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That's a wrap

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Taping Body Parts

Introduction

Tape in one form or another has been used in both athletic performance and rehabilitation for many years. The popularity of Kinesio taping is relatively recent and although the literature suggests that it was formally introduced by a forward thinking Chiropractor, ‘Kenzo Kase’ in the 1970’s it wasn’t until high profile athletes like beech volleyball exponent Kerry Walsh in the 2008 Beijing Olympics used it in front of the worlds media that interest in this modality really took off. Since then it has really gathered steam with ever self respecting high profile athlete to weekend warrior have considered or used it at some point. Not that there is anything wrong with the other type of tapes, its simply understanding what’s best for the job rather than what looks more aesthetically pleasing.

Types of tape

Broadly athletic and tape used for rehabilitation can be broken down into the following:

1. Rigid type tapes – These are usually employed to hold or reduce joint movement, the fabric has little give in it and typically they have a zinc oxide based glue which is usually quite strong and adheres to the skin well. Common readily available examples include ‘Strappal ®’ or ‘Endura ®’.
2. Under tapes – Called so as they are usually employed to sit directly under the rigid tapes. They are reported as being more hypoallergenic so kinder essentially to the skin. They do have their own glue coating on them so can of course be used successfully as a stand alone option. Common readily available options include ‘Hyperfix ®’ or ‘Endura-fix ®’.
3. Elastic based tapes – These tapes usually have a high twist ability which offer a degree of flexibility allowing the skin, muscles and remaining soft tissues a degree of movement after application. They are normally porous and cotton based in construction so to some degree allow the skin to breath and transmit moisture through the material. Common readily available examples include ‘Tensoplast ®’ and ‘Elastikon ®’.
4. Felt based tape – Mainly devised to act as a barrier and offer protection to the skin, they do not contain any glue but generally make the use of tape more comfortable. ‘Mueller ®’ have extensive colours and options.
5. Cohesive bandages - these are often grouped with tapes as they are employed in a similar way. They don’t contain glues and essentially their weave allows them to cohere to themselves when wrapped around a joint or muscle. Coban ™ is an excellent example of this.
6. Kinesio type tape – Briefly mentioned above, this is commonly seen in sport a lot. It essentially adjusts to the skin and is said to glide as movement occurs. Many variants are available in a plethora of colours. ‘KTTape ®’ is a good starting point but many other suppliers exist.
How tape works

The truth is the scientific community is not entirely in agreement. Several mechanisms have been postulated. All of which have their strengths and drawbacks. Originally the rigid tapes where applied to limit movement, for example, to limit ankle movement following an inversion sprain but the research is undecided and usually indicates that this only occurs initially, thereafter the effect is reduced. Other authors have suggested it helps with ‘proprioception’, your bodies ability to know where it is in space. I suspect it plays some part here but this is just one part of the jigsaw, and it’s a pretty complex one to unravel given that it covers a multitude of receptors, spindles and processes. It is also though to indirectly reduce pain and of course like anything in life, there is a degree of placebo involved. Regardless of the agreements for and against it has been a trusty friend to the athlete for many years and what’s really important is whether it applies adjustment, support, relief, performance or restriction it is just one component of an individual’s approach to training, keeping going and recovering from niggles to more serious injuries.

Things to be aware of before putting tape on

Before applying tape to yourself you need to consider the following precautions / contraindications. This is not an exhaustive list, please see product packaging for exact details.

- Skin integrity, consider likelihood of allergy to tape?
- Is your skin hyper-sensitive?
- Where you are applying the tape, is there any active eczema, psoriasis or dermatitis.
- Ensure you are not applying tape over immature scars or areas of infection.
- If you have any circulatory problems (minor to major), ensure you consult your GP or family doctor first.
- Avoid areas where sun damage has occurred, think recent holidays etc.
- If you are having active treatment for any medical condition, seek advice from your GP, family doctor or the consultant in charge of your care.
- Avoiding taping in pregnancy, especially the first trimester.
- You are capable of removing it.
- You have the capacity to detect changes in sensation.

Top tips on applying the tape

- Think carefully about the ‘things to be aware of list above’.
• Remove any moisturisers or emollients from the skin, they will only cause the tape to unstick.
• Avoid shaving the body part, as this is useful as the hair follicles have tiny receptors which feed back to the brain.
• Apply the tape as smooth as possible and avoid wrinkles especially in weight bearing areas, such as the hands and feet.
• Once applied, ensure no new symptoms particularly circulatory or sensation changes such as pins and needles are occurring.
• Make sure you have a sharp pair of safety scissors for cutting the tape, especially the more flexible based tape.

Common taping used in training

First thing is you need to decide whether you are taping to prevent injury (prophylactic) or taping to aid recovery from an injury.

Thereafter consider which tape you think is going to be the best option for the job.

Below are 5 common taping procedures

1. Preventing rolling inwards on your ankle(s) (inversion injuries)
   • Use a glue based adhesive tape.
   • Firstly consider above ‘things to be aware of before putting tape on’ and ‘top tips for applying tape’.
   • Cut or tear two lengths of the tape approximately 30cms (fixed tape, half if using Kinesio tape (as it stretches).
   • Apply to the medial aspect of the foot (just above the anterior and medial malleolus), thread the tape under the sole (avoid crinkling the tape) and pull up onto the anterior aspect of the tibia, you want to end about 10cms below the knee.
   • Keep the foot in a neutral position when applying the tape. Reinforce with the second piece, you may need to cut two small strips (anchor strips) approx. 5cms in lengths to hold each end down, place these horizontally at the start and finish point.
   • The idea is it encourages your foot not to travel inward, a position it naturally sprains in.
   • Lastly check sensation is normal.

2. Collateral Knee ligaments
   • Use a glue based adhesive tape.
   • Firstly consider above ‘things to be aware of before putting tape on’ and ‘top tips for applying tape’.
• Cut or tear two lengths of the tape approximately 15cms (fixed tape, half if using Kinesio tape (as it stretches).
• Fully extend the knee and apply each strip medial and lateral to the knee joint, you may need to use to anchor strips either side of the strips to hold the tape.
• This should promote joint awareness and give a feeling of support, especially when flexing the knee during exercise such as a squat, its often combined with the ankle taping above.
• Lastly check sensation is normal.

3. Instability of the shoulder complex

• Use a glue based adhesive tape.
• Firstly consider above ‘things to be aware of before putting tape on’ and ‘top tips for applying tape’.
• Cut or tear three lengths of the tape approximately 15cms (fixed tape, half if using Kinesio tape (as it stretches).
• You will probably need someone else to apply this tape. Place your arm in neutral, use your other arm to lift up your shoulder about 1cm by lifting your flexed elbow. Get your partner to apply 3 vertical strips of tape travelling anteriorly, middle and posteriorly on your Deltoid down your arm, it should feel like the shoulder is raised a little. Ideally you should also feel like you have more awareness of your shoulder position.
• Lastly check sensation is normal.

4. Tennis elbow offload taping

• Use a glue based adhesive tape.
• Firstly consider above ‘things to be aware of before putting tape on’ and ‘top tips for applying tape’.
• Cut or tear two lengths of the tape, one 10cms and the other 15cms (fixed tape, half if using Kinesio tape (as it stretches).
• Apply the tape so the two pieces join together over the painful area, (common extensor origin). With the longer piece pull and apply the tape onto the forearm either medially or laterally. You will have to play around with this as its about finding a sweet spot or a point where you have offloaded the discomfort and it feel better.
• Lastly check sensation is normal.

5. Taping a swollen joint / muscle

• Use an elasticated glue based adhesive tape or cohesive bandage
• Firstly consider above ‘things to be aware of before putting tape on’ and ‘top tips for applying tape’.
• Wrap the tape / bandage around the joint, always wrap lighter than you think at first, it should help with the swelling.
• Always check sensation is normal, you don’t want to occlude the muscle, joint and using a circumduction technique can easily do this if you wrap too hard.

Closing points

• Be sensible when using tape, its not a cure for everything and is just part of your overall routine.
• Pick a tape that is right for the job, there are loads of different types and some work better than others depending on what you are using them for.
• Check your contraindications and pay close attention to irritation of the skin when its applied.
• The length of time you leave tape on varies with the product (read the product guidelines). However common sense is the real guideline, if its not altering your sensation, causing irritation and having an effect then in most cases it should be fine to leave on. Kinesio tape has been reported in cases studies to be left on for 3 plus days.
• For more in depth advice and application, see your local physiotherapist, chiropractor and osteopath.
• For any concerns, see your local GP or family doctor.