



EBM NEWSLETTER

14/2020

VOLUNTEER TRAINING MISSION

The following research was developed through the NMT voluntary training program abroad. In this particular case, the NMT Institute trained health personnel in the physical therapy department of the Mekelle University, Ethiopia. This first experimental study, unique in its kind, is related to phantom limb pain after traumatic amputation. In Ethiopia, there are many cases of anti-personnel mine injuries, affecting both adults and children. The complete program of continuing education in rehabilitation has high quality standards, which help medical personnel in acquiring new therapeutic skills, for the achievement of short, medium and long-term rehabilitation objectives. The study was developed and supported by the NMT Institute through its foreign training MISSION.

EFFICACY OF NEUROMUSCULAR TAPING ALONG WITH CONVENTIONAL PHYSICAL THERAPY IN POST AMPUTATION PHANTOM PAIN MANAGEMENT: AN EXPERIMENTAL STUDY

Authors

Rahul Krishnan Kutty ^{*}(1), Hailay Gebremichael (2).

- Assistant Professor, Department of Physiotherapy, School of Medicine, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, East Africa.
- Lecturer, Department of Physiotherapy, School of Medicine, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, East Africa.

International Journal of Physiotherapy and Research, Int J Physiother Res 2017, Vol 5(3):2002-09. ISSN 2321-1822 DOI: <https://dx.doi.org/10.16965/ijpr.2017.110>

KEY WORDS: Neuromuscular Taping, Phantom Pain, Chronic Pain, Physical Therapy, Conventional Physical Therapy Management, Pain Management, Physiotherapy.

Abstract: NeuroMuscular Taping (NMT) is a biomechanical therapy method using decompressive and compressive stimuli to obtain positive effects in the musculoskeletal, vascular, lymphatic and neurological systems. Application of an elastic tape on the skin will evoke direct therapeutic effect both local and distant by reflex. The application of NMT with an eccentric and decompressive technique rises the skin and dilates the interstitial spaces and consequently improves circulation and absorption of liquids reduces subcutaneous pressure. The aim of this study is to assess the efficacy of NeuroMuscular taping on the treatment of Phantom pain in post amputation subjects in Mekelle ortho-physiotherapy centre, Physiotherapy Department, Tigray region, Northern Ethiopia, 2015-16.

EVIDENCE

BASED RESEARCH AND CLINICAL EFFECTIVENESS

The Research & Development aspect of the NMT institute is based upon the creation of clinical experiences and controlled treatment trials leading to research projects that eventually modify how we treat our patients.

PROFESSIONAL TRAINING IN HEALTH CARE

All training courses in the medical and health area of the NeuroMuscular Taping Institute are certified by Continuing Education Credits in the country where they are held.

NeuroMuscular Taping Institute is an activity of Savà rehabilitation LINK.



CONTACT

Tel: +39 06 3611685

Cell: +39 3387773912

Via Gavinana 2, ROME, ITALY

Email: david.blow@nmtinstitute.org

www.neuromusculartaping.com

www.tapingneuromuscolare.eu

www.nmtinstitute.asia

Materials and Methods: The study population consisted of 32 subjects between 10 and 80 years of age. Subjects who underwent lower limb amputation and having phantom pain syndrome in Mekelle-ortho physiotherapy center, Mekelle and meeting the inclusion criteria were included in the study. The 32 subjects were allocated in to two groups of which, one is experimental group (16 subjects who were treated with neuromuscular taping treatment along with conventional physiotherapy) and second control group (16 subjects who were treated with conventional physiotherapy alone).

Results: To check the effectiveness of neuromuscular taping, the results of both groups were compared with each other i.e. between the groups it revealed a statistical association, i.e. (df =16, p=0.005 level, group A= 0.059 & group B =0.501). These finding clearly suggested that for lower limb amputation patient conventional physiotherapy is effective in reduction of pain but along with neuromuscular taping it stands to very effective in reducing phantom pain in post amputation subjects and VAS scale parameters reduction resulted in 6-7 treatment sessions that is less than in 8-10 treatment sessions when compared to control group.

Conclusion: To conclude the results using the conventional physiotherapy with neuromuscular taping in the management of phantom pain in lower limb amputation subjects were found to be very effective than conventional physiotherapy alone. Hence, it is highly recommended that neuro muscular taping can be included in the treatment protocol for lower limb amputation subjects having phantom pain syndrome along with conventional physiotherapy.

READ MORE

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Original Research Article

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Rahul Krishnan Kutty ^{*1}, Hailay Gebremichael ².

¹ Assistant Professor, Department of Physiotherapy, School of Medicine, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, East Africa.

² Lecturer, Department of Physiotherapy, School of Medicine, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, East Africa.

ABSTRACT

Background: Neuro Muscular Taping (NMT) is a biomechanical therapy method using decompressive and compressive stimuli to obtain positive effects in the musculoskeletal, vascular, lymphatic and neurological systems. Application of an elastic tape on the skin will evoke direct therapeutic effect both local and distant by reflex. The application of NMT with an eccentric and decompressive technique rises the skin and dilates the interstitial spaces and consequently improves circulation and absorption of liquids reduces subcutaneous pressure. The aim of this study is to assess the efficacy of Neuromuscular taping on the treatment of Phantom pain in post amputation subjects in Mekelle ortho-physiotherapy centre, Physiotherapy Department, Tigray region, Northern Ethiopia, 2015-16.

Materials and Methods: The study population consisted of 32 subjects between 10 and 80 years of age. Subjects who underwent lower limb amputation and having phantom pain syndrome in Mekelle-ortho physiotherapy center, Mekelle and meeting the inclusion criteria were included in the study. The 32 subjects were allocated in to two groups of which, one is experimental group (16 subjects who were treated with neuromuscular taping treatment along with conventional physiotherapy) and second control group (16 subjects who were treated with conventional physiotherapy alone).

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KEY WORDS: Neuromuscular Taping, Phantom Pain, Chronic Pain, Physical Therapy, Conventional Physical Therapy Management, Pain Management, Physiotherapy.

Address for correspondence: Rahul Krishnan Kutty, Department of Physiotherapy, School of Medicine, College of Health Sciences, Mekelle University, Mekelle, Ethiopia, East Africa. **E-Mail:** physioraul@gmail.com



ADVANCED TRAINING IN MEDICAL AND REHABILITATION AREAS

Rehabilitation specific Research Projects. The NMT Institute is committed to creating innovative and continuous training programs to help medical treatment rehabilitation services offer the best therapy possible and offer increasingly updated therapy.

The goal of the NMT Institute is to improve the overall results of patients' rehabilitation treatment and their quality of life by using standardized therapeutic protocols. The use of the technique allows you to reduce both pain and recovery times so that patients can quickly achieve psycho-motor health and well-being.

The NMT Institute's goal is to improve patients' overall treatment results and quality of life by using our treatment protocols to maximize patients' rehabilitation time, reduce pain, and enable patients to achieve active and healthy lifestyles. The comprehensive medical rehabilitation education program maintains high quality standards that will guide medical and rehabilitation staff in gaining new treatment skills to improve short and long-term rehabilitative care.

The NMT Volunteer Projects has the overall objective of breaking the vicious circle of poverty/disability, which is established in not only third world countries but in all countries, through protocols and research programs intended for local specialists who operate in the area.

NeuroMuscular Taping Institute's continuing education courses bring innovative treatment protocols and structured rehabilitation programs together.

These form the groundwork for clinics and hospitals to achieve the following goals:

- Use of treatment protocols to maximize patients' rehabilitation time
- Maintain high quality standards and to improve short- and long-term rehabilitative care
- Reduction of pain and overuse of medication
- Reduce complications
- Improvement of mobility and increased autonomy/Improvement of patient compliance in ongoing therapy
- 24-hour therapeutic benefit achievement of active and healthy lifestyles for patient

NeuroMuscular Taping continuing education programs may be provided in the form of:

- Post graduate training program – To give newly qualified professionals a treatment skill, helping them to meet day-to-day treatment objectives.
- Graduate (final year) training program – To improve students' knowledge and understanding of functional anatomy.
- On-site or in-house training program – To improve therapists' competency, enhance performance-in-practice, introduce innovative techniques, and ultimately improve the outcomes of patient care.
- Standard surgical program – To cover standard treatment procedures for common mainstream post and pre-surgical rehabilitation.
- Specialised surgical program – physical therapy, occupational therapy, lymphatic therapy, vascular, and rehabilitation care for specialised surgical procedures such as amputations, lung and cardiac surgery, pediatric club foot, etc.
- Yearly updating and revision program – To improve therapeutic techniques through yearly updating and revision of treatment protocols to support high standards for patient care outcomes.
- To update current knowledge through elaboration and expansion of the International Research, Clinical trials and Case study Database maintained by the NeuroMuscular Taping Institute.

NMT continuing education programs can be tailored to the needs and existing knowledge and skills of participants to continually expand rehabilitation and achieve the highest level of patient care.

Regards, David Blow

HELP US TO SHARE YOUR NMT KNOW-HOW TO OTHERS



VOLUNTEER TRAINING PROJECTS ARE ORGANISED IN VARIOUS DEVELOPING COUNTRIES THAT OFFER SPECIFIC NMT KNOW-HOW FOR ORTHOPEDIC AND NEUROLOGICAL REHABILITATION



If you are in the NMT training photo, tag yourself and follow us on the dedicated album on Facebook.

Your group photo is not there?
Share it or send it to us by email!