

38 - PELVIS GLOBAL TECHNIQUE FOR REDUCTION OF PAIN IN YOUTH WITH CHRONIC LOW BACK PAIN

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INTRODUCTION

Macedo (2011) presents low back pain such as that which occurs on the back, the space between the bottom edges of the costal railings and the lower gluteal fold. Low back pain is the main source lumbar spine, a very complex structure, which involves the vertebrae, intervertebral discs, joints, tendons, regional muscles, blood vessels, roots and peripheral nerves, spinal cord, meninges and cauda equine.

Chronic back pain is a symptom, not a disease, which often with multiple etiologic factors acts in the same individual (LIMA, 1999). It is recognized as a disabling syndrome and is characterized by pain that persists after the third month of the first episode of acute pain and the gradual installation of disability. Often inaccurate begins with periods of improvement and worsening (Tsukimoto, 2006).

Low back pain affects more frequently, people in their most productive period of life, that is, in youth, resulting in substantial economic cost to society. Are observed related work absence costs, medical and legal expenses, payment of social security disability, the employee compensation and disability insurance (BRIGANÓ and Macedo, 2005). Health professionals, including physiotherapists, are subject to high levels of pain in the spine, and low back pain is one of the most frequent pain complaints in clinical practice (Siqueira, Cahu AND VIEIRA, 2008).

Epidemiological studies show a slight difference in the prevalence of low back pain between the two sexes, where the female is the one that studies have shown a higher incidence of low back pain, referring to a larger variety and persistence of pain, greater space of time than men (Balague, Troussier And SALMINEN, 1999; Manchikanti, 2000; Almeida, RABBIT AND OLIVEIRA, 2006). This difference has been linked to other factors such as menstruation, pregnancy, and employment status (Manchikanti, 2000).

Manual manipulations are indicated for the treatment of musculoskeletal disorders of the spine. Manipulative treatments are distinguished from other manual therapies by manipulative thrust, the thrust triggered the end of the passive joint movement (VAUTRAVERS, et. Al., 2001). The goal of this therapy is to restore the physiological movement where there is restriction or dysfunction. One can predict that, recover or improve function of the musculoskeletal system, all related parties will benefit, whether other musculoskeletal components, tissues, organs and systems in the regions covered by the nervous and circulatory pathway (Rachid, 2009).

The individual with back pain by presenting this set of changes, requires specific reviews of all lumbar function, along with a pipeline of physical therapy and osteopathic. The paucity of studies investigating the relationship between chronic low back pain and lumbar manipulation is what gives importance to this study.

METHODOLOGY

This study was characterized as an uncontrolled clinical trial, cross, qualitative and quantitative. The sample consisted of 15 individuals with chronic low back pain. The study was conducted at the Clínica de Fisioterapia da Faculdade Assis Gurgacz, in the afternoon, in the month of September 2014.

Inclusion criteria were considered Mitchel test positive, low back pain for more than 3 months and physical therapy students up to 30 years female. The exclusion criteria were: patients with fractures, those presenting spinal surgery, arthrodesis, real difference in the length of the lower limbs, neurological disorders, pregnancy, individuals who make use of analgesic medication during the period of the study and individuals who are performing another treatment during the data collection.

A physical therapy evaluation was performed at the Clínicas FAG and consisted of objective analysis of pain by Visual Analogue Scale (Bolton; Wilkinson, 1998), standing flexion test (Lee, 2001), the seated flexion test (GREENMAN, 2001) and Mitchell test (LE and RAGEOT, 2004). After evaluation and found the dysfunction of each participant, subjects underwent pelvis global technique (Ricard, 1998).

After the manipulation, subjects were reassessed immediately, in all tests, to see if there was correction of identified disorders.

RESULTS

Data were tested according to the normal distribution using the Shapiro-Wilk test, given the assumptions for the test, the data were expressed as mean and standard deviation and frequency distribution were performed. For data analysis we used the SPSS 22.0 program for Windows. The significance of 5% was stipulated.

Fifteen female subjects with a mean age of 21 ± 1 year were evaluated. The pain pre-intervention measure was 5.7 ± 0.33 and 2.1 ± 0.31 after, with a statistically significant improvement with $P < 0.01$. On standing flexion test results showed dysfunction in two subjects (13.3%) to the right and 13 subjects (86.7%) to the left. In the sitting flexion test, three subjects (20%) showed impairment on the right; in contrast, 12 subjects (80%) to the left. When evaluated the Mitchell test, nine subjects (60%) showed dysfunction in flexion; six subjects (40%) in extension. Individuals with dysfunction in flexion, seven subjects were right dysfunction (46.7%), while two had left (13.3%). Showed that the extension dysfunction in four subjects (26.7%) showed dysfunction right as two patients (13.3%) presented to the left dysfunction.

After manipulative intervention subjects were evaluated according to the sacrum-iliac alignments and lower lumbar spine. The tests were reapplied in individuals. Responses corresponded to alignments 83% (13 individuals) to the sacrum; 80% (12) for iliac and 80% (12) for lower lumbar spine. When associated alignments, the manipulative intervention showed the following findings: 73.3% (11) realigned the regions of the sacrum, iliac and lower lumbar spine; 13.3% (2) with realignment of the sacrum and ileum; and therefore, 13.3% (2) achieved low alignment with sacrum and lumbar spine.

DISCUSSION

Spinal manipulation is a therapeutic procedure commonly used by physiotherapists in osteopathy specialized for the treatment of patients with cervical, lumbar and pelvic pain. Some studies suggest that, in chronic spinal pain syndromes, spinal manipulation features superior to acupuncture and drug treatments (GILES and MULLER, 1999) results. The osteopathic manipulations are an instrument in the service of manual therapists. But osteopathy is much more than that: it is the reasoning that allows the connection between some disorders and functional pathology presented by the patient (GÓIS, et al, 2006).

According to WHO (2005), consists of the trust sudden manual application of a controlled differential force covers a part of the body proper, manual application which generates the setting / adjustment. However, according to Gois, et al, (2006), an accurate diagnosis is necessary so that there are always good results with joint manipulation, high speed and low amplitude, thus therapeutic intervention using this technique is accurate and effective.

According to this study, lumbar manipulation, through the technique used, was effective when it relates to decreased lumbar pain symptoms, which handled all subjects reported immediate pain relief.

Briganó and Macedo (2009) and Marcondes, et al, (2010) conducted studies comparing manual techniques with conventional therapy through exercises. In both studies there was improvement in physical function and pain status of patients. However, there were no significant differences when analyzing the two techniques; it is not possible to elect the most efficient. Already Couto (2007) compared the results of manual technique with patients making only use of anti-inflammatories for the pain reduction, however, at the conclusion of their study also no significant differences in the results of the two groups.

Marcondes et al (2010) brought together 11 articles on the application of manual techniques in chronic low back pain with positive results of applying the technique in the short term as a reduction in pain and improved physical function, but also had long-term treatment controversial results. Ferreira et al (2007) conducted a study with 240 patients with chronic nonspecific low back pain, where 80% of subjects showed a reduction in pain, but no difference between groups. This result showed that manipulative therapy and motor control exercises are effective in the short term. Already at 12 months there was no significant difference between groups.

In a study of 195 patients hospitalized at Maine Medical Center in Portland who underwent osteopathic manipulative treatment, 43% of these reported a decreased for pain medication, 74% indicated a decrease in pain, 90% had reduced anxiety, and 98% reported that osteopathy improved their overall level of comfort (POMYKALA et al, 2008).

Wieting (2008) reports that most of the manipulations performed in the United States by doctors and other professionals are for complaints of musculoskeletal pain in the dorsal and cervical regions. Manipulations are generally geared towards restoring normal movement and eliminate pain secondary to altered biomechanics.

Spinal manipulation is beneficial in clinical practice, but further studies are conflicting about its effectiveness. This is a manual form of treatment that aims relieving pain and increased joint motion ranges. Matta et al (2006), says that the lack of flexibility, especially on the trunk and hip region, and is associated with greater risk for onset of back pain, where 80% of back pain is caused by reduced levels of flexibility articulate.

For Matta (2006), by maintaining good flexibility in major joints, there is a great improvement in pain because the more flexible, less likely will the incidence of muscle pain, especially in the thoracic and lumbar region.

CONCLUSION

Based on the methodology employed in the study, it was concluded that pelvis global manipulation is effective in reducing low back pain status and alignment of the sacrum, ilium and pelvis because of the 15 manipulated individuals, all had at least one of these alignments and a reduction 50% in the context of pain, immediately after manipulation.

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PELVIS GLOBAL TECHNIQUE FOR REDUCTION OF PAIN IN YOUTH WITH CHRONIC LOW BACK PAIN ABSTRACT

Introduction: Chronic low back pain is characterized by pain symptoms, which lasts for more than three months in the lumbar spine. It most often affects the people in their most productive period of life. Vertebral manipulation techniques are used in the treatment of back pain and aim to recover the physiological movement in areas where the restriction or dysfunction was installed. Objective: This study aims to investigate the relationship between chronic low back pain and lumbar manipulation. Methodology: an uncontrolled clinical trial, cross, qualitative and quantitative cutting was performed. The sample consisted of 15 individuals with chronic low back pain. An assessment was made of the whole: the sacrum, iliac, and lower lumbar pain, through the sitting flexion test, flexion standing, Mitchell and EVA to quantify pain; after the dysfunction observed was carried Global technical hip. Results: The study results showed a statistically significant decrease in the number of post-manipulation pain. Conclusion: We conclude, therefore, that for the present study, overall handling pelvis is effective in reducing low back pain symptoms and disorders in the alignment of the sacrum, iliac and lower lumbar spine.

KEYWORDS: Global Technical pelvis. Chronic low back pain. Articular correction.

GLOBAL BASSIN TECHNIQUE DE RÉDUCTION DE LA DOULEUR TABLE DANS LES JEUNES PERSONNES CHRONIQUE DOULEURS LOMBAIRES RÉSUMÉ

Introduction: La lombalgie chronique est caractérisée par des symptômes de la douleur qui dure plus de trois mois dans la colonne lombaire. Elle touche le plus souvent les personnes dans leur période la plus productive de la vie. Techniques de manipulations vertébrales sont utilisés dans le traitement des maux de dos et visent à récupérer le mouvement physiologique dans les zones où la restriction ou le dysfonctionnement a été installé. Objectif: Cette étude vise à étudier la relation entre la douleur chronique au bas du dos et la manipulation lombaire. Méthodologie: un essai clinique non contrôlé, croix, qualitative et quantitative coupe a été effectuée. L'échantillon se composait de 15 personnes souffrant de douleurs lombaires chroniques. Une évaluation a été faite de l'ensemble: le sacrum, iliaque, et la douleur lombaire, à travers le test de flexion assis, flexion debout, Mitchell et EVA de quantifier la douleur; après le dysfonctionnement observé a été réalisée hanche technique mondial. Résultats: Les résultats de l'étude ont montré une diminution statistiquement significative du nombre de la douleur post-manipulation. Conclusion: Nous concluons donc que, pour la présente étude, la manipulation globale bassin est efficace dans la réduction de faibles symptômes et troubles de douleurs au dos dans l'alignement du sacrum, iliaque et de la colonne vertébrale lombaire.

MOTS-CLÉS: Bassin techniques mondiaux. La lombalgie chronique. Correction articulaire.

GLOBAL TÉCNICA PARA LA REDUCCIÓN DE LA PELVIS DOLOR TABLA EN LA JUVENTUD CON INDIVIDUOS CRÓNICA DOLOR DE ESPALDA BAJA RESUMEN

Introducción: el dolor lumbar crónico se caracteriza por síntomas de dolor, que dura más de tres meses en la columna lumbar. Con mayor frecuencia afecta a las personas en su período más productivo de la vida. Técnicas de manipulación vertebrales se utilizan en el tratamiento de dolor de espalda y el objetivo de recuperar el movimiento fisiológico en las zonas donde se ha instalado la restricción o disfunción. Objetivo: Este estudio tiene como objetivo investigar la relación entre el dolor crónico de espalda baja y la manipulación lumbar. Se realizó un ensayo clínico controlado, cruz, cualitativa y cuantitativa de corte: Metodología: La muestra consistió en 15 individuos con dolor lumbar crónico. Se realizó una evaluación de la totalidad: el sacro, ilíaca, y el dolor lumbar inferior, a través de la prueba de flexión sentado, flexión de pie, Mitchell y EVA para cuantificar el dolor; después de que la disfunción observada fue llevado a la cadera técnica global. Resultados: Los resultados del estudio mostraron una disminución estadísticamente significativa en el número de dolor post-manipulación. Conclusión: Se concluye, por tanto, que para el presente estudio, el manejo general de la pelvis es eficaz para reducir los síntomas de dolor de espalda y los trastornos en la alineación del sacro, ilíaca y más baja de la columna lumbar.

PALABRAS CLAVE: pelvis técnicos mundiales. El dolor lumbar crónico. Corrección articular.

TÉCNICA GLOBAL DE PELVE PARA REDUÇÃO DO QUADRO ÁLGICO EM INDIVÍDUOS JOVENS COM DOR LUMBAR CRÔNICA RESUMO

Introdução: A lombalgia crônica é caracterizada pelo quadro algico, que perdura por mais de três meses, na região da coluna lombar. Ela afeta com maior frequência a população em seu período de vida mais produtivo. As manipulações vertebrais são técnicas utilizadas no tratamento das lombalgias e têm por objetivo recuperar o movimento fisiológico nas áreas onde a restrição ou disfunção foi instalada. Objetivo: Este estudo tem por objetivo investigar a relação entre a dor lombar crônica e a manipulação lombar. Metodologia: Foi realizado um ensaio clínico não controlado, de corte transversal, qualitativo e quantitativo. A amostra foi composta por 15 indivíduos com diagnóstico de lombalgia crônica. Foi realizada uma avaliação do conjunto: sacro, ilíaco, lombar baixa e dor, através dos testes de Flexão sentado, Flexão em pé, Mitchell e EVA, para quantificação da dor; após a disfunção encontrada, foi realizada a Técnica global de quadril. Resultados: O resultado do estudo mostrou significância estatística para diminuição do quadro de dor pós-manipulação. Conclusão: Conclui-se, portanto, que para o presente estudo, a manipulação global de pelve é eficiente na redução do quadro algico lombar e no alinhamento das disfunções de sacro, ilíaco e coluna lombar baixa.

PALAVRAS-CHAVE: Técnica global de pelve. Dor lombar crônica. Correção articular.