IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

"Effectiveness Of Dry Cupping With Stability Exercise V/S Manual Pressure Release With Stability Exercise For Nonspecific Neck Pain A Comparative Study."

BY

NAZNIN I. RANA

DISSERTATION SUBMITTED TO

GOKUL GLOBAL UNIVERSITYSIDHPUR, GUJARAT

IN PARTIAL FULFILLMENT OF THE REQUIREMENT,

FOR THE DEGREE OF

MASTER OF PHYSIOTHEAPY

IN

ORTHOPEDICS

UNDER GUIDENCE OF:

Dr. RAVINDRASINH RAJPUT

MPT (ORTHOPEDICS), PRINCIPAL OF

GOKUL PHYSIOTHERAPY DEPARTMENT

SIDHPUR, GUJRAT

Gokul Educational Campus, Opp. I.O.C. Depot, Near Sujanpur Patia, StateHighway 41, Sidhpur - 384151, Gujarat, India

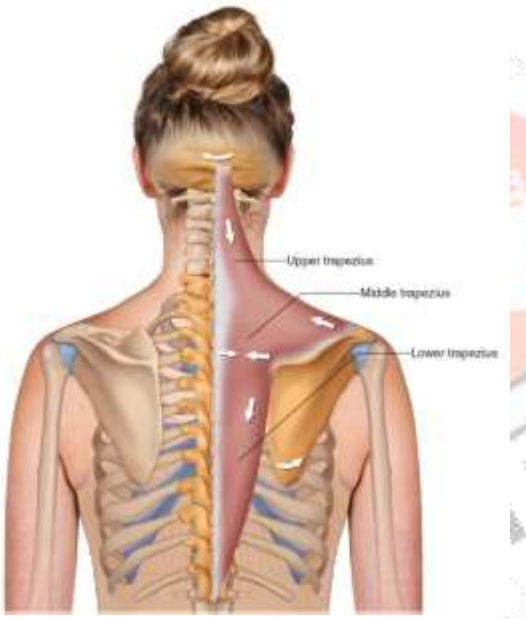
ABSTRACT

Background :-

Neck pain is most common these days after pandemic, Neck pain is most common symptom for seeking therapeutic alternative to congenital medicine.

Neck pain upper Trapezitis is most Common Condition in desk job. Desk job for prolong hours leads to neck pain which aggravated with further activity, work & Stress. Myofascial Pain symptoms usually involves muscle. Pain with Specific trigger & tender points. In addition to the local or regional Pain, untreated & Chronic cases might lead to Symptoms like depression, Fatigue behavioral disturbances. The Cause for myofascial Pain are Structural inadequacies tight constrictive Clothing, lack of exercises, poor posture, an unsupportive ergonomics.

These are various treatment modalities include electrotherapy, manual therapy, Stress reduction, dry needling, ergonomic training for management of Neck pain Trapezitis.



1

Objective :-

To Compare the effect of Dry cupping (Myofascial Cupping) (integrated Neuromuscular technique) Trigger point manual therapy on the upper trapezius latent on pain intensity.

Myofascial Dry Cupping Technique :-

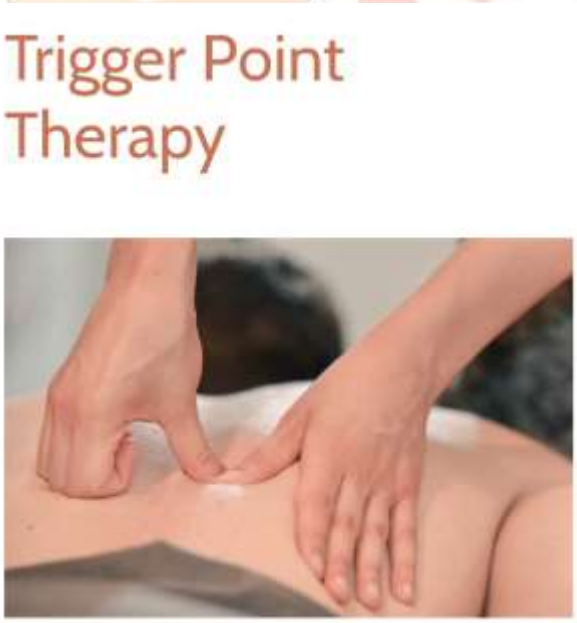
Dry Cupping therapy is a noninvasive treatment commonly used to reduce pain & promote the healing process in various populations, including those with nonspecific neck pain.

Manual Pressure Release :-

Sustained manual pressure has been advocated as an effective treatment for myofascial trigger points. This study aimed to investigate the effect of manual pressure sensitivity of latent in the upper trapezius muscle, using a novel pressure algometer.

(Sustained manual pressure, referred to this paper as Manual pressure release) previously referred to as "ischemic Compression", "inhibition" and "trigger point pressure release''.

2



Objectives :-

To find out effective of Myofascial cupping therapy verses Manual myofascial Pressure release on Postural Neck Pain in Desk job Persons.

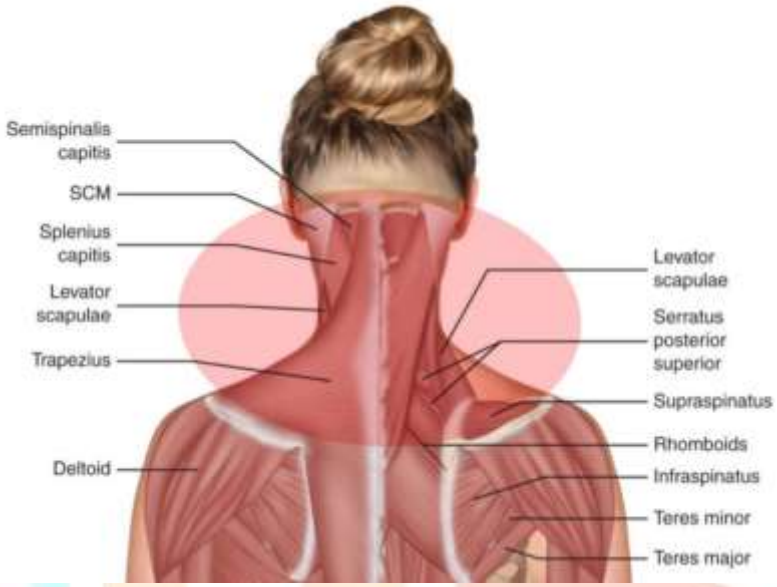
Methods :-

A comparative study was conducted in Gokul Global University, Sidhpur. Depending on the selection criteria participants were selected & informed consent was signed. The respondents were then requested to offer their

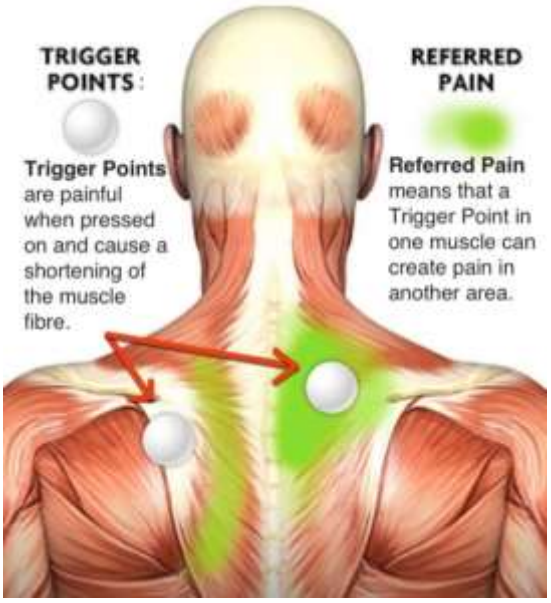
demographic information. Assessment of risk factors in young adults was Completed. The data was analyzed using was performed which includes frequency, mean & standard deviation.

CHAPTER 1

Introduction



Trapezitis (Neck pain) With desk job. Neck pain upper Trapezitis is most common condition after pandemic where most of the education and all office work are online. Desk job for prolong hours leads to neck pain which aggravated with further activity, work & stress. Myofascial pain symptoms usually involves muscle pan with specific trigger points. In addition to the local or regional pain untreated & chronic cases fatigue & behavioral disturbances. The cause for Myofascial pain are structural inadequacies, tight constrictive clothing, lack of exercises, poor posture, an unsupportive ergonomics, There are various treatment modalities include electrotherapy manual therapy, stress reduction, dry needling, ergonomic training for management of neck pain Trapezitis. Non specific neck pain is typically caused by mechanical or Myofascial disorders. Trigger point is one of the most widespread long-lasting muscle disorders affecting all ages & social groups, regardless of occupation, physical build or physical activity levels. A TRP is associated with a tender spot situated in a taunt band of muscle.



when this spot is manipulated, impulsive or exertion pain may be experienced. TRP is classified as latent or active. However, both types have the potential to Create pain, limit Rom & restrict functional activities, therefore Clinically it is important to identify it & should be addressed as part of a comprehensive physiotherapy programs.

Currently instrument based & non instrument based manual therapy interventions exist for deactivation or TRPs. Dry needling, Dry Cupping, ischemic Compression, muscle energy techniques, strain counter strain are the most Common conventional treatment approaches for treating Trp.

Cupping therapy is an ancient form of alternative medicine in which a therapist applies cups on your skin for few minutes to create suction in order to mobilize accumulated blood. Cupping therapy helps in removing harmful substances & toxin from the body to promote healing and it is one of the best detoxification treatment.

According to history, Cupping therapy, a traditional Chinese medicine threads, has been used for > 2000 years.

5

According Muslim history cupping therapy was practiced and its awareness spread by PROPHET (P.B.U.H) It is Sunnah to do cupping on sunnah points also called (horary) points.

Nowadays it is accepted worldwide by Olympic athletes like Michael phelps, Alex naddour & many who use & suggested cupping as remedial for sports injury.

Cupping therapy is an effective way to manipulate sort tissues. It works on various theories like reflex zone theory, Pain gate theory & Genetic theory. It is described detoxification process by which waste matte & toxins are removed and as harmonization process for the imbalanced vital energy.

Today, Cupping is widely used as a holistic treatment in foreign for inpatient care & prevention and treatment of various disorders, as well as for promotion of general health.

Cupping therapy generates relaxation, rejuvenation, improve blood circulation improve skin conditions, revitalization, deep tissue massage & sports injure.

Muslim society follow this therapy as a sunnah or Prophet Mohammad (P.B.U.H) and like to get it performed on lunar dates.

With day to day activities & lifestyle, with wrong posture, unsupported ergonomic people are prone for TRP which are frequently seen in trapezius muscle, as it is an antigravity muscle holding the head to inefficient posture & emotional stress adding on to activate Trp.

The Psychological side effects of living with chronic pain can be debilitating as pain itself. Thus by reducing the pain, a person can focus on his work more clearly.

1.2 Need Of The Study

Researcher & healthcare professionals are becoming more interested in performing comparison studies to evaluate the efficacy of various approaches as their understanding of upper trapezius and its treatment choice advances. Such research can help to improve patient care & outcomes by shedding light on the best, most reliable method for treating upper trapezius.

Researchers are comparing Myofascial cupping & Manual Muscle pressure release techniques effectiveness for pain relieve along with neck & shoulder girdle exercise, ergonomical changes make evidence-based recommendations for efficient treatment protocols that are specifically suited to the needs of individuals with upper Trapezitis. This study aims to contribute to the expanding body of information upper Trapezitis care & may enhance their quality of life.

1.3 Significance Of The Study

Myalgia and inflammation in the upper trapezius muscle region are two examples of the conditions that fall under the category of musculoskeletal upper extremity discomfort, which creates serious problems for people's productivity and well-being. This comparison of Myofascial Release (MR) and Myofascial Dry Cupping Therapy (MDCT), combined with neck and shoulder girdle exercises, is very important for a number of reasons.

Selection of Treatments Based on Evidence:- Healthcare professionals frequently struggle with the choice of the most successful therapy strategy for musculoskeletal upper body pain due to the wealth of therapeutic choices accessible. The objective of this study is to offer empirical proof of the relative effectiveness of targeted exercises, Myofascial Release, and Myofascial Dry Cupping therapy. These research-based conclusions can help doctors build individualized treatment regimens for their patients, improving outcomes and decreasing trial-and-error in therapy selection.

Improved Patient Outcomes:- Improving patient outcomes requires an understanding of the effectiveness of interventions. Exercises for the shoulder girdle, neck and shoulders can be compared to find the best pain alleviations, functional improvement, and range of motion. This information results in more effective treatment plans that enhance the comfort, mobility, and general quality of life of patients.

Advancement of Therapeutic Approaches:- This study advances musculoskeletal pain management by investigating Myofascial Release and Myofascial Dry Cupping therapy, along with targeted exercises, to uncover mechanisms of action and synergistic effects. This could lead to more effective therapeutic approaches for upper extremity pain.

Holistic Patient Care:- The study emphasizes holistic patient care by incorporating shoulder girdle and neck exercises, addressing muscular imbalances and promoting strength and flexibility. This approach emphasizes multimodal treatment strategies for comprehensive pain management.

1.4 Aim & Objective

The aim of this comparative study is to assess and compare the effectiveness of two therapeutic interventions, Myofascial Release and Myofascial Dry Cupping therapy, along with targeted shoulder girdle and neck exercises, in managing musculoskeletal upper extremity pain in patients. The study seeks to provide evidence-based insights into the potential benefits of each treatment approach, aiding healthcare practitioners in making informed decisions while designing personalized treatment plans for individuals suffering from musculoskeletal upper extremity pain.

Objectives:-

To evaluate the efficacy of myofascial Release in reducing pain and improving functional outcomes in patients with musculoskeletal upper extremity pain.

To evaluate how well Myofascial Dry Cupping therapy worked in providing pain relief and reducing inflammation in individuals experiencing musculoskeletal upper extremity pain.

To compare the impact of "Myofascial Releases" and Myofascial Dry Cupping therapy on the ROM and flexibility of the affected shoulder girdle and neck muscles.

1.5 Hypothesis

Null Hypothesis (HO)

(HO)1:

There is no statistical significant effect of "Myofascial Release" along with shoulder girdle exercise and neck exercise in patient's with Upper Trapezitis.

(HO)2:

There is no statistical tremendous impact of Myofascial Dry Cupping along with shoulder girdle exercise and neck exercise in patient's with Upper Trapezitis.

(HO)3:

There is no statistical tremendous impact of "Myofascial Release" and Myofascial Dry Cupping along with shoulder girdle exercise and neck exercise in patient's with Upper Trapezitis.

Alternate Hypothesis (H1)

(H1)1: There is statistical significant effect of "Myofascial Release" along with shoulder girdle exercise and neck exercise in patient's with Upper Trapezitis.

(H1)2: There is statistical significant effect of Myofascial Dry Cupping along with shoulder girdle exercise and neck exercise in patient's with Upper Trapezitis.

(H1)3: There is statistical significant effect of "Myofascial Release" and Myofascial Dry Cupping along with shoulder girdle exercise and neck exercise in patient's with Upper Trapezitis.

CHAPTER 2

LITERATURE REVIEW

(Westgaard et al., 2001) There was no discernible variation in the activity of the trapezius muscles between employees who had and did not have shoulder and neck pain, according to a study of female service employees with modest biomechanical exposure. This implies that in this cohort, muscular activity is not a good predictor for vulnerability for neck and shoulder pain.

According to the study, stress may play a bigger role in the onset of neck & shoulder discomfort in this population than other factors. They cite the elevated levels of stress that the study's participants reported, as well as earlier research that has connected stress to pain in the neck and shoulders.

(Castro-Sanchez et al., 2011) Demonstrates that decreasing upper Trapezitis can be accomplished via myofascial cupping therapy significantly improved patients' quality of life and pain levels. These results are in line with prior studies that have indicated the value of myofascial cupping therapy for treating a range of pain disorders. Both therapies were helpful at reducing pain, according to the findings, although myofascial cupping therapy was superior at enhancing quality of life. In light of the fact that myofascial cupping therapy not only lessens pain but also enhances general quality of life, it is suggested that it may be a more thorough treatment for upper Trapezitis.

(V N et al., 2014) The efficacy of positional release therapy and myofascial release therapy in the treatment of Trapezitis were compared in a study. According to the study, both therapies had a positive impact on range of motion and pain levels. Positional release therapy was shown to be less successful than myofascial release therapy.

According to the study's conclusions, myofascial release therapy may be better option for treating Trapezitis than positional release therapy. However, additional study is required to validate these results.

(Mishra et al., 2018) Conducted a research where individuals with upper trapezius muscular spasm were compared to the benefits of Myofascial Release (MFR) & Active Release Technique (ART) on pain and neck flexibility in movement. Both methods were successful in lessening pain and enhancing range of motion, according to the study. However, ART might be a better option for treating upper trapezius muscular spasm than MFR. However, additional study is required to validate these results.

(Choksi et al., 2021) Conducted to evaluate the long-term effectiveness of three different treatments for upper Trapezitis: ischemic compression, deep transverse friction massage and sham conventional therapy. The study found that all three treatments were effective in terms of pain relief and restricted ROM. However there was no statistically subsequent difference between three treatments.

According to the study's findings, each of the three therapies has a comparable impact on lowering upper Trapezitis. Healthcare professionals need to know this information in order to suggest the best course of action for their patients. The long-term effectiveness of the therapies in lowering discomfort and limited range of motion was also discovered by the investigation. This is significant for patients because it suggests that they can anticipate experiencing long-lasting symptom relief. The study was well planned and carried out and the

outcomes are trustworthy. The study followed the best practices for clinical research- randomized controlled trials. The study also used a sizable sample size, which boosts the accuracy of the findings.

12

(Joshi et al., 2022) Looked out to find the efficacy of "Myofascial Release (MFR)" and high frequency "transcutaneous electrical nerve stimulation (TENS)." The findings demonstrated that in subjects with trapezius myalgia, both MFR & TENS were successful in lowering pain and enhancing function. However, it was discovered that MFR was more efficient than TENS at minimizing discomfort and enhancing range of motion.

13

Review Of Literature

Literature suggests the need to explore myofascial Cupping on autonomous nervous system affecting the pain sensitivity. However, these methods have not been critically evaluated or compared. Therefore, we hypothesized that MFC therapy will show better effect than manual pressure release on pain, pressure pain threshold (PPT) & neck movement in individuals with latent TPR in trapezius.

Thus, the study aimed to evaluate the effect of MFC therapy and MPR on these parameters.

CHAPTER 3

MATERIAL AND METHOD

Methodology :- A

3.1 Study design :- Comparative Study

3.2 Study Settings :- Gokul Global University, Sidhpur

3.3 Sampling Method :- Comparison between two therapy

3.4 Sample size Calculation:- 42 people

3.5 Sampling Criteria

I. Inclusion Criteria

- Age between 15-40 years
- Both Genders
- Neck pain more than 3 months (Chronic Trapezitis cases)

II. Exclusion Criteria :-

- Any injury to Neck
- Cervical Region Congenital deformity
- Neurological disorders
- Acute inflammatory Condition

3.6 Outcome Measures :-

A. Numerical Rating Scale (NRS)

B. Active Cervical lateral flexion using goniometer.

3.7 Operation Definitions :-

Trapezitis:- Trapezitis is a common condition that causes inflammation of the trapezius muscles in the Upper Back and Neck.

3.8 Data Collection Tools :-

- Assessment form
- Consent form
- Data Sheet
- Marker Pen
- Pencil
- Eraser

- Paper
- Alcohol Swab
- Recording material
- Inch Tape
- Dry Cupping cups, Piston gun
- Neck disability scale form
- Numerical Analog Scale for pain
- Goniometer
- Algometer for measuring pain & pressure threshold.

Fig 3.8.1 Data Collection Tools

16

3.9 Methods:-

An experimental study was carried in Cresent High School and Infigrity IT Company in Juhapura, Ahmedabad. There were 42 participants. The sample size was determined using primer statistical Software, 21 participants in each group was calculated based on a previous study with

alpha =Power alteration, mean

difference and expected s > at Therefore total sample size taken was 42.

Participants aged 15 years - 40 years, male & females with neck pain more than 3 months, having latent TrPs in upper trapezius were included And participants excluded were one with :-

(a) Any other musculoskeletal problem at or around cervical region like fracture, sprain.

(b) Systemic disorder, infection, Progressive disorder.

(c) Neurological Conditions.

(d) Any Psychological disorder where person might not Cooperate for the treatment.

(e) One who has taken m treatment for TrPs within 6 months.

Participants were examined for TrP in upper trapezius muscle with following diagnostic Criteria.

1. Taut band within the muscle.
2. Exquisite tenderness at a point on the taut band.
3. Referred pain.
4. Local twitch response.

Baseline assessment was taken pain intensity using Numerical pain rating scale. (NPRS), Pain Pressure Threshold (PPT) by pressure Algometer & cervical lateral flexion to contralateral. side of Trp by universal goniometer.

Outcome Measure :-

1. **Pain intensity :-** It was assessed by NPRS - (Numerical Pain Rating Scale) that best reflects the intensity of the pain. The **11 points numeric Scale** ranges form **" 0 "** representing no pain to **" 10 "** representing worst pain.

    a. **NPRS is valid & reliable scale to measure pain intensity.**

2. **Pressure Pain Threshold (PPT):-** It is the minimal amount of pressure that produces pain .PPT was measured by a wanger Algometer which is considered as a reliable method in the assessment of TrPs sensitivity.

    It consisted of a 1 cm2 rubber tip & dial that could display the pressure of up to 10 kg with graduation with 100 gm . Algometer was placed perpendicular on the marked Trp On the trapezius & then the pressure was applied until the pressure caused a pain. The maximum pressure displayed by the Algometer was recorded.

    Three measurements were obtained and the mean value was calculated.

3. **Range of Motion(ROM):-** Cervical lateral flexion motion was measured using goniometer. Participants were asked to sit upright & laterally flex their head towards opposite side of the Trp The motion was stopped once the available ROM was completed the care was taken to disallow shoulder elevation. The cervical CROM measured by goniometer.

Methodology B

Collection of Data

Group A

Group A was treated with MFC and Group B treated with MPR.

Group A Myofascial Dry Cupping

Muscle selection :-

Trapezius (Upper)

Sternocleidomastoid

Levator Scapulae

Sub occipitals.

Trigger Points Sensitivity :-

Trigger points sensitivity in the stated muscles were determined by perpendicular thumb pressure on TPS sensitivity ranking from 0 to 2.

0 - indicates thumb palpation increased sensitivity in TPs area without pain indicates intensity of pain increased and patient reports pain when asked. Indicate that pain intensity increased & patient spontaneously notes the pain when pressure pa applied.

The Trigger points sensitivity on each muscle were summed & the total recorded as Trigger points sensitivity. Each active MTrps was diagnosed based on Simons diagnostic criteria after palpating Trigger Points sensitivities It was marked with Pen, Then wiped with alcohol pad.

Material required :-

Three plastic cup with size 2.5 cm in diameter

One piston gun

Goniometer

Inch tap

Pen

Alcohol parcel

3.10 Myofascial Cupping Techniques:-

Trp in upper trapezius was identified and marked. Then participants were taken in prone or comfortable sitting position, lubrication was applied Ove the marked point & three cups were places. 1st Cup placed on C7 Spinous Process area followed by treatment cup on marked area and counter balance cup was secured on other side of treatment cup. Cups were placed & fixed with help of piston gun by creating a negative pressure (Vacuum) inside Cups. Participants was asked for any discomfort during the Session . After 10 minutes, the Cups were removed. Again lubricants or Alovera gel can be applied over the marks.

Next Session was done after 3 days.

20

3.11 Myofascial Pressure Release:-

Participants were assessed for TrPs & then in supine position, the participants arm was placed in shoulder abduction, external rotation and head side flexed.to the involved side with elbow flexion. Using the pincher grip. the therapist moves through the fibers of trapezius on marked point. Pressure Compression was followed by strain counter strain i.e. isometric contraction of muscles & then MPR was given.

Each isometric sessions applied for 8-10 seconds & followed by contralateral side bending flexion & ipsilateral rotation to maintain the sort tissue Stretch for 30 seconds & was repeated 5 times.

The duration of treatments was 10 min per session, 5 times per week for 4 weeks.

Measurement taken in both groups with goniometer Lat side flexion.

Pressure & Pain threshold measured with algometer.

In both approach MFC & MPR , All Participants got stability Exercises of neck muscles for 15 minutes , Three Sessions per week with 10 Sec. hold, 10 repetitions with 2 minutes rest interval between the exercises.

21

3.12 Stability Exercise :-

Fig 3.12.1 Neck Exercises

22

Static Neck Exercise:-

- Neck Glide
- Neck Extension
- Neck Rotation
- Lateral Extension
- Shoulder Shrugs
- Tilted Forward Flexion
- Deep Stretching
- Resistance Presses
- Towel Pull

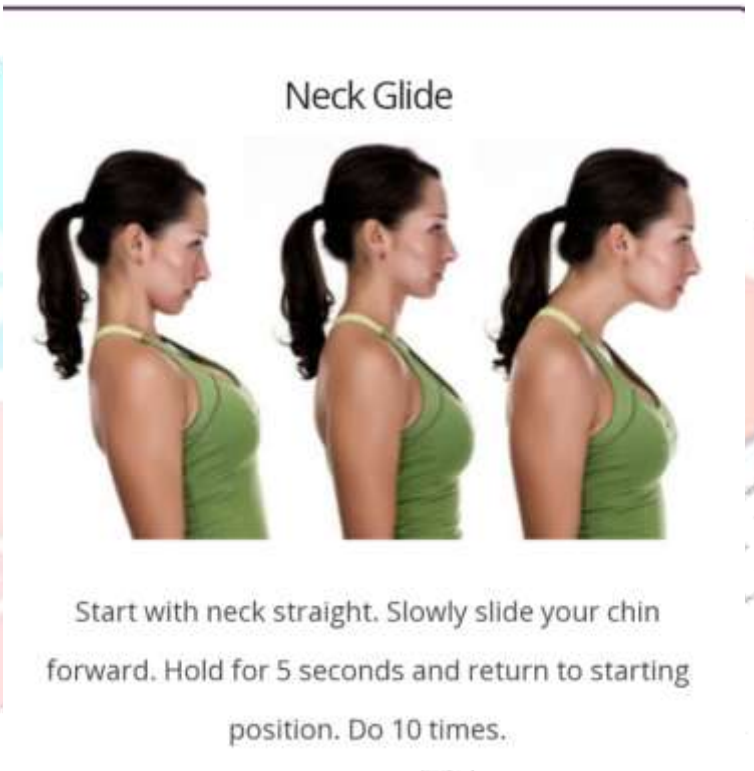


Fig 3.12.2 Neck Exercises

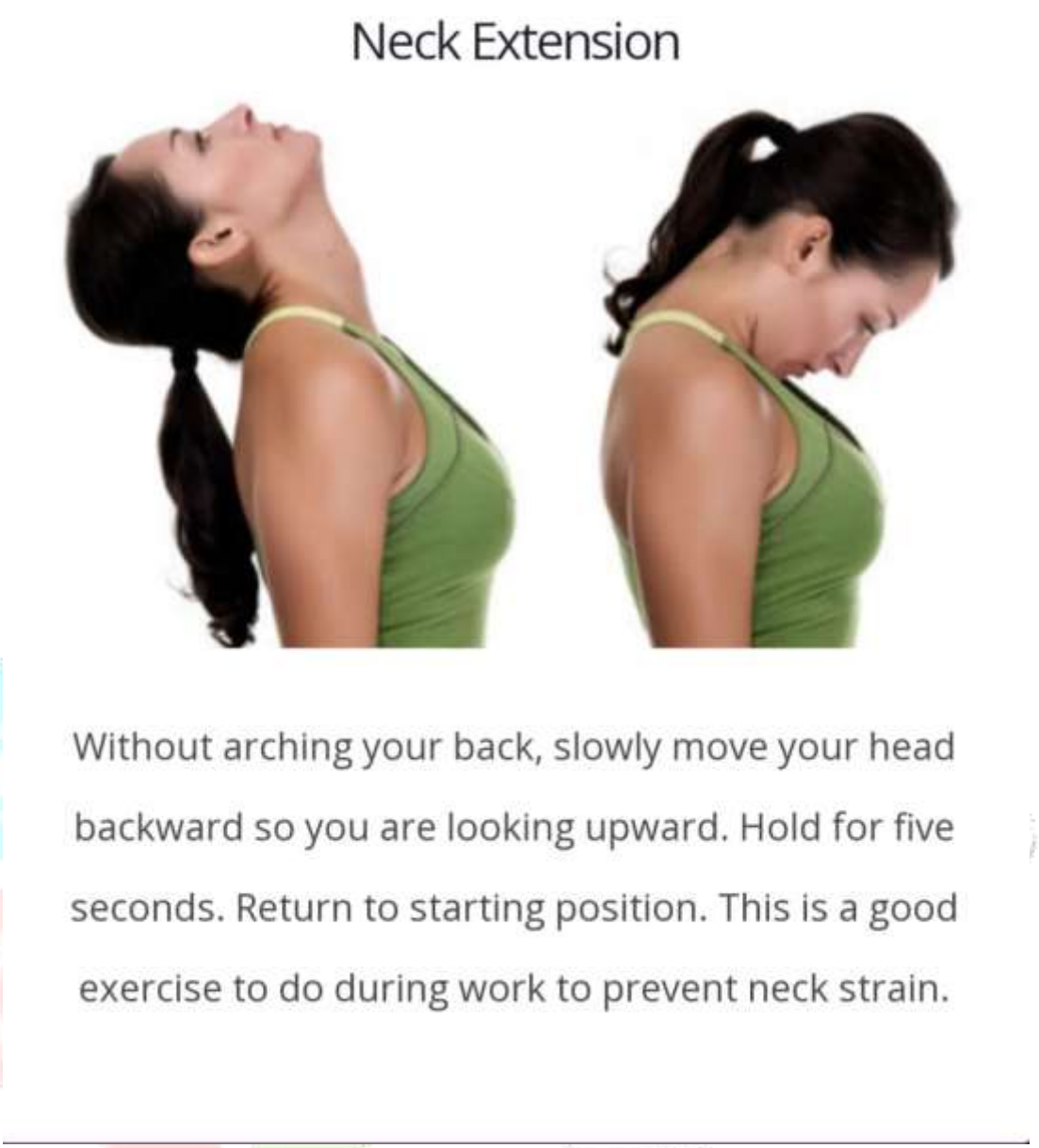


Fig 3.12.3 Neck Exercises

Fig 3.12.4 Neck Exercises

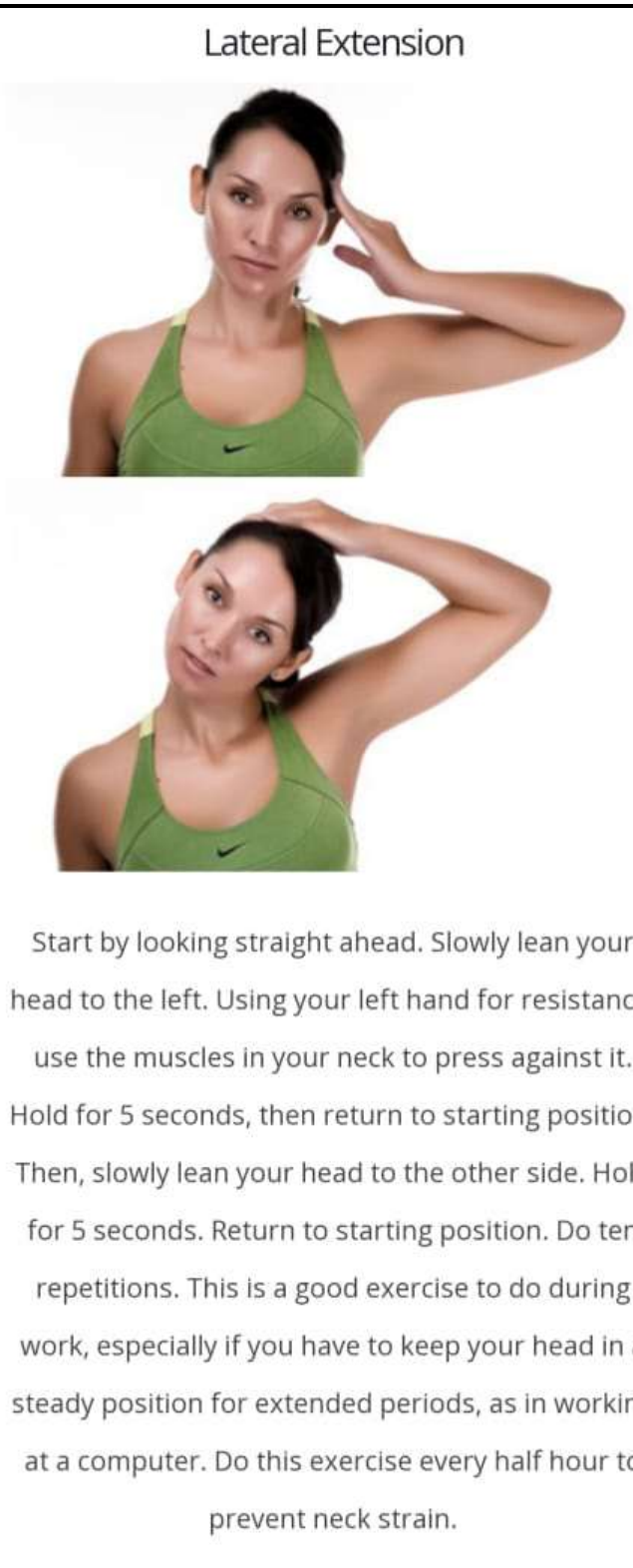


Fig 3.12.5 Neck Exercises

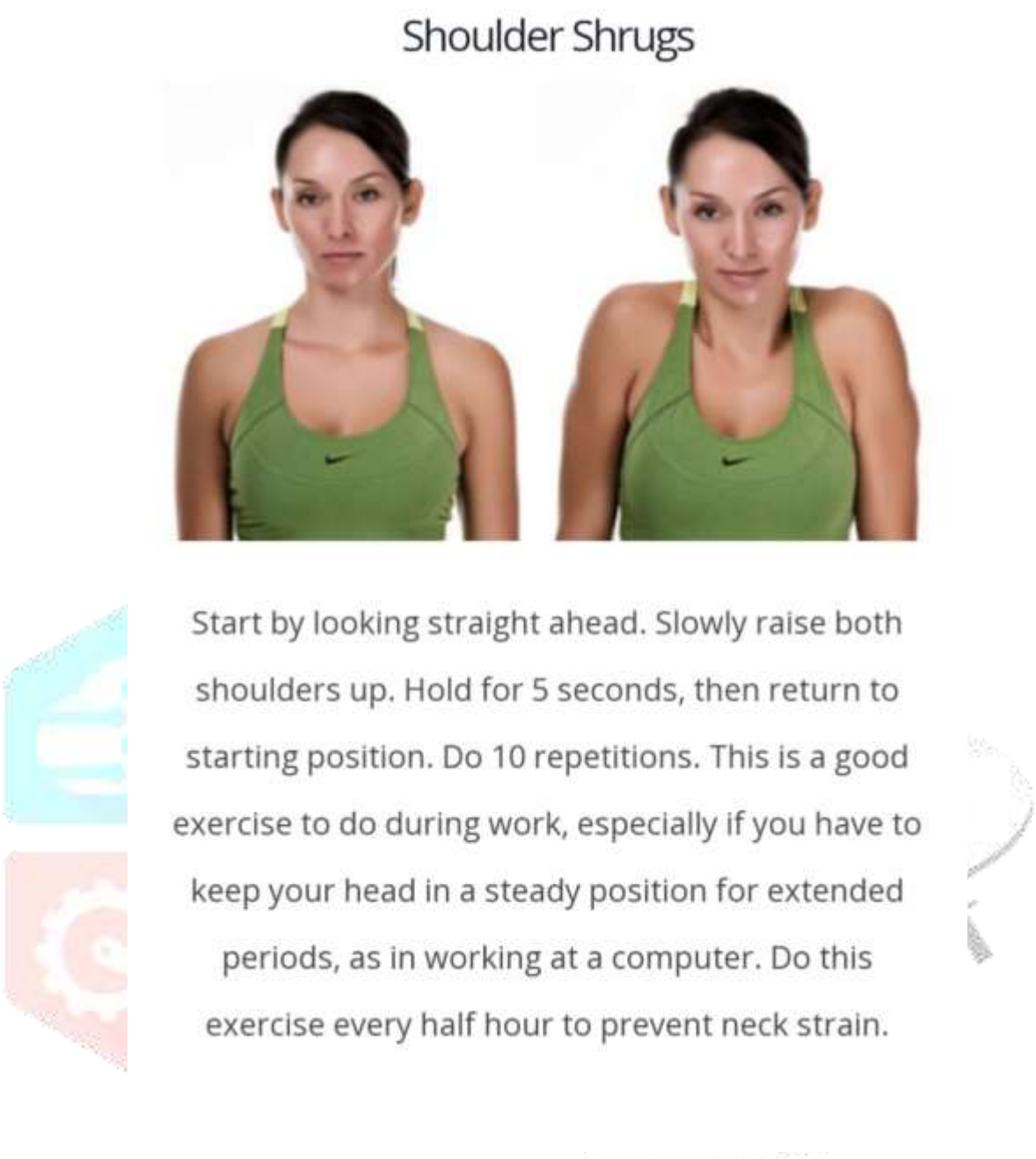


Fig 3.12.6 Neck Exercises

Fig 3.12.7 Neck Exercises

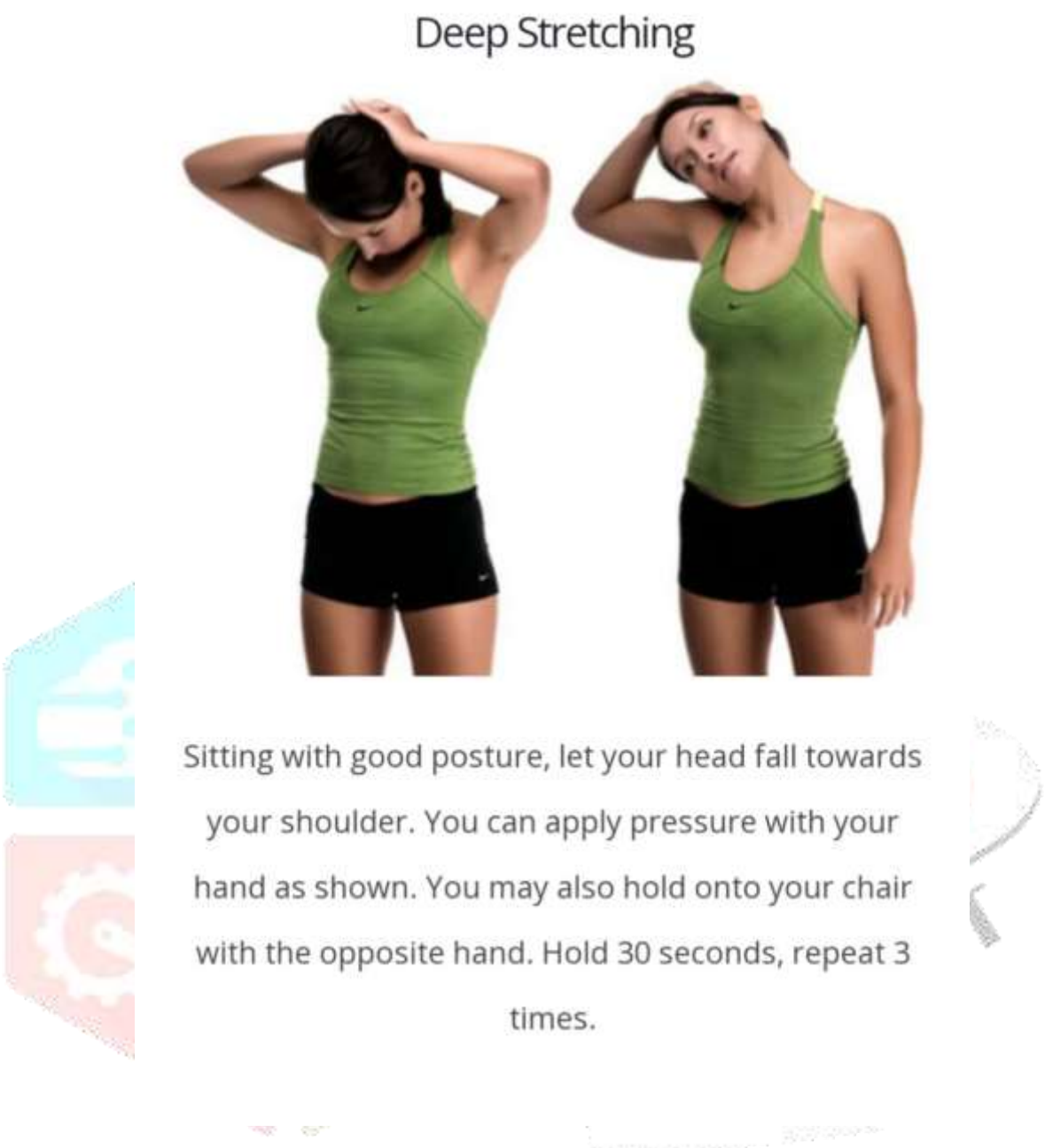


Fig 3.12.8 Neck Exercises

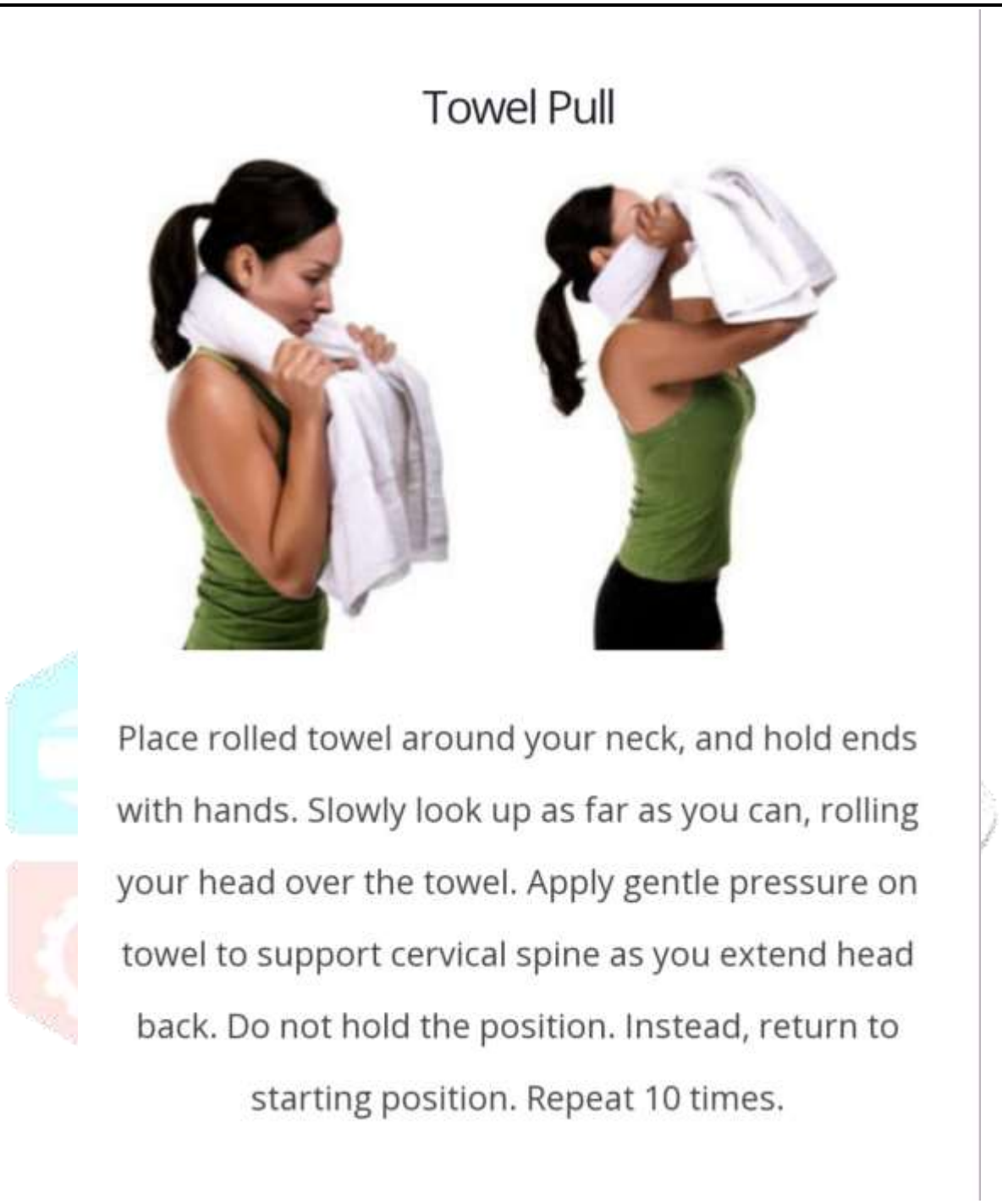


Fig 3.12.9 Neck Exercises

Fig 3.12.10 Stability Neck Exercises

Fig 3.12.11 Stability Neck Exercises

Fig 3.12.12 Shoulder Girdle Exercises

Methodology B (Data Collection Procedure) :-

I have approached the population & encourage them to take part in the study.

I checked for the inclusion & exclusion criteria among the population.

I explained the study after the participants have seen selected. After signing the inform consent form, I took demographic details before starting the procedure.

I have taken fall assessment Or Participants, I have checked owes try Disability Index questionnaire of day to day life physical activities.

I have taken all neck ROM with goniometer at starting and end of my sessions.

33

I have checked Tenderness & Trigger points with digital algometer. Consisting of a capacitance sensor attached to the tip of the palpating thumb changes in pressure sensitivity were also measured during the application of Manual pressure Release via Numerical pain Scale.

CHAPTER 4

4.1 STATISTICAL RESULTS

SPSS VERSION 20.0

Level of Significance $P \leq 0.05$

Statistical tests: Paired t test, Un paired t test

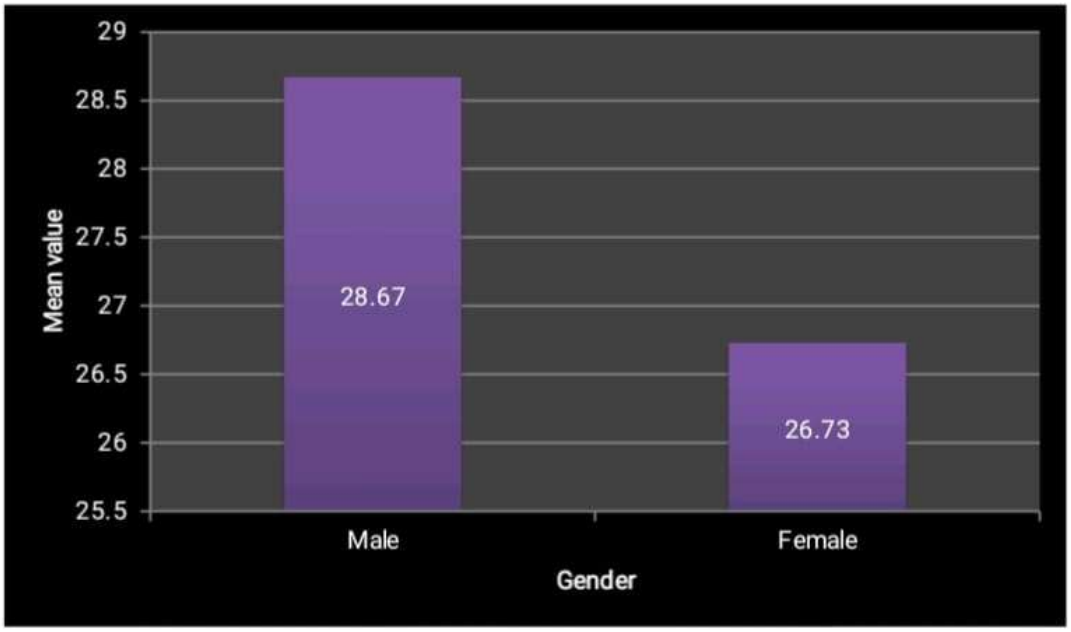
35

Table 1

Gender and age group wise distribution in Cupping therapy group

Gender	Mean	SD
Male	28.67	1.63
Female	26.73	5.57
Total	28.29	4.18

Mean age of all patients was 28.29 ± 4.18 years, male patients was 28.67 ± 1.63 years, female patients was 26.73 ± 5.57 years in Cupping therapy group.



Graph 4.1

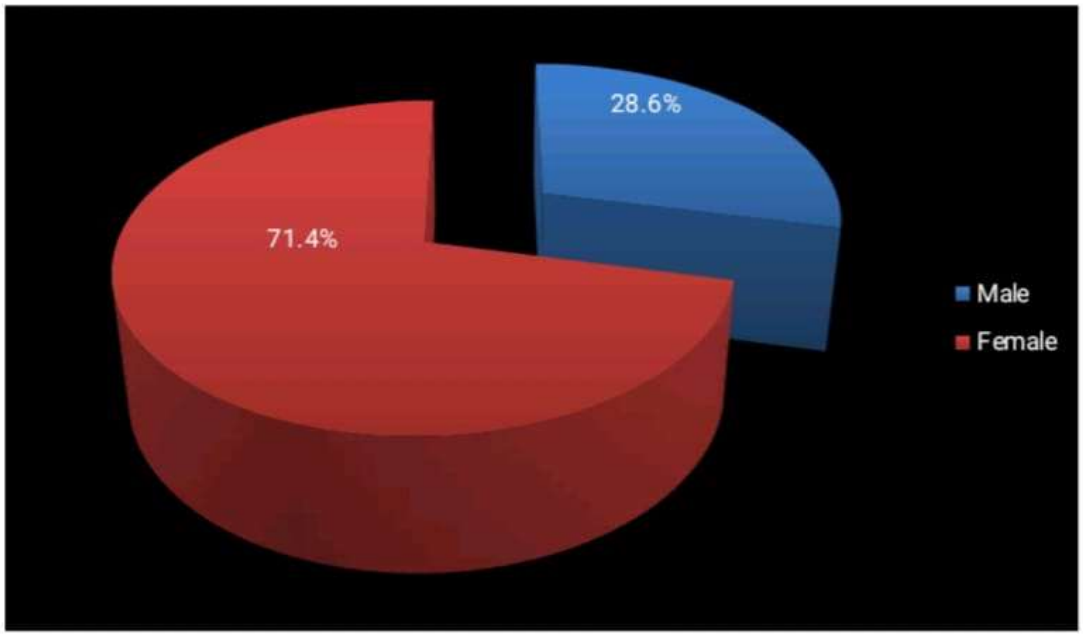
36

Table 2

Gender wise distribution in Cupping therapy group

Gender	Number	Percentages
Male	6	28.6%
Female	15	71.4%
Total	21	100%

Out of 21 patients, 6 (28.6%) were male and 15 (71.4%) were female in Cupping therapy group.



Graph 4.2

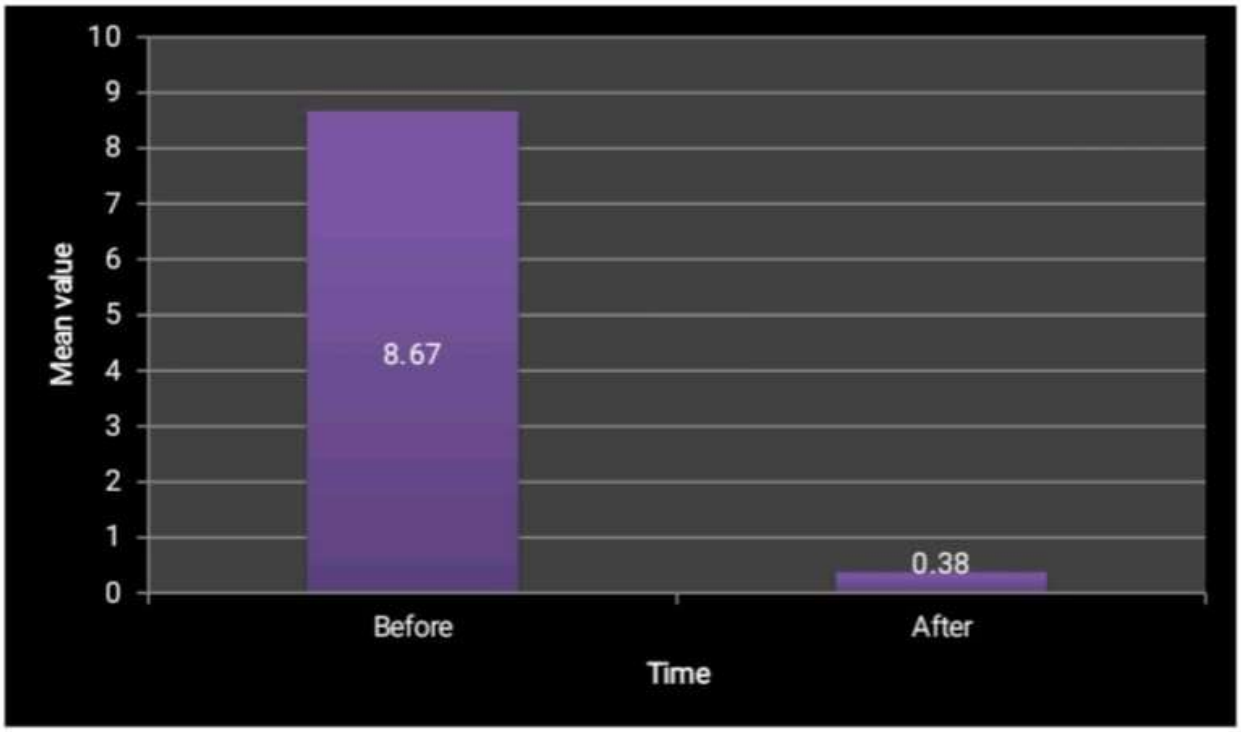
Table 3

Pain score wise distribution in Cupping therapy group

Time	Mean	SD	Difference	t Value	P Value
Before	8.67	0.73	8.28	52.947	≤ 0.001*
After	0.38	0.49			

Level of Significance P ≤ 0.05, * Significant, ** Non Significant

Mean pain score was 8.67 ± 0.73 before treatment while 0.38 ± 0.49 after treatment of Cupping therapy. Statistically, significant difference was present in change of pain score in Cupping therapy group.



Graph 4.3

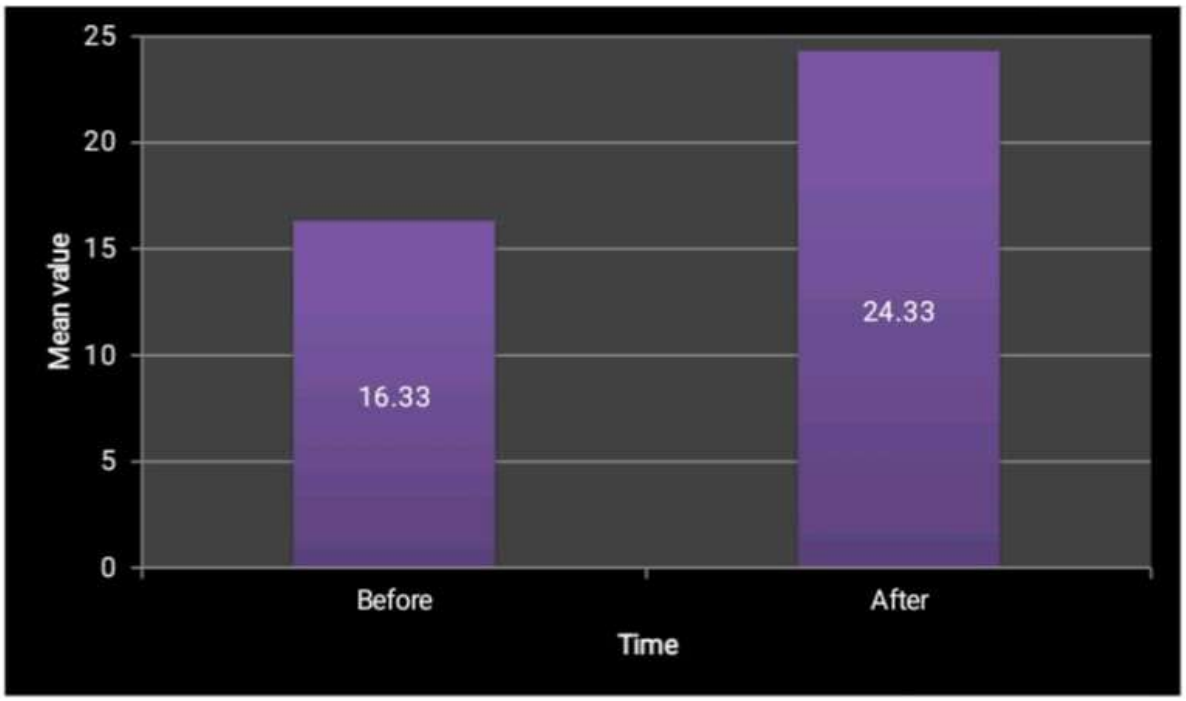
Table 4

Lateral flexion wise distribution in Cupping therapy group

Time	Mean	SD	Difference	t Value	P Value
Before	16.33	1.11	-8.0	-26.596	≤ 0.001*
After	24.33	0.79			

Level of Significance P ≤ 0.05, * Significant, ** Non Significant

Mean Lateral flexion score was 16.33 ± 1.11 before treatment while 24.33 ± 0.79 after treatment of Cupping therapy. Statistically, significant difference was present in change of Lateral flexion score in Cupping therapy group.



Graph 4.4

39

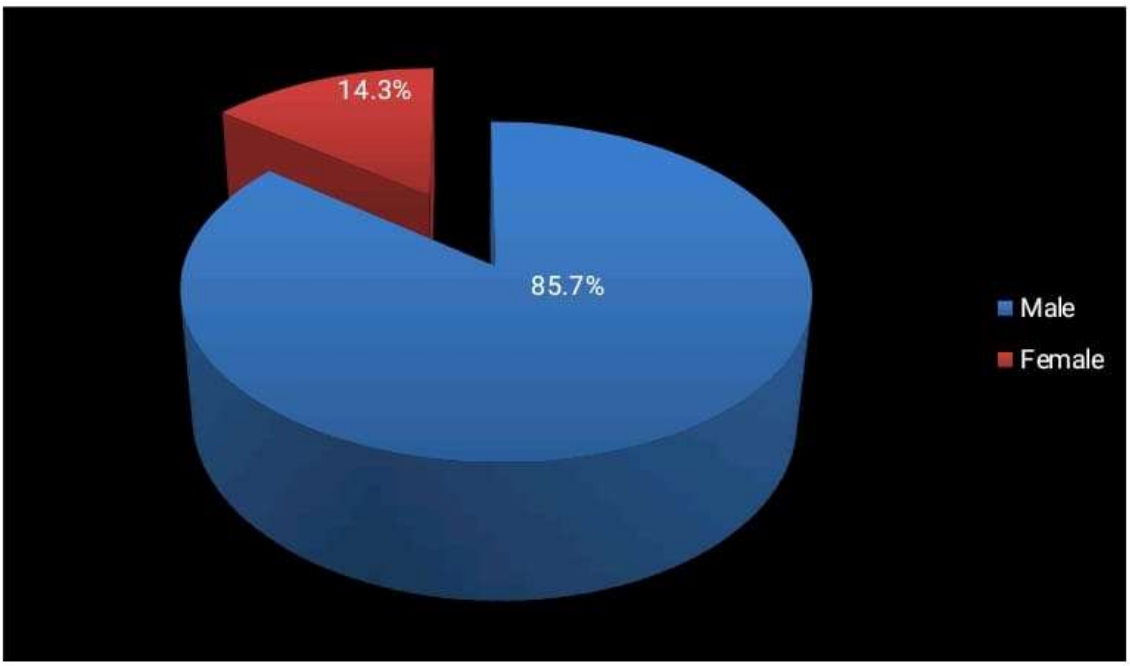
Table 5

Gender wise distribution in Manual Pressure Therapy Group

Gender	**Number**	**Percentages**

Male	18	85.7%
Female	3	14.3%
Total	21	100%

Out of 21 patients, 18 (85.7%) were male and 3 (14.3%) were female in Manual pressure therapy group.



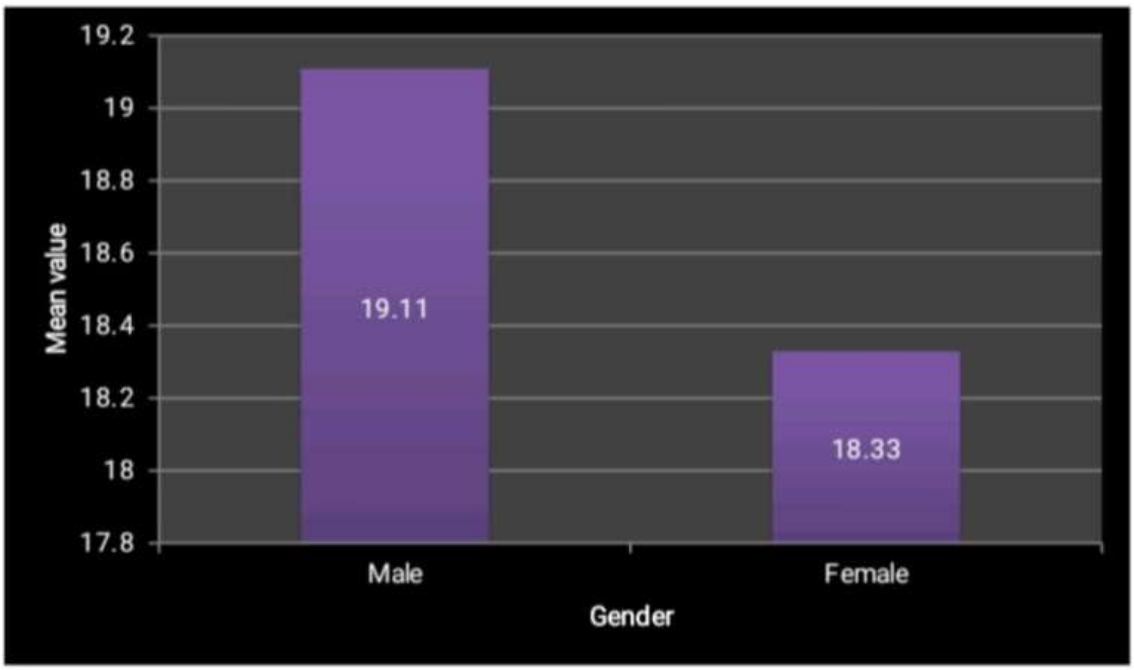
Graph 4.5

Table 6

Gender and age group wise distribution in Manual pressure therapy group

Gender	Mean	SD
Male	19.11	5.64
Female	18.33	1.52
Total	19	5.23

Mean age of all patients was 19 ± 5.23 years, male patients was 19.11 ± 5.64 years, female patients was 18.33 ± 1.52 years in Manual pressure therapy group.



Graph 4.6

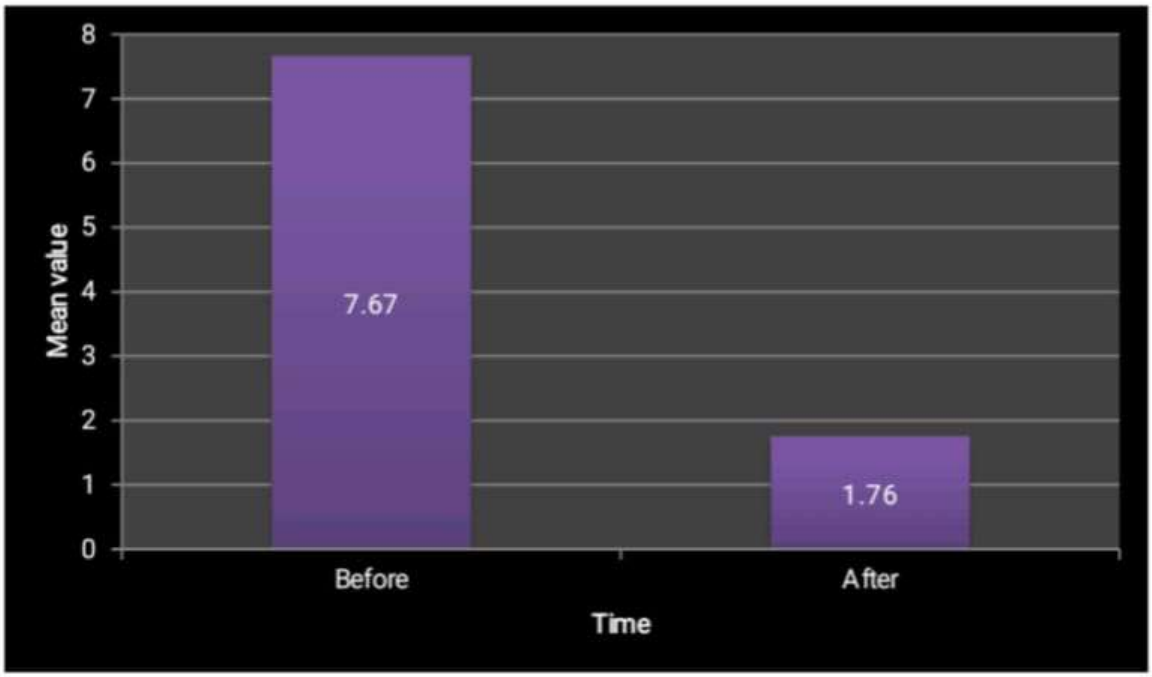
Table 7

Pain score wise distribution in Manual pressure therapy group

Time	Mean	SD	Difference	t Value	P Value
Before	7.67	1.01	5.95	18.283	≤ 0.001*
After	1.76	0.94			

Level of Significance P ≤ 0.05, * Significant, ** Non Significant

Mean pain score was 7.67 ± 1.01 before treatment while 1.76 ± 0.94 after treatment of Manual pressure therapy. Statistically, significant difference was present in change of pain score in Manual pressure therapy group.



Graph 4.7

42

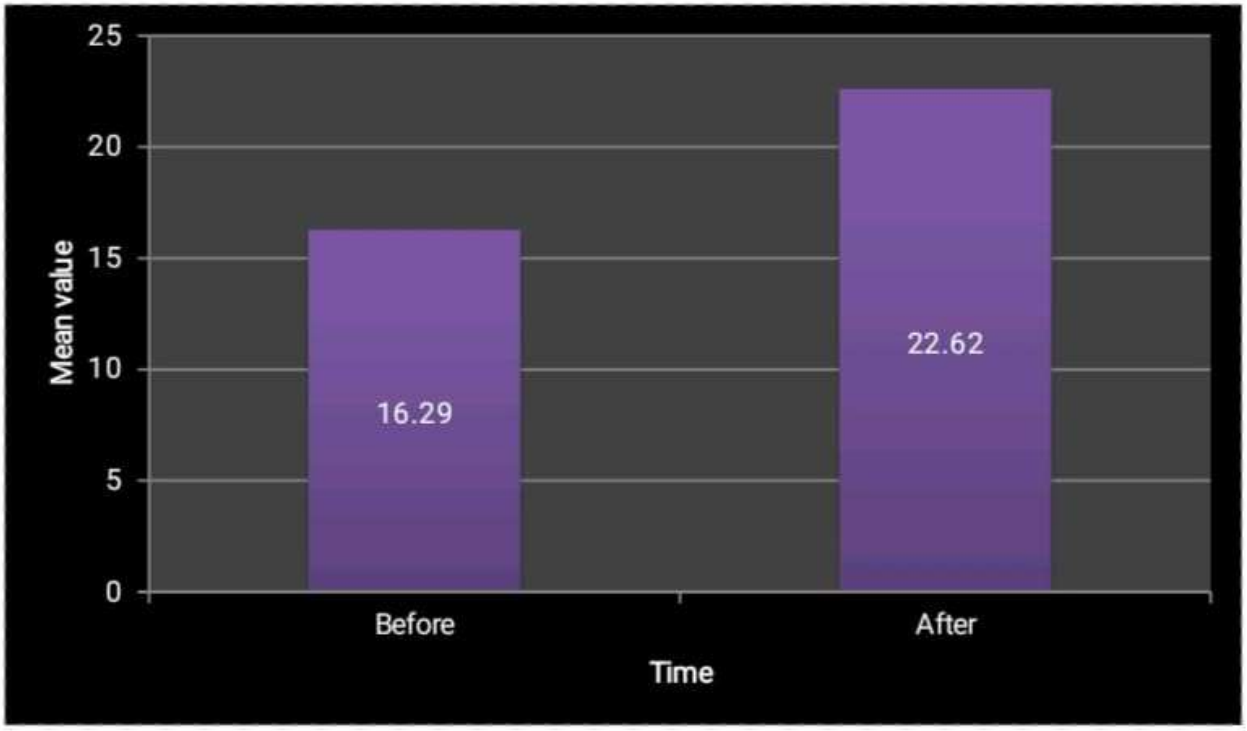
Table 8

Lateral flexion wise distribution in Manual pressure therapy group

Time	Mean	SD	Difference	t Value	P Value
Before	16.29	1.10	-6.33	-15.021	≤ 0.001*
After	22.62	1.62			

Level of Significance P ≤ 0.05, * Significant, ** Non Significant

Mean Lateral flexion score was 16.29 ± 1.10 before treatment while 22.62 ± 1.62 after treatment of Manual pressure therapy. Statistically, significant difference was present in change of Lateral flexion score in Manual pressure therapy group.



Graph 4.8

43

Table 9

Pain Score Wise Distribution Between Cupping Therapy Group And Manual Pressure Therapy Group

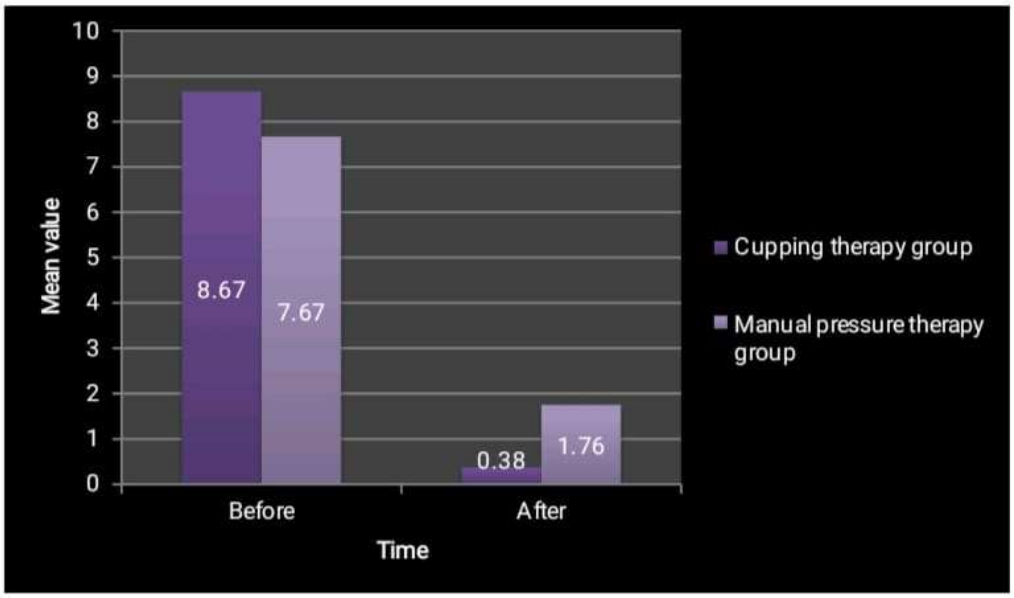
Time	Groups	Mean	SD	Difference	T Value	P Value
Before	**Cupping Therapy Group**	**8.67**	**0.73**	**1.00**	**0.151**	**0.767****
	Manual Pressure Therapy Group	**7.67**	**1.01**			

After	**Cupping Therapy Group**	**0.38**	**0.49**	**-1.3**	**-5.9328**	**0.001***
	Manual Pressure Therapy Group	**1.76**	**0.94**			

Level of Significance P ≤ 0.05, Significant, **Non Significant

Statistically, no significant difference was present in pain score between Cupping Therapy Group and Manual Pressure Therapy Group.

Mean pain score was less in Cupping Therapy Group (0.38 ± 0.49) as compared to Manual Pressure Therapy Group after group (1.76 ± 0.94). Statistically, significant difference was present in pain score between Cupping Therapy Group and Manual Pressure Therapy Group.



Graph 4.9

44

Table 10

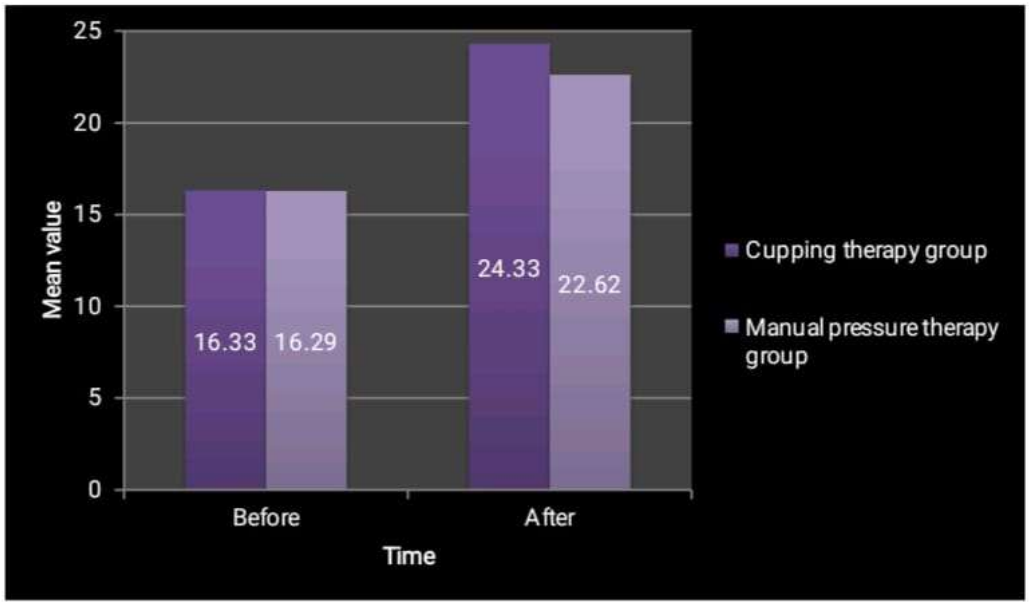
Lateral flexion wise distribution between Cupping therapy group and Manual pressure therapy group

Time	Groups	Mean	SD	Difference	t Value	P Value
Before	Cupping therapy group	16.33	1.11	0.048	0.139	0.890**
	Manual pressure therapy group	16.29	1.10			
After	Cupping therapy group	24.33	0.79	1.71	14.337	≤ 0.001*
	Manual pressure therapy group	22.62	1.62			

Level of Significance P ≤ 0.05, * Significant, ** Non Significant

Statistically, no significant difference was present in Lateral flexion score between Cupping therapy group and Manual pressure therapy group.

Mean Lateral flexion score was more in Cupping therapy group (24.33 ± 0.79) as compared to Manual pressure therapy group after group (22.62 ± 1.62). Statistically, significant difference was present in Lateral flexion score between Cupping therapy group and Manual pressure therapy group.



Graph 4.10

CHAPTER 5

5.1 DISCUSSION

The purpose of study was to determine how manual muscle pressure and myofascial dry cupping therapy decrease level of perceived pain associated with nonspecific neck pain and increased localized blood flow of the treated tissues compared with sham cupping and control conditions along with neck exercises and posture correction.

In my comparative study I took 42 people 21 are students below age 20 years old other group 21 people age between 20 to 40 years which are working in IT Industry. In both group there are tender points and upper trapezius neck pain. In both group neck pain and lateral neck flexion is reduced. My moto of study is which is fastest pain reliver and improving lateral neck flexion.

In my study I found myofascial cupping therapy along with neck exercise reduced neck pain faster then manual pressure release. On improving lateral neck flexion both are same effective.

5.2 Limitations of the Study

While this study offers valuable insights into the efficacy of Manual Myofascial Release, Myofascial Cupping Therapy and targeted exercises for musculoskeletal upper extremity pain management, certain limitations must be acknowledged to contextualize the findings appropriately:

Sample Size : The relatively small sample size may restrict the generalizability of the results and limit the ability to detect nuanced effects.

Lack of Control Group : The absence of a specific control group hinders the isolation of intervention effects, potentially influencing the interpretation of outcomes.

Subjective Reporting : The self-report nature of pain assessment and patient-reported outcomes introduces potential bias and variability in data collection.

These limitations, while important to acknowledge, do not diminish the significance of the study's contributions to musculoskeletal pain management. They serve as guiding points for future research endeavors, encouraging a more comprehensive understanding of the complexities surrounding the efficacy of these interventions.

It is critical to interpret the findings with caution. The study adds to the ongoing search for evidence-based techniques to improving patient outcomes and developing musculoskeletal pain care practices. Larger sample sizes, longer follow-up periods and controlled designs in future research can give more substantial evidence and enhance the foundations for effective pain management strategies.

Future research is needed not only to standardize treatment guidelines but also to continue analyzing the physiological effect of dry cupping therapy. The physiological mechanism and theory behind dry cupping must also continue to be evaluated.

CHAPTER 6

CONCLUSION

In patients with musculoskeletal upper extremity pain, particularly upper Trapezitis, a comparative analysis of Manual Myofascial Release vs. Myofascial Cupping Therapy, accompanied by shoulder girdle and neck exercises, yielded valuable insights into effective pain management strategies. The study's outcomes demonstrated potential early benefits of Myofascial Cupping Therapy in reducing pain intensity and improving functional outcomes for individuals with musculoskeletal upper extremity pain. The application of the Numerical Pain Rating Scale (NPRS) revealed statistically significant reductions in pain intensity across all interventions- Manual Myofascial Release, Myofascial Cupping Therapy and the combined intervention. Particularly noteworthy was the combined intervention's pronounced pain reduction, suggesting potential synergistic effects between targeted exercise and myofascial cupping therapy for addressing musculoskeletal upper extremity discomfort. This study highlights the significant role of these therapies in diminishing pain severity, with improving lateral neck flexion.

6.1 Future Scope Of The Study

The current comparison of Myofascial Cupping Therapy and Manual Myofascial Release together with neck and shoulder exercise in patients with musculoskeletal upper extremity discomfort, paved the way for further investigation and research in a number of areas.

Long Term Follow-up Studies: Long term follow-up research will help determine whether the pain alleviation and functional gains were sustainable and durable.

Comparison with Other Modalities: In the future, research might compare the efficacy of Myofascial Cupping Therapy and Manual Myofascial Release to other therapeutic modalities that are frequently employed to treat pain in the muscular upper extremities.

Mechanisms of Action: Researching the basic principles that underlie Myofascial Cupping Therapy and Manual Myofascial Release can help us better understand how these treatments for musculoskeletal pain work.

Studies Comparing Non-pharmacological Interventions To Drug Therapies: Studies comparing the efficacy of non-pharmacological to standard pain killer for Upper Trapezitis may focused on advantages of non invasive therapies.

CHAPTER 7

SUMMARY

Aiming to treat patients with muscles skeletal upper extremity discomfort, notably upper Trapezitis the study compared the effectiveness of Manual Pressure Release and Myofascial Cupping Therapy with neck & shoulder girdle exercises. The two groups 21 each is MFR + exercise other group MFC + exercises have been studied on. The trial lasted 45 days, each intervention consisted of 20 minutes sessions that were held every alternate days in week.

Prior to and following the therapies, the Numerical pain rating scale was used to measure severity of pain. For data comparisons, normality tests were performed using SPPS version. The study's findings showed that Myofascial Cupping significantly decreased severity of pain compare to Myofascial Pressure Release Therapy. To support and build upon these important discoveries, additional research with bigger sample numbers & longer follow up time is advice.

CHAPTER 8

References

1. ↑ Jamal MA, Shaiqua A, Zeenat F, Ahmad W. Hijamah: An important regimen of Ilaj bit Tadbeer.
2. ↑ Al-Bedah AM, Elsubai IS, Qureshi NA, Aboushanab TS, Ali GI, El-Olemy AT, Khalil AA, Khalil MK, Alqaed MS. The medical perspective of cupping therapy: Effects and mechanisms of action. Journal of traditional and complementary medicine. 2019 Apr 1;9(2):90-7.
3. ↑ Mashlool ZT, Aowada MA. Effect of cupping treatment on some biochemical variables of thi-qar province. Int. J. Res. Appl. Nat. Soc. Sci. 2016;4:93-104.
4. ↑ Bhikha R, Saville J. Cupping: time to re-evaluate its position. Tibb Institute. A Science of Medicine. The Art of Care. 2015 Feb;1(1):1-0.

Back to top

5. ↑ Cupping Massage Therapy: What Is It and What Are the Benefits? https://bestoahumassage.com/cupping-massage-therapy-what-is-it-and-what-are-the-benefits/
6. ↑ Chirali I Z. *Traditional Chinese medicine: cupping therapy*. Elsevier Health Sciences.1999.
7. ↑ Dinall AM. A reflection on cupping therapy and historical medical dominance. Int J Complement Alt Med. 2019;12(2):66-8.
8. ↑ ICAHT Centre Of Integrative Medicine. Dry Cupping Massage Treatment At ICAHT Centre Leicester . Available from https://www.youtube.com/watch?v=yvA8g4B1Ces
9. ↑ Cupping Therapyhttps://www.webmd.com/balance/guide/cupping-therapy

10. ↑ ICAHT Centre Of Integrative Medicine. Performing Hijama (Wet Cupping) at Cardiff Hijama Center UK - Testimonial By Mustafa. Available from https://www.youtube.com/watch?v=mhOdwwuMJPQ

11. ↑ Price S. Aromatherapy for Common Ailments: How to Use Essential Oils--Such as Rosemary, Chamomile, and Lavender--To Prevent and Treat More Than 40 Common Ailments. Simon and Schuster; 2003 Dec 23.

12. ↑ [12.0] [12.1] Dantian health acupuncture herbs. Cupping. Available from https://www.dantianhealth.com.au/cupping-types/#flash-cupping [last accessed 14/10/2020]

13. ↑ [13.0] [13.1] Mehta P, Dhapte V. Cupping therapy: A prudent remedy for a plethora of medical ailments. Journal of traditional and complementary medicine. 2015 Jul 1;5(3):127-34.

14. ↑ ToHealth. How to do cupping therapy. Available from https://www.youtube.com/watch?v=V8ntyHPvRnw

15. ↑ Cupping Therapy for Muscles and Joints: An Easy-to-Understand Guide for Relieving Pain, Reducing Inflammation and Healing Injury

16. ↑ AmouraProductions. Moxa Cupping Massage Angie Schnell. Available from https://www.youtube.com/watch?v=kjnC1ZTAP1M

17. ↑ Anadolu Agency. Cupping therapy with buffalo horns in Indonesia . Available from https://www.youtube.com/watch?v=znxjK_HS3Wk

18. ↑ Staten Island Advance. Amanda tries Acupuncture and Cupping. Available from https://www.youtube.com/watch?v=iFW5cn6ICuA

19. ↑ Beauty Insider. Face Cupping Gives Instant Facelift. Available from https://www.youtube.com/watch?v=zBDSsBPnnF8 [last accessed 14/10/2020]

20. ↑ Nimrouzi M, Mahbodi A, Jaladat AM, Sadeghfard A, Zarshenas MM. Hijamat in traditional Persian medicine: risks and benefits. J Evid Based Complementary Altern Med. 2014 Apr;19(2):128-36.

21. ↑ 21.0 21.1 Aboushanab TS, AlSanad S. Cupping therapy: an overview from a modern medicine perspective. Journal of acupuncture and meridian studies. 2018 Jun 1;11(3):83-7.

22. ↑ 22.0 22.1 Ilkay Zihni Chirali MBAcC RCHM. Benefits of Cupping Therapy. Traditional Chinese Medicine Cupping Therapy (Third Edition), 2014

23. ↑ Timothy Huzar. Medical News Today. What to know about cupping therapy? Available from https://www.medicalnewstoday.com/articles/324817#pain-relief [last accessed 14/10/2020]

24. ↑ 24.0 24.1 Healthline. Cupping therapy. Available from https://www.healthline.com/health/cupping-therapy#conditions [last accessed 14/10/2020]

25. ↑ Al-Bedah AMN, Elsubai IS, Qureshi NA, et al. The medical perspective of cupping therapy: Effects and mechanisms of action. *J Tradit Complement Med*. 2018;9(2):90-97. Published 2018 Apr 30. doi:10.1016/j.jtcme.2018.03.003

26. ↑ Cleveland Clinic. Cupping: Risks / Benefits. Available from:https://my.clevelandclinic.org/health/treatments/16554-cupping/risks--benefits [last accessed 14/10/2020]

27. ↑ Contraindications for Cupping. Available from https://meridiancarecenter.teachable.com/courses/facialcupping/lectures/5649041 [last accessed 05/11/2020]

28. ↑ Bay state physical therapy. Cupping. Available from https://baystatept.com/physical-therapy-services/cupping/#:~:text=Physical%20therapists%20may%20sometimes%20use,ligaments%2C%20muscles%2C%20and%20tendons. [last accessed 14/10/2020]

29. ↑ Furhad S, Bokhari AA. Cupping Therapy. Available from https://www.ncbi.nlm.nih.gov/books/NBK538253/ [last accessed 14/10/2020]

30. ↑ Yoo SS, Tausk F. Cupping: east meets west. International journal of dermatology. 2004;43(9):664-5.

31. ↑ Moura CC, Chaves ÉCL, Cardoso ACLR, Nogueira DA, Corrêa HP, Chianca TCM. Cupping therapy and chronic back pain: systematic review and meta-analysis. Rev Lat Am Enfermagem. 2018 Nov 14;26:e3094.

32. ↑ PT health. what is cupping therapy? Available from https://www.pthealth.ca/blog/what-is-cupping-therapy/#:~:text=Cupping%20increases%20the%20blood%20flow,they%20release%20pain%2Dkilling%20chemicals. [last accessed 26/10/2020]

33. ↑ Best Health Physio. Cupping therapy. Available from https://besthealthphysio.ca/cupping-therapy/ [last accessed 26/10/2020]

34. ↑ The lowa clinic. Cupping Therapy | Physical Therapy | The Iowa Clinic. Available from https://www.youtube.com/watch?v=na3eN1SrhPE

35. ↑ OSC. Cupping - What is it, and how is it used in our Physical Therapy clinic? Available from https://www.youtube.com/watch?v=PdClgoxvOlo

36. ↑ Naik, R. Role of water cupping therapy in nocturnal leg cramps - a case report. International Journal of Emerging Technologies and Innovative Research. 2021 Dec. 8, 836.https://www.jetir.org/papers/JETIR2112398.pdf

MANUAL PRESSURE RELEASE REFERENCES

1. ↑ [1.0] [1.1] Simons DG, Travell JG, Simons LS. Travell & Simons' myofascial pain and dysfunction: upper half of body. Lippincott williams & wilkins; 1999.
2. ↑ [2.0] [2.1] Alvarez DJ, Rockwell PG. Trigger points: diagnosis and management. American family physician. 2002 Feb 15;65(4):653.
3. ↑ [3.0] [3.1] Davidoff RA. Trigger points and myofascial pain: toward understanding how they affect headaches. Cephalalgia. 1998 Sep;18(7):436-48.
4. ↑ Vázquez Delgado E, Cascos-Romero J, Gay Escoda C. Myofascial pain syndrome associated with trigger points: a literature review.(I): Epidemiology, clinical treatment and etiopathogeny. Medicina Oral, Patología Oral y Cirugia Bucal, 2009, vol. 14, num. 10, p. 494-498. 2009 Oct 1.

5. ↑ Yap EC. Myofascial pain-an overview. Annals-Academy of Medicine Singapore. 2007 Jan 1;36(1):43.
6. ↑ 6.0 6.1 6.2 Niel-Asher S. The concise book of trigger points: A professional and self-help manual. North Atlantic Books; 2014 Sep 16.
7. ↑ Ray BS, Wolff HG. Experimental studies on headache: pain-sensitive structures of the head and their significance in headache. Archives of surgery. 1940 Oct 1;41(4):813-56.
8. ↑ Simons DG, Travell JG, Simons LS. Travell & Simons' myofascial pain and dysfunction: upper half of body. Lippincott williams & wilkins; 1999.
9. ↑ Jantos M. Understanding chronic pelvic pain. Pelviperineology. 2007 Jun 1;26(2):66.

10. ↑ 10.0 10.1 10.2 Vázquez Delgado E, Cascos-Romero J, Gay Escoda C. Myofascial pain associated to trigger points: a literature review. Part 2: differential diagnosis and treatment. Medicina Oral, Patología Oral y Cirugia Bucal, 2010, vol. 15, num. 4, p. 639-643. 2010 Jul 1.

11. ↑ Pringle K. Myofascial Pain and Dysfunction: The Trigger Point Manual. Journal of Manipulative & Physiological Therapeutics. 1999 Jun 1;22(5):A1.

12. ↑ 12.0 12.1 Fernández-de-Las-Peñas C, Dommerholt J. International consensus on diagnostic criteria and clinical considerations of myofascial trigger points: a Delphi study. Pain Medicine. 2018 Jan 1;19(1):142-50.

13. ↑ Ge HY, Monterde S, Graven-Nielsen T, Arendt-Nielsen L. Latent Myofascial Trigger Points Are Associated With an Increased Intramuscular Electromyographic Activity During Synergistic Muscle Activation. The journal of pain. 2014;15(2):181–7.

14. ↑ Celik D, Yeldan İ. The relationship between latent trigger point and muscle strength in healthy subjects: a double-blind study. Journal of Back and Musculoskeletal Rehabilitation. 2011 Jan 1;24(4):251-6.

15. ↑ Delgado EV, Romero JC, Gay-Escoda C. Myofascial pain syndrome associated with trigger points: A literature review. (I): Epidemiology, clinical treatment and etiopathogeny. Medicina oral, patología oral y cirugía bucal. Ed. inglesa. 2009;14(10):1.

16. ↑ Tough EA, White AR, Cummings TM, Richards SH, Campbell JL. Acupuncture and dry needling in the management of myofascial trigger point pain: a systematic review and meta-analysis of randomised controlled trials. European Journal of Pain. 2009 Jan 1;13(1):3-10.

17. ↑ Simons DG. Clinical and etiological update of myofascial pain from trigger points. Journal of musculoskeletal pain. 1996 Jan 1;4(1-2):93-122.

18. ↑ Kawakita K, Itoh K, Okada K. The polymodal receptor hypothesis of acupuncture and moxibustion, and its rational explanation of acupuncture points. InInternational Congress Series 2002 Aug 1 (Vol. 1238, pp. 63-68). Elsevier.

19. ↑ Gunn CC, Wall PD. The Gunn approach to the treatment of chronic pain: intramuscular stimulation for myofascial pain of radiculopathic origin. Churchill Livingstone; 1996.

20. ↑ Fernández-de-las-Peñas C, Cuadrado ML, Arendt-Nielsen L, Simons DG, Pareja JA. Myofascial trigger points and sensitization: an updated pain model for tension-type headache. Cephalalgia. 2007 May;27(5):383-93.

21. ↑ Woolf CJ. Central sensitization: implications for the diagnosis and treatment of pain. pain. 2011 Mar 1;152(3):S2-15.

22. ↑ [22.0] [22.1] Mazza DF, Boutin RD, Chaudhari AJ. Assessment of myofascial trigger points via imaging: a systematic review. American Journal of Physical Medicine & Rehabilitation. 2021 Oct 1;100(10):1003-14.

Back to top

Infigrity™

Infinite. Integrity.

Date: 24th May 2024

PHYSIOTHERAPY DISSERTATION CERTIFICATE

This is to certify that **Dr. Naznin Rana**, a physiotherapist who is doing higher studies at **Gokul Global University**, doing a dissertation regarding neck pain, came here to **Infigrity IT Services Pvt. Ltd.** for free physiotherapy sessions for employees aged above 18 years. She has delivered the best physiotherapy exercises, and posture correction, and taught about how to handle neck pain at home.

During their tenure, we found her sincere and cooperative. We admire their involvement and engagement with the employees.

Yours faithfully,
For Infigrity IT Services,

Kazim Abbas Y. Noorani
Managing Director

INFIGRITY IT SERVICES PVT. LTD.
720 Citygate, Near Vishala Restaurant, New Vasna, Ahmedabad - 380007
https://infigrityit.com/
Email : contact@infigrityit.com