

# International Kinesio Taping Symposium 2012, Düsseldorf:

## NOTES FROM AN ATTENDEE

By Seppo Appelqvist, PT

*The International Kinesio Taping Symposium in Germany provided one attendee with a good reason to combine business and leisure. Seppo Appelqvist, from Finland, was able not only to build on his Kinesio taping knowledge and contacts, but had a chance to watch Finnish football star Teemu Pukki playing in the Fortuna Düsseldorf-Schalke match. "You couldn't take for granted getting tickets for the match," Seppo tells us, "since the home team supporters rumbled after the last game of the season so much that they got a penalty, this time the home team got permission to sell at the most 25,000 tickets instead of 54,000 for the first two matches of this season."*

*It took a lot of Finnish stubbornness, but a the ticket was found. "It was an excellent match, ending 2-2," Seppo adds. He's got his eye out for more courses in Germany!*

*After a poor night's sleep it was time to head for the university and locate the correct room number. After getting lost at first this was found with the help of a Scottish participant and his GPS. The auditorium was filled, with more than 100 pairs of eyes from 23 different countries eager to update their knowhow about Kinesio Taping.*

After the introduction, the first research presentation was by the Serbian (CKTI Dragan Dimitrijevic). He summarized "Thermography monitoring of Kinesio Taping Therapy - 3 Case Studies" (Nikolovski, Dimitrijevic, Stević). With Kinesio Tape the temperature -- e.g. in the area of chin (case 1) -- increased 2.4 degrees in 5 minutes. It was interesting to observe the increase in temperature, as shown by the infrared readings, also in surrounding area (for example in the sternum area) though the tape was set in the shoulder. As a conclusion, Kinesio Taping increases circulation and increases surface temperature. A critic asks, is this specific to Kinesio Taping or could any garment or covering do the same?



Second, a Spanish researcher presented a review of literature, "Kinesio Taping through Bibliometric Indicators" (CKTI Francisco Garcia-Muro San José). In the review 237 documents were analyzed. Studies were reported to be difficult to find and even 41.4 % is not written in English. Studies have been published in 13 languages in 139 journals. Results of Kinesio Taping reported in the literature have been generally good.

Next was a case study on Kinesio Taping related to ACL surgery: "Kinesio Taping after Anterior Cruciate Ligament Surgery, the Acute Phase" (CKTI Jose Maria Gonzalez Ruiz). In this repeated surgery, Kinesio Taping was used 20 days together with mobilization and exercise. The knee extension was full, so flexion motion and swelling was under interest. Knee flexion increased over 30 degrees in 20 days, knee was pain free and there was no sign of inflammation. A case study is not always a big deal in research circles, but this kind of case study can bring information and motivate somebody to carry out a larger study to meet the criteria of high quality research. Personally I'll remember this presentation best from the speaker's habit to mobilize soft tissue with the Kinesio Tape on. This was said to work well in controlling swelling.



Other workshops and demonstrations included Kinesio Taping for Beginners with CKTI Graceann Forrester and basic Kinesio taping Concepts with CKTI Jim Wallis.

Kinesio Taping was approached through the scientific challenge also from Egypt, in the topic "Kinesio Arm Taping as Prophylaxis Against the Development of Erb's Engram" (Ahmed, ElNegmy, Salem, Sherief) presented by Radwa Ahmed, PT, of Cairo University. A physiotherapy group (n=15) was compared with patients treated by both physiotherapy and Kinesio Taping. EMG and functional tests were used in evaluation. As a result of taping the shoulder and the forearm, the results were clearly better in the additional Kinesio Taping group compared to physiotherapy group.

Japanese view to brain EEG wave activity as a result of different stimulus, "EEG and Kinesio Taping" (Kimiko Kawano, PhD) was an interesting presentation. Experiments showed how Kinesio Taping of the calf activated the beta waves, which are dominant in activity. On the other hand, the same happened when calculating and hitting with a hammer as well. The lunch time was coming closer, so I started to wait for the conclusion (and lunch). After one hour I heard the conclusion: "I have no conclusion." But I got lunch, and possibly increased beta activity.

"Pain management after thoracic surgery using Kinesio Taping" (Jutta Draganow, MD, Hans-Michael Klein, MD) presented by a professor at the university in Düsseldorf was a thorough theme for the very informative background. There is a big risk of postoperative pain after lateral thoracotomy. Twenty to sixty percent of patients experience pain and almost 50% of these suffer from moderate or severe pain. Pain can be neurogenic or myofascial and also the control of pain must be diverse. One of these methods to control pain is Kinesio Taping.

The subject "Kinesio Tape: An Alternative and/or Complementary Treatment for Pain due to Sternotomy after Cardiac Surgery?" (Scalbrino, Clerici, Colombo, Frassine) was presented by CKTI Stefano Frassine and researcher Claudia Clerici and followed up on the previous theme. Pain reduction was clearly greater in the Kinesio Taping group. As a conclusion, Kinesio Taping was found to be a statistically effective way to reduce pain after cardiac surgery. Thus it enables reduction in use of pain killers.

In three live cases Kenzo Kase treated an amputee patient, ankle sprain and a stroke patient. It was interesting to notice the sensitivity to touch in the amputated stump. Touch felt painful with only 3-5g pressure, when pressure with bigger force didn't cause pain. Dr. Kase treated the stump with fan strip containing 16 thin strips and the touch was less painful after taping.

After coffee break I attended the workshop on "Balloon Theory of the Body." That reminded me of some things that make a difference between sports taping and Kinesio Taping. In demonstration the scar in the stomach affected the range of extension motion of the cervical spine, raised ribs to the straight

leg raise (SLR) test and the raised stomach to forward flexion test. This was an important point among other important points. That was roughly what happened in the first day.

The second day started with a shorter hiking tour in the campus area than in the previous day. Hamstring surgery and chronically tight Hamstrings made the first presentation "Kinesio Tape & Hamstrings" (Stephan Mogel, PT) my personal favorite of the symposium. In this subject 107 healthy, athletic participants were divided into three groups. Measured were mobility of the knee flexion, hip flexion, bend forward and the isometric strength of hip extensors. As a result of taping, the biggest change was found in the mobility of hip extension. Knee flexion was also significantly increased as well as strength in hip extension.

Effect of Kinesio Taping in Facial Palsy was introduced with two patients in the topic "Facial Palsy (Bell's palsy)" (Jacek Sasinowski, CKTP). The pictures taken before and after taping, showed a big difference. Practical experience of the Polish presenter shows encouraging results to utilize Kinesio Taping in cases of facial palsy.

For a person (me) who doesn't know anything about neurological physiotherapy, the subject "The Acute Effect of Kinesio Taping Method for Drooling in Children with Cerebral Palsy" (Zenginler, Tarakci, E, Tarakci, D, Irmak) presented by Yonca Zenginler, PT, had me thinking about the upcoming coffee break. But for those who are working in the neurological area, this subject is important. With the Kinesio Tape around the mouth and under the chin, the severity of drooling decreased from 3.72 to 2.20 and frequency 2.94 to 1.92. In addition there was a significant difference in the larynx elevation. Satisfaction was found in 19 of 25.





A series of three presentations concerning low back problems began with "Postural Balance in Low Back Pain: Comparison Between Back School and Kinesio Taping Method" (Stefano Frassine and Silvia Tognolina). In this 30 patients suffering from low back pain were divided into three groups. Group A received manual therapy and attended back school. Group B was treated by Kinesio Taping. Group C both. Measurements were carried out with VAS, isokinetic strength test and questionnaire. Generally best results were achieved in the group C.

This back theme continued with the subject "Back Stability, Gait and Kinesio Taping (A preliminary study): Kinesio Taping of the Thoraco Lumbar Fascia can help." (CKTI Itzhak Friedman). The Israeli presenter highlighted the role of thoracolumbar fascia (TLF) for example in a force transfer and maintaining posture. Eleven healthy participants took part in this study. Their stride length in walking was measured before and after Kinesio Taping.

The study "Effectiveness of Different Treatment Approaches on Pain, Functional Scale and Strength in Patients with Lumbar Pathologies without Neurological Deficits" (Baltacı, Senbursa) presented by CKTI Gül Baltacı, looked into the effect of different physiotherapy methods in the treatment of lumbar problems.

Turkish researchers concluded the regular Swissball exercise programme is effective to decrease pain, increase strength and function. The fastest reduction in pain was found in Kinesio Taping after immediate application.

Dr. Kenzo Kase spoke over an hour about "The Autonomic Nervous System Relating to the Kinesio Taping Method." Dr. Kase stressed the significance of stem cells in the healing process of soft tissue injury, and effect of Kinesio Taping on that. He emphasized the meaning of negative pressure to create space between the skin layers and to mobilize and repair mucosa as well as cooling down the temperature. Kase reminded us that Kinesio Tape is the only treatment method which with minimal stimulation works for several days. In the future there will probably be new screening tests for autonomic nervous system.

There was also room for a study related to animals, when Italian representative CKTI Sybille Molle, DVM, summarized the study "Use of Kinesio Taping for the Treatment of Sacroiliac Joint Dysfunction in the Horse: 7 Cases" (Molle, Duggeri, D'Onofrio). Seven horses with diagnoses of SI-joint dysfunction were taped. They were already medically treated in the past, which gave a good baseline in investigating the potential help of Kinesio Taping. The horses received Kinesio Taping for three weeks. Pressure measurements and walking analysis were made before the first visit, at week 1 and 5 after third treatment. As a result, pain decreased, stride length in walking increased and velocity increased. In addition the riders reported the horses were more elastic and willing to go.

An "ask the expert" panel was an interesting part where participants could ask anything about Kinesio Taping. How can you know the right amount of stretching? Suitability for the Parkinson patient? Pain control in the terminal stage? Itching? Usage for a child suffering from muscular dystrophy? Meaning of colors? How to make a Kinesio Taping study? Why Kinesio Taping was missing in Kinesiology education?

Dr. Kase explained why Kinesio Tex Tape is the best. Tape could be made in a cheaper way, he noted, but our tape contains good elastic fibers and there is something specific in the glue. There was also an answer for the origin of colors. One young patient said to Dr. Kase: "Doctor, this beige looks sick!" After that the production of blue and red tape started. Later on an athlete said "I don't want colors, I want black so my muscles look stronger." So started the production of black. Two other experts mentioned they let the patient choose the color, not because they would work in a different way, but because some colors may bring pleasure to the patient and the treatment may thus work better.

My workshop topic on the second day was sports. The workshop was built around cycling, where biomechanics was explained as a source of overuse injury. Also taping techniques were demonstrated. I was surprised to hear that although the major types of cycling injuries are overuse, traumas caused by falling make almost as big a part of the total number of injuries. In the demonstration the Quadriceps was taped and in this taping technique, like in other muscle taping cases, the direction of taping did matter. This origin-insertion idea is an important part of the taping method.

An intensive two days passed fast. Results of Kinesio Taping in the studies were good in extensive use range, but many studies had quite a small number of participants. A couple of presenters also brought this out, but the host reminded also from the purpose of the symposium, which is not only introducing high quality studies, but also encouraging to make a study, sharing up to date knowhow and giving participants the opportunity to meet other colleagues around the world who are working with Kinesio Taping. With these goals the 2012 Symposium succeeded well.

