

Results: The mean values were: GT-Pre: 2.28; GT-Post.0': 2.67; GT-Post.10': 2.51; GC-Pre: 2.42; GC-Post.0': 2.43; GC-Post.10': 2.53. Statistical analysis showed no significant differences between GT-Pre. vs. GT-Post.0'; GT-Pre. vs. GT-Post.10'; GT-Post.0' vs. GC-Post.0'; GT-Post.10' vs. GC-Post.10'; GC-Pre vs. GC-Post.0'; GC-Pre vs. GC-Post.10'.

Conclusion(s): InterX therapy did not prove effectiveness in reducing the PPT in the short-term with the selected parameters and chosen technique. It would be useful to investigate other application procedures recommended by the manufacturer.

Implications: This new therapy claimed to be better than conventional electroanalgesia (TENS) but the correct parameters for MTP have not been established yet. More studies are needed.

Keywords: Muscle trigger point; Pain 3; Electroanalgesia

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Ethics approval: Ethics committee of Universidad Favaloro, Lic. En Kinesiología y Fisiatría, has approved this work, August 2012.

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Research Report Poster Presentation

Number: RR-PO-04-11-Sun

Sunday 3 May 2015 12:15

Exhibit halls 401–403

EFFECTS IN PRESSURE-PAIN THRESHOLD OF PERCUTANEOUS GALVANIC MICROCURRENT IN THE TRAPEZIUS TRIGGER POINTS

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Background: The Percutaneous Microelectrolysis® (MEP®) is a technique that employs a galvanic current up to 990 μ A, which is applied percutaneously with an acupuncture needle connected to the cathode. Although it is used in tendinopathies, trigger points and muscle injuries, among other conditions, its bases are mostly empirical and there is lack of evidence.

Myofascial Pain Syndrome (MPS) usually presents painful myofascial trigger points (MTrPs). One methodology used to quantify the pain is the algometry, which measures the pressure pain threshold (PPT).

Purpose: The aim of this study was to analyze the effects of MEP® on the PPT and compare them with a control group (introduction of a needle without current). The secondary objective was to determine tolerance to both techniques.

Methods: *Type of study:* Prospective clinical trial, descriptive, experimental, transversal, quantitative, single blind.

Population and sample: 16 healthy subjects between 18 and 30 years of age (12 women, 4 men) who referred neck pain.

Materials: The algometry was determined by a digital device trademark Wagner, model FPX 25™. The visual analogue scale (VAS) was used to determine the tolerance to the technique.

Procedure: Two MTrPs were found by digital palpation (one per upper trapezius) resulting in a total of 32 measurements. Afterwards, the following procedure was performed:

- Treated Group (T.G.): Algometry to determine the PPT. MEP® with an acupuncture needle (0.30 \times 25 mm) and 500 μ A (2.11 mA/cm²) during 3 minutes or until the subject refers intolerance to the procedure. Algometry was done at minute 1 and 10 after the intervention. They were asked to determine the tolerance of the procedure with the VAS.

One week later, in the same sample, the following procedure was performed:

- Control Group (C.G.): Algometry to determine the PPT. MEP® with an acupuncture needle (0.30 \times 25 mm) without current during 3 minutes or until the subject refers intolerance to the procedure. Algometry was done at minute 1 and 10 after the intervention. They were asked to determine the tolerance of the procedure with the VAS.

The data was processed with SPSS19.

Results: In T.G. the difference in the PPT measurement between before treatment (2.24 \pm 0.85) versus 1 minute (3.12 \pm 1.25) and versus 10 minutes after the procedure (3.52 \pm 1.17) was $p=0.001$. In C.G. the difference in the PPT measurement between before treatment (1.77 \pm 0.62) versus 1 minute (2.08 \pm 0.6) and versus 10 minutes after the procedure (2.23 \pm 0.67) was $p \leq 0.001$. However, the statistical analysis shows a statistical significance ($p < 0.001$) between T.G. and C.G. at minute 1 and minute 10.

MEP® procedure was less tolerated ($p < 0.0001$) than placebo (VAS MEP: 6.125 (\pm 2.86); VAS Placebo: 1.594 \pm 2.108).

Conclusion(s): The reduction in PPT was greater with MEP® than in control group. This therapy could be a promising alternative for the MTrPs treatment.

Implications: This clinical trial had the approbation of the Comité de Ética de la Universidad Maimónides, number 2011/00104.

Keywords: Muscle trigger point; Electrolysis; Microcurrent

Funding acknowledgements: The author(s) received no financial support for the research and/or authorship of this article.

Ethics approval: This clinical trial had the approbation of the Comité de Ética de la Universidad Maimónides, number 2011/00104.

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Research Report Platform Presentation

Number: RR-PL-696

Saturday 2 May 2015 08:30

Rooms 300–301

BARRIERS AND FACILITATORS OF PHYSICAL ACTIVITY IN PEOPLE LIVING WITH HIV ON A HOME-BASED PHYSICAL ACTIVITY PROGRAMME

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Background: The promotion of physical activity is encouraged in people living with HIV and AIDS (PLWHA) in an attempt to improve health as part of effective disease management. Adherence to exercise programmes is often poor and a home-based exercise approach is suggested as a means of improving participants' adherence to physical activity promotional programmes. Currently the barriers and facilitators of physical activity in PLWHA in South Africa are not known. Considering the high prevalence rate of HIV infection in South Africa, it is important to determine the barriers and facilitators of physical activity in PLWHA.

Purpose: This study investigated the personal and environmental factors that can be considered barriers or facilitators of physical activity in a home-based pedometer walking programme thus highlighting adherence challenges to such a programme.

Methods: Secondary analysis of findings from intervention participants who participated in a randomised controlled trial conducted in a cohort of South African PLWHA on antiretroviral therapy over a six month period provides the information for this abstract. Descriptive analysis and qualitative content analysis was conducted on data from 42 participants who underwent physical activity modification. The physical activity modification programme consisted of monthly education contact sessions, participants received a physical activity diary, a Yamax pedometer and an individualised walking programme.

Results: The mean age of the sample was 38.7 (± 8.9) years, of whom 83.3% ($n=35$) were women who were employed ($n=19$; 45.2%) but earning very little (less than ZAR 500 per month [± 50 USD]) and often single or widowed

($n=23$; 54.8%). Attendance of monthly contact sessions was high (89.5–97.4%) and participants who achieved their weekly pedometer step count goals in the preceding month ranged from 36.8% to 73.7%. Barriers to physical activity identified included physical complaints, psychological complaints, family responsibility, the physical environment, social environment and workplace challenges. Facilitators of physical activity included support and encouragement from friends and family, religious practices during worship, community environment such as having access to parks and sport fields and allocation of specific time for activity e.g. walking for transportation.

Conclusion(s): A prominent facilitator identified during the course of the study was support and encouragement received from participants' friends and family. Additionally the study highlighted the fact that barriers to physical activity in PLWHA when participating in a home-based physical activity programme are multifactorial and often include challenges that a health care worker cannot modify.

Implications: Knowledge of the personal and environmental factors that influence PLWHA's adherence to home-based physical activity promotional programmes is beneficial as it may be useful when developing and implementing a physical activity programme at community level. Additionally it sheds light on the contextual factors that participants need to overcome to improve adherence.

Keywords: Physical activity; Adherence; HIV

Funding acknowledgements: National Research Foundation; University of the Witwatersrand Faculty Research Committee; Medical Research Council; South African Society of Physiotherapy.

Ethics approval: University of the Witwatersrand Human Research Ethics Committee.

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Research Report Platform Rapid 5 Presentation

Number: RR-PLR5-698

Saturday 2 May 2015 13:45

Rooms 324–326

THE EFFECT OF PHYSICAL ACTIVITY MODIFICATION ON ISCHAEMIC HEART DISEASE RISK FACTORS IN PEOPLE LIVING WITH HIV: RANDOMISED CONTROL TRIAL

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Background: Ischaemic heart disease (IHD) is a global health problem, especially in Africa where the presence of