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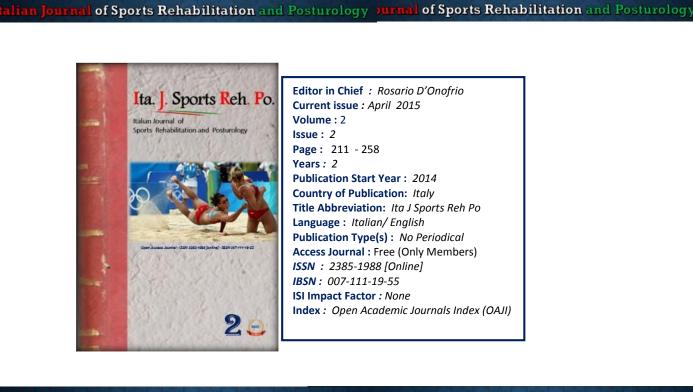
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Italian Scientific Society of Rehabilitation and Posturology of the Sports

- **Italian Football Medical Association**
- Italian kinesiological Taping Association
- Italian Group for Evidence Based Sport Osteopathy
- European Academy of Osteopathic Medicine

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Dear Readers,

The idea of creating an Italian Journal of Rehabilitation and Sport Posturology in English, with an international outlook, will allow us to establish a scientific exchange with health professionals who deal with sport all over the world.

This is a very interesting aspect of our study. It will enable us to widen the sphere of our professional experiences, both the theoretical and the practical ones, and to enter into relations with different scientific circles. The written and the oral exchange of information is the source and the essence of knowledge and it allows us to have an ethical, serious, professional communication whose content is validated by the International Scientific Literature.

Our editorial purpose in Italy is to encourage studies and researches, not only in Universities, but also in sports in order to avoid the empiricism that for years has understimated the Rehabilitative Science applied to Sport.





Editor In Chief

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The taping kinesiologico[®] kinesiobellia : method and applicability

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Abstract

This method was developed by prof. Rosario Bellia, physiotherapist for ten years the Italian national roller skating race, with an experience gained over many years of use of elastic taping, in sports and international general physiotherapy. First he was trained in Korea with the company Atex Korea, using the original approach applied to sport by the doctor of the Korean national roller skating race dr. Brandon Choi. Then from the experience gained with the Australian David Blow (acupuncturist), which had the merit of having prepared in an organic and effective technique with the use of elastic taping, and has developed an original method for a particular application and effective. The proximity of Bellia's methodology with Virginio Mariani, great researcher and expert application of elastic taping within postural and lymphatic drainage, has helped to improve a specific aspect of the application of kinesiology taping kinesiobellia.

Key words: Taping, kinesio -taping

The Taping Kinesiologico[®] Kinesiobellia

All these practical experiences as well as in-depth theoretical techniques have led to the development of an application method of elastic tape, characterized by the best Bellia has experienced over the years in Italy and abroad, in compliance with the overall vision and three-



dimensional body (holistic view). Following the technique learned in Korea, which foresees for the application of the tape considered "detrimental to the movement". In addition, the posture during the application provides the location of the athlete who plays the technical movements. This technique collects remarkable results also in general physiotherapy and postoperative surgery (orthopedics, oncology, hemolymphatic, etc.). The global vision is to cure the cause and the symptom. The basic principle is: bandage the cause and not the symptom of dysfunction, thus it is important an initial and postural analysis of the patient, to design the bandage that is increasingly regarded as an additional technique to other methods of physiotherapy and not elective Of particular importance, especially in sports traumatology, the use of matching of kinesiology taping and taping functional in the different phases of the rehabilitation project from the moment of trauma sports to return of the competitive activity, this is accomplished with three application modes:

a) The functional taping stabilizes the elastic

b) The elastic taping drains and the functional one stabilizes

c) The elastic taping drains and above applies the function that stabilizes the joint, to re - athletize the sportsman

Prof. Bellia Rosario, from experienced physiotherapist, had the merit to develop an application technique of elastic bandage, which could supportive to the various stages of rehabilitation in complete synergy with various modern physiotherapy techniques.

The kinesiology taping is widely used in the field of occupational therapy with a specific method, to support specific techniques in occupational rehabilitation. Based on the deficits of the patient's motor skills using techniques neuromuscular facilitation. The taping Kinesiologico[®] since the early years of its development methodology has had a remarkable expansion in Italy, both in sports physiotherapy and the hospital level.

Were greatly appreciated: the global setting (holistic), innovative applications following the biomechanics of movement respecting of the method of neuromuscular facilitation Kabat, the synergy in the field of neurodynamics, applications in the energy balance of traditional Chinese medicine (MTC) and applications to promote lymphatic drainage.

The taping kinesiologico has crossed national and Europeans borders arriving in India, where, after participating as a speaker of prof. Rosario Bellia at the International Congress of physiotherapy in New Delhi in 2011, it was developed a training course at the University of New Delhi reserved for thirty Indians physiotherapists. There were programmed a series of most important rehabilitative hospitals of Indian territory by 2016, confirming a significant interest in this technique abroad

After being in charge as professor of kinesiology taping at the Master Posturology Clinic at the University of Naples, "Federico II", and at the University of Palermo, prof. Bellia Rosario has



decided to publish a book: Application of kinesiology taping and spine. Bandaging techniques for spinal dysfunctions, rachialgia and posture. This book can be considered a real manual of kinesiology taping application in diseases of the spine and Posture. The kinesiobellia method intends comprehensively face the symptoms produced by the functional overuse in sports, both during the phase of rehabilitation, and agonistic phase racing, to support the athlete during his performance, paying the utmost attention on the analysis of kinetic chains and on the biomechanics of the sporting gesture (Photo 1)

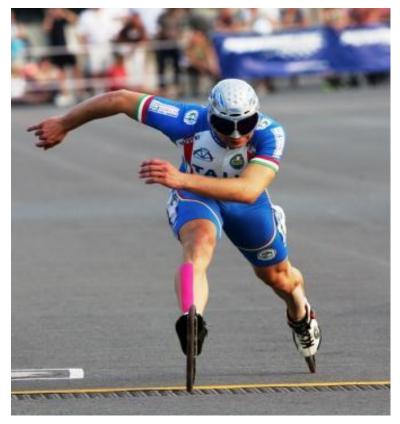


Photo 1: : Kinesiobellia taping technique applied during the competitive sports activities to improve the muscular contraction and the performance

The training modules on taping kinesiologico® kinesiobellia

The training modules on taping kinesiologico® kinesiobellia are:

- 1. Linfo-taping: Training for the practical application of the lymph taping kinesiolo-gico[®] in emo-lymphatic diseases, post-surgical and neurological diseases.
- 2. Dysfunctions of the vertebral column and posture: Course Formatio-ne on the application of taping kinesiologico[®] vertebral dysfunction and postural-logy.

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- 3. Physiotherapy General: Training course on the application of taping kinesiologico[®] as support in diseases related to physical therapy in general and post-surgery.
- 4. Sports Traumatology Level 1: Training course for the application of Taping Kinesiologico[®] in sports traumatology, both in rehabilitation and for the prevention of injuries and fatigue, in the management of the athlete in the gym and on the field. - ADVANCED level: "The method Koreano applied to the sport." Analysis of kinetic chains, the biomechanics of the sporting gesture to make a bandage specific "technical movement."
- 5. Application in occupational therapy training course for the application of taping kinesiologico[®] in various diseases and areas of competence of occupational therapists.
- 6. Neurological disorders: during training are addressed application techniques of the elastic bandage in the central and peripheral neurological diseases, with particular attention to degenerative diseases: Parkinson's disease, multiple sclerosis, etc.
- 7. bandage Biomechanical System: "The method Biomechanical System". On the analysis of the kinetic chains to the biomechanics of the gesture to make a specific bandage "human movement".
- 8. The Esthetic Taping System Alibel. Specific training course for professionals of aesthetics and physio-aesthetics within the drip-lymphatic to help the "drain" of fluids and cellu-lite.

How The Esthetic taping System Works

Body surface area covered by taping kinesiologico[®] form, during body movement, the convolutions (like the waves of the sea) of the seed coats, which are able, by reducing the local pressure, to increase interstitial space with an improvement of lymphatic and hematic drainage (draining, anti-edema of the system). (Photo 2,3,4). This generates a sort of flywheel of actions, which allows the body biomechanically itself and in specific to drain fluids and cellulite





Photo 2 : Kinesiobellia Taping Technique . Technique draining of the inferior limb for post inguinal surgical treatment



Photo 3 : . Kinesiobellia Taping Technique . Technique draining of the inferior limb for the treatment surgical post from complete prosthesis to the hip

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Photo 4: Technical taping kinesiobellia, : draining technique of upper limb for post surgical treatment

The Esthetic Taping System Alibel

After many years of experience in the use of kinesiology taping within the drip-lymphatic and tera-peutic method, prof. Bellia Rosario has been processed The Esthetic Taping System Alibel.((Photo 5,6,)This method of application of elastic tape in aesthetics, with specific processes tested and codifieed as a result of excellent collaboration with prof. Izzo Marcello, an internationally renowned angiologist and professor at the University of Ferrara.





Photo 5 : Technique Esthetic Taping System Alibel for the treatment of the smagliatures



Photo 6 : Technique Esthetic Alibel System Taping for the treatment of cellulitis

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Overall effect dell'Esthetic taping System:

Any tape applied on the skin produces a support and a variation of muscular function:

a) The skin, mucosa and meridians are the superficial reflaction of the deep state of health of organs, muscles, joints, capsules;

b) The pathological state of a muscle, joint, organ manifests itself as muscle weakness in that area;

c) A pathologically contracted muscle projects on the skin on the mucosa a neurological disturbance which modifies potential of muscle contraction;

d) A muscular or lymphatic stimulation (Photo :7) store the potential of muscle contraction if done properly (kinesiology - Louis Nahmani).



Photo 7 : Kinesiobellia technique, emo lymphatic drainage of the upper limb

The future has arrived: Bandage Biomechanical System®

Prof. Bellia Rosario with Dr. Simone Cocchiara has developed a new method of application of elastic taping, which involves the use of an "innovative" tape with Lycra and elastomers in memory. This method is a clear technical evolution towards a concept of the bandage using biomechanical criteria evolved human movement

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Technical and methodological principles of the bandage Biomechanical System:

The three application techniques and the specific phases of the bandage Biomechanical System:

1. Technical support to the dynamics of the purposeful gesture during the performance (Dynamic System): following the biomechanics of the structures involved (arthrokinematics) (competitive phase)

2. Technique of proprioceptive neuromuscular facilitation: to facilitate the gesture dysfunction "movement" (rehabilitation phase) (Photo 8)

3. Technical prevention of functional overload (overload) during the preparation of the athlete. (phase of athletic preparation).



Photo 8 : Biomechanical system bandage technique to support of the rehabilitation phase

"The fabrics will not be damaged due to the pain, they are damaged because of the functional load to which they are subjected."

The load at which a structure is subjected at a given time produces a reaction of the same structure, therefore the reaction can be of various types, among them the damage of the structure if the variable "load": load capacity of the structure is exceeded, and therefore, its damage.

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Christopher Kaeding describes that a tendon structure normally subjected to exercise, through the tenocytes produces a large amount of growth factors, growth factor-beta 1 (TGF- β 1) and insulin-like growth factor 1 (IGF-1), to promote collagen production and replication of the same tenocytes (reparative phase). The result of this stimulation is the growth of structure in the tendon, the structure in fiber diameter the increase the load capacity of the structure and thus the mechanical capacity.

Most of the clinical manifestations that we encounter every day are diseases such as overuse or more correctly overload. With the technique of "bandage Biomechanical System[®] we try to absorb the forces applied to reduce the" stress of anatomical functional structures. Modifying also, at times, the biomechanics of the gesture without limiting the movement itself thanks to ample elasticity, preserving the full range of motion during any athletic.(Photo 9,10,11,12)



Photo n. 9: Biomechanical system bandage technique to support the sports performance in the tennis, and particularly the technical gesture

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Photo 10: Biomechanical system bandage technique to support the sports performance in the tennis, and particularly the technical gesture

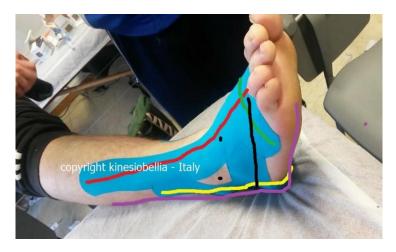


Photo 11: Biomechanical system bandage technique tibiotarsal joint

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Photo 12 : Biomechanical system bandage technique to the shoulder

Respecting the pathogenic principle, so that the tissues are not damaged because of pain but because of the load, the first objective is the management of load structures, absorbing some of the forces that are exerted on the structures, assisting in the delivery of power through "elastic recoil "and therefore increasing performance kinematics.

Therefore it provides assistance and a strong mechanical resistance (acceleration or deceleration) to support the structures in the management of the load in the different phases of the movement. The great flexibility of the bandage and the high elasticity allows to treat multiple joints and along spiral trajectories thus adding accessories rotational movements involve multiplanar movements, and all without any limitation of movement.

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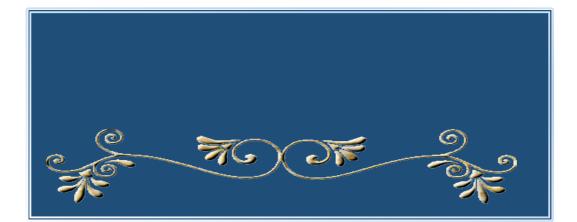
Book Reference

1) The taping kinesiology in sports traumatology practical manual application in March 2011. ISBN Code 978-88 - 6172-062 - 6th house publishing Alea, Milan - MedEdu

2) The kinesiology taping - Method Korean - manual practical application in modern sports traumatology April 2012. ISBN Code 978-88 - 6172-063 - 3. Alea Publishing House, Milan - MedEdu

3) The kinesiology taping dysfunction of the spine - practical manual application in modern physiotherapy October 1013. ISBN 978-88-6172-069-5 Code publisher Alea, Milan – MedEdu

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