape to span roughly 1.5-2” on either side of the scar.



After anchoring the tape on one side of the scar, pull the tape with 75-100% tension into the restriction, or the direction the scar doesn't seem to want to move, even if that means the tape goes in opposite directions at different places in the scar.

Use as many strips as necessary to cover the length of the scar.

In most cases, patients like Joanne also get sent home with strips of tape. She was taught how to tape her scar and also shown how to manipulate it. She was also given some basic exercises to improve the mobility of the tissue through the lower abdominal area.

Joanne returned in 2 weeks. She had no pain or feeling of tightness since using the scar taping protocol.

While Joanne's case solved itself quickly not all cases are like this. Scars and surgery are complicated. We always advise using the kinesiology tape only after an assessment and adding specific home exercises as prescribed by a qualified therapist.

Using kinesiology tape is more than just applying tape to skin. It consists of an assessment, a treatment plan and complimentary exercises that synergistically improve common conditions/injuries.

The goal of this e-book was not to be comprehensive or formulaic- there are already plenty of those available.

It was intended to get you thinking. Thinking about using kinesiology tape if you aren't already and maybe giving you new things to try, if you are using a different "system".

For other details:

- 60-second videos for specific taping protocols visit www.tapegeeks.com
- Looking for face-to-face instruction? Go to the SEMINARS section to see the scheduled dates.
- Would you like to host a course? Contact conor@tapegeeks.com
- Are you better at self-paced learning via videos?
- You're in luck! Check out Conor's online "**Tape-Like-A-Geek**" **Level 1** – everything you learn at a live seminar but in the comfort of your own home/clinic.



Conor Collins, BSc, RMT, has been involved with sports injury management and manual therapy for 16-years.

He maintains an active clinical practice specializing in concussion and post-concussion syndrome. He has been lucky enough to serve athletes at all levels and has consulted for teams in the NCAA, NHL, IHF and Soccer Canada.

Outside of the clinic Conor is beginning his 12th year of teaching manual therapy students, where he is currently on faculty at Mohawk College in Hamilton, Ontario, Canada.

The **geeks** *Team*