

EFFECTS OF ROLFING THERAPY ON MYOFASCIAL PAIN SYNDROME

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Abstract

Rolfing Therapy (RT) is applying mild to deep pressure to alleviate muscle back pain. This study was conducted to determine the participants' level of Myofascial Pain Syndrome (MPS) and the significant difference before and after administering the RT. Some 40 participants were equally divided into treatment group (exposed to RT) and control group (not exposed to RT) respectively. The methods used were pretest and posttest-quasi experimental design, purposive sampling technique, mean and t-test to analyze the data, as well as the Universal Pain Assessment Tool Chart to assess and evaluate the level of pain experienced by the participants. Results revealed that their level of pain in the control group before and after RT remained the same as moderate pain; whereas, the treatment group experiencing moderate pain decreased to no pain at all after RT. This finding shows that there was a significant difference (p-value 0.000) in the level of pain between those who were exposed and unexposed to RT to mean that RT alleviates MPS of the participants even on a single session.

Key words: Effects of RT to MSP, Rolfing Therapy, and RT& MPS

Introduction

The Department of Health (DOH) manual particularly *Public Health Nursing in the Philippines* (Cuevas, 2007) categorized Rolfing massage as part of alternative health care practice therapy together with the acupressure and 10 approved herbal medicine under R.A. 8423, known as Traditional Alternative Medicine Act of 1997. On the other land, the National Center for Complementary and Alternative Medicine (NCCAM) in America categorized Rolfing Massage therapy as Manipulative and Body-Based Practices Therapy.

Laceetti & Kazanowski, (2009) elaborated that Myofascial pain may develop from a muscle injury or from excessive strain on a particular muscle or muscle group, ligament, or tendon. Other causes include injury to intervertebral disc, general fatigue, repetitive motions, medical conditions (including heart attack, stomach irritation), and lack of activity (such as a broken arm in a sling).

According to Barrientos (2008) symptoms of myofascial pain syndrome can be made worse with activity or stress. Besides the local or regional pain associated with myofascial pain syndrome, people with the disorder also can suffer from depression, fatigue, and behavioral disturbances.

Myofascial Pain Syndrome condition is more common in people between ages 40 and 60, but has been seen in younger people, too. Some studies suggest that Rolfing massage therapy known as structural integration discovered by Dr. Ida P. Rolf is effective by using pressure gliding movement to relieve myofascial pain syndrome on regional trigger points sites (palpable ropo nodules), especially found at the neck and upper back area (Professional Guide to Diseases, 2005).

Objectives of the Study

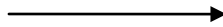
This study aimed to determine the effects of Rolfing Therapy on the level of pain of clients with Myofascial Pain Syndrome.

Specifically, it aimed to:

1. Determine the level of pain of the participants before and after Rolfing Therapy; and
2. Determine the significant difference in the level of pain of participants before and after Rolfing Massage.

Independent Variable

Before and After Rolfing Therapy on Myofascial Pain Syndrome



Dependent Variable

Decreasing Myofascial Pain Syndrome in the site of Rolfing Therapy

Figure1. The variables and their relationship

Literature Review

Rolfing Therapy, a method used to reorganize the whole body, utilizes physical manipulation and movement awareness to bring head, shoulders, thorax, pelvis and legs into vertical alignment. It allows more efficient use of the muscles with less expended energy by lifting the head and chest and lengthening the body's trunk. When Rolfing therapy is successful, the body is gravitationally rebalanced, able to function more smoothly and more efficiency (Miller, n.d.)

Rolfing Therapy had a significant effect against myofascial trigger points, according to the study of Findley in 2009.

A controlled study conducted by the Department of Kinesiology at UCLA found that people who underwent Rolwing demonstrated a greater range of motion. They were able to move more easily, smoothly and energetically; their posture improved and could maintain it more comfortably; in other words, they could stand in a given position without straining themselves to hold such position. Researchers at the University of Maryland obtained similar results as they found that Rolwing resulted in greater physical strength, less stress, and enhanced nervous-system response. This study also noted improvement in people who had curvature of the spine. Children with cerebral palsy benefited from Rolwing, as did people with whiplash and chronic back pain (Prutri, 2005).

Methodology

Research Design

This study used pretest and posttest quasi-experimental research design to determine the difference between those who were exposed and not exposed to Rolwing Therapy.

Participants of the Study

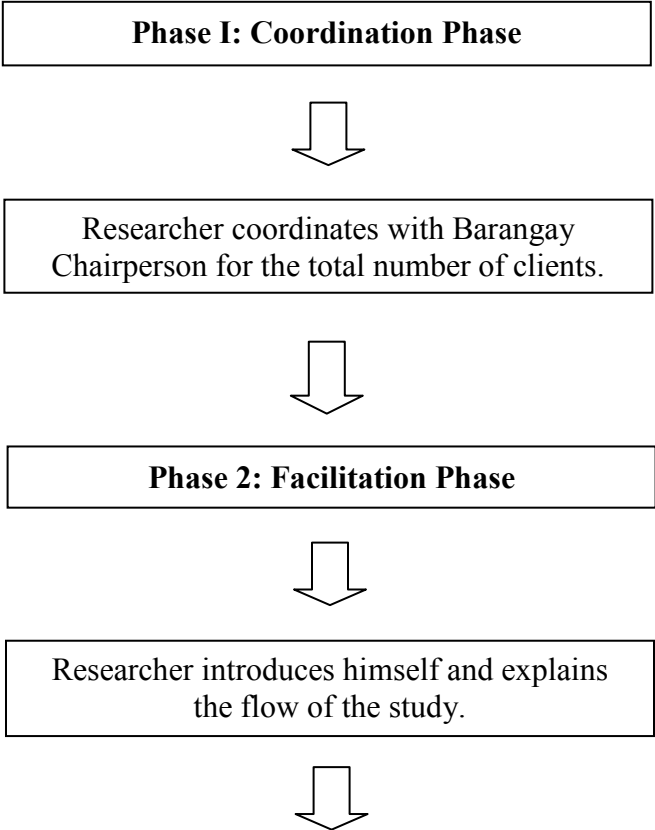
Purposive non-probability sampling technique was utilized to select a total of 40 participants whose chief complaint focused on upper back and neck pain, specifically on the trapezius muscle as one site of myofascial pain syndrome: the respondents had an age bracket of 21 to 40 year old, either male or female, with a normal range of blood pressure of 100 to 130 mm Hg for the systolic and 70 to 90 mm Hg for the diastolic, were not taking anti-anxiety drugs (mental disorders), not pregnant, not menstruating (monthly period), did not undergo any kind of cervical and thoracic surgery for less than one year did not nurse skin

wounds, skin rashes and skin allergy on the upper trapezius muscle. More importantly, they showed willingness to undergo and participate in Roling therapy through signed consent.

Data Collection Process

The 40 participants were divided into two equal groups, the first group was assigned as the treatment group or those given a Roling Therapy, and the second – the control group or those who would not receive any treatment.

FLOWCHART IN DATA GATHERING



Participants sign consent.



Participants fill up the Information Sheet.



Assessment of Participant's Myofascial pain syndrome Level of pain using Universal pain assessment tool. Taking Blood Pressure. Assess contraindication to Roling Therapy (Pre-Intervention)



Phase 3: Application of Treatment



Researcher administers Roling Massage Therapy. Participants can ask questions during the Roling massage session.



Phase 4: Post Intervention



Assessment of Participant's degree/level of pain
with the intervention after the massage session
(Post test)

Research Instrument

A 10-point Universal Pain Assessment Tool was used to determine the MPS level of pain of the participants before and after the Roling therapy.

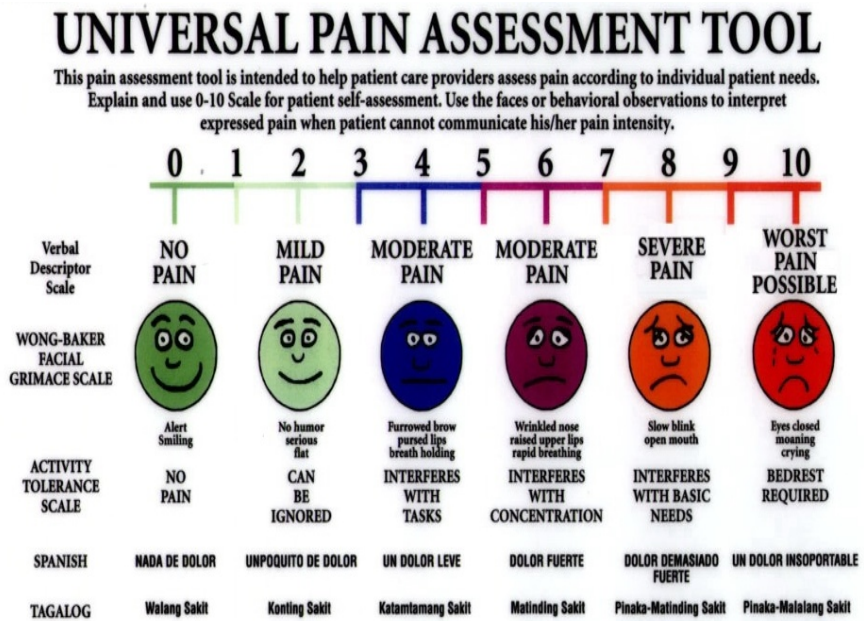


Figure 1. Universal pain assessment tool

The application of Rolfing Therapy giving two or more pounds of pressure using the researcher's elbow for assessing and treating MPS for 10 to 15 minutes or until the taut band (MPS site) decreases.



Figure 2. The researcher assesses and applies Rolfing Therapy to one of the participants in front of the mirror while comparing the facial expression to the Universal Pain Assessment Tool before and after exposing to the treatment.

Statistical Treatment

Mean, frequency counts, and percentages were used to determine the level of pain of participants with myofascial pain syndrome.

The t-test was used to ascertain the significant difference between those who were treated and not treated with Rolfing Therapy.

Results and Discussion

Level of Pain Before and After Rolfing Therapy. Table 1 shows the level of myofascial pain syndrome of the treatment and control groups before and after the Rolfing Therapy. Both the treatment and control groups had experienced a moderate pain before the treatment. The treatment group who received Rolfing Therapy improved from moderate pain ($\mu=1.95$) to no pain ($\mu=0.10$) after Rolfing Therapy, while an average score of 1.75 or moderate pain was noted for the control

group who did not receive any treatment neither before nor after the Roling Therapy.

Table 1. Level of pain of the participants before and after Roling Therapy

Rolifing Therapy	Before		After	
	Mean	Remarks	Mean	Remarks
Treatment	1.95	Moderate Pain	0.10	No Pain at all
Control	1.75	Moderate Pain	1.75	Moderate Pain

Legend:

- 0.00 – 0.50 No Pain*
- 0.51 – 1.50 Mild Pain*
- 1.51 – 2.50 Moderate Pain*
- 2.51 – 3.50 Severe Pain*
- 3.51 – 4.00 Worst Paint*

The Gate Control Theory of Pain by Melzack and Wall in 1962 explained that physical pain is not a direct result of activation of pain receptor neurons, but rather, its perception is modulated by interaction between different neurons. This theory explains about a pain-modulating system in which a neural gate present in the spinal cord can open and close, thereby modulating the perception of pain. By contrast, the gate control theory suggested that psychological factors play a role in the perception of pain. This theory helps to explain how interventions based on somatosensory (tactile) stimulation such Roling therapy provides pain relief.

the central nervous system. Hence, the pain on another part of the body becomes unnoticeable.

Conclusions

There is a moderate level of pain both in the control and treatment groups of participants with Myofascial Pain Syndrome (MPS) before implementing Rolfing Therapy. After its' implementation, the treatment group decreases pain to no pain at all, as compared to the control group.

In the former RT has caused a significant difference in the level of pain after it was administered to the participants; in the latter, the moderate pain remains the same. Clearly this means that RT is one of the effective alternative therapies in decreasing moderate pain in the MPS, specifically on the upper trapezius muscle site of the participants.

Recommendations

People need to consult a certified massage therapist from the Department of Health (DOH) or a certified massage therapist of the Technical Education Skills Development Authority (TESDA) before they undergo Rolfing Therapy.

People afflicted with myofascial pain syndrome are advised to seek medical advice in case the therapy does not work.

The massage therapy spa or clinic may be encouraged to ensure the quality healthy practices prescribed by the Department of Health under the Republic Act 856 Chapter III known as implementing rules and regulations for Massage Clinics and Sauna Bath Establishments.

Nursing educators may incorporate in their curricular program, if not serve Rolfing Therapy as part of an affordable, eco-friendly, effective treatment to decrease pain suffering from MPS. Rolfing Therapy may

enhance the tender, loving care power of nurses to render independent nursing function, especially in the community setting. They may also conduct seminars and workshops to help students to develop skills in massage techniques under the supervision of a licensed massage therapist from DOH.

Future researchers may be encouraged to include more numbers of participants to further strengthen the effectiveness of Rolfing Therapy not only in MPS but also other muscle disorders.

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