Original Research Paper

Volume -10 | Issue - 3 | March - 2020 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Health Science

EFFECT OF YOGA THERAPY WITH VARMA THERAPY ON PAIN AND CADENCE AMONG MIDDLE AGED LOW BACK PAIN MEN

Dr. A. S. Selvam

Assistant Professor, Department Of Yoga & Well Being, Saveetha School Of Law, Saveetha University (Deemed University), Chennai-77, Tamil Nadu, India.

ABSTRACT The present random group experimental study was designed to find out the effect of Yoga therapy with Varma Therapy on Pain and Cadence among middle aged low back pain men. It was hypothesized that there would be significant difference in Yoga therapy with Varma Therapy than the control group on Pain and Cadence among middle aged low back pain men. To achieve the purpose of the study, thirty (30) middle aged low back pain men residing in Chennai aged between 40 to 50 years were selected randomly in two groups, namely experimental group and control group of fifteen (15) subjects each. Training period of this study was eight weeks. Experimental group underwent Yoga therapy with Varma Therapy for eight weeks, six days a week for a maximum of one hour in the morning. The control group was kept in active rest. The pre test and post test were conducted before and after the training for all two groups. To analyze the data (ANCOVA) test was used. The test of significance was fixed as 0.05 level of confidence. It was concluded that the significantly reduced in Yoga therapy with Varma Therapy than the control group on Pain and improved Cadence variable among middle aged low back pain men.

KEYWORDS : Yoga Therapy With Varma Therapy, Pain And Cadence.

INTRODUCTION

Most People may experience low back pain at certain stages of their life span. It is characterized by pain, stiffness and tension in the back. It is the most common cause of job-related disability and a leading contributor to missed work. It affects about 40% of people at some point in their lives. Low back pain (often abbreviated as LBP) may be classified by duration as acute (pain lasting less than 6 weeks), sub-chronic (6 to 12 weeks), or chronic (more than 12 weeks). The condition may be further classified by the underlying cause as mechanical, non-mechanical, or referred pain. In most episodes of low back pain, a specific underlying cause is not identified or even looked for, with the pain believed to be due to mechanical problems such as muscle or joint strain. Yoga therapy and Varma Therapy are the foremost mode of treatment preferred for low back pain.

STATEMENT OF THE PROBLEM

The purpose of the study was to find out the effect of Yoga therapy with Varma Therapy on Pain and Cadence among middle aged low back pain men.

HYPOTHESIS

It was hypothesized that there would be significant difference in Yoga therapy with Varma Therapy than the control group on Pain and Cadence among middle aged low back pain men.

REVIEW OF RELATED LITERATURE

Colgrove, Y. M. et.al., (2019) Conducted study on the Physical and physiological effects of yoga for an underserved population with chronic low back pain. The quasi-experimental within-subject wait-listed crossover design targeted the recruitment of low-income participants who received twice-weekly group yoga for 12 weeks, following 6–12 weeks of no intervention. Outcome measures were taken at baseline, pre intervention (6–12 weeks following baseline), and then post intervention. Outcome measures included pain, disability, core strength, flexibility, and plasma tumor necrosis factor (TNF)-α protein levels. Outcomes measures were analyzed by one-way ANOVA and paired one-tailed *t*-tests. Eight patients completed the intervention. Significant improvements in pain scores measured over time were supported by the significant improvement in pre- and post-yoga session pain scores. Significant improvements were also seen in the Oswestry Disability Questionnaire scores, spinal and hip flexor flexibility, and strength of core muscles following yoga. Six participants saw a 28.6%–100% reduction of TNF-α plasma protein levels after yoga, while one showed an 82.4% increase. Two participants had no detectable levels to begin with. Brain imaging analysis shows interesting increases in N-acetylaspartate in the dorsolateral prefrontal cortex and thalamus. It was concluded Yoga appears effective in reducing pain and disability in a low-income CLBP population and in part works by increasing flexibility and core strength. Changes in TNF-α protein levels should be further investigated for its influence on pain pathways.

Rayat, S. (2010) Conducted study on the effect of Yogasana Training on Low Back Pain among College Players. The subjects of the study were 40 students from SGGS Khalsa College Mahilpur, District Hoshiarpur, India and the subjects were divided into two groups one control group and one experimental group. Yogasana Training for 3 month was assigned to experimental group (5 days a week) and control group was not allowed to undergo any experimental treatment, but they are permitted to do their daily routine work. From the selected subjects (N=40) pretest (initial) and post test (after training) was conducted on the criterion measures (Sit and Reach Test, Trunk Extension Test, Bridge Up Test, Sit Up Test and assessment of pain through visual analogue) at the start and the end of the experimental training programme. The data pertaining to selected hematological variables were analyzed by t- ratio to determine the difference between initial and final mean for control group and experimental group. The significant difference was seen at 0.05 level of confidence (0.05 = 4.096). It was concluded that there is a significant improvement in reducing the low back pain due to Yogasana Training training programme.

METHODOLOGY

For the purpose of this random group experimental study, thirty (30) middle aged low back pain men in Chennai were selected at random as subjects based on their Pain and Cadence levels and their age was ranged from 40 to 50 years. Yoga therapy with Varma Therapy was given six days (Sunday) per week for eight weeks. All the subjects were randomly assigned to experimental group and control group each consisted of 15 subjects. Experimental group was involved in Yoga therapy with Varma Therapy practices for eight (8) weeks, control group kept in active rest. The Yoga therapy with Varma Therapy given to experimental group include, prayer, Loosening the joining, Tadasana, Hastottanasana, Katichakrasana, Ardha Chakrasana, Ustr asana, Ardha Shalabhasana, Makarasana, Bhujangasana, Marjar ias ana, Setu Bandhasana, Savasana, Nadi Shodhana, Kapalabati, Abdo minal Breathing and Yoga Nidra (Relaxation) with Varma Therapy Points are the Tilartha Kala Varmam, Atthi Kanthaari Varmam, Konac hennai Varmam, Nangana Poottu Varmam, Ullankaal Vellai Varmam and Naaithalai Varmam Techniques. Initially pre-test was taken and after the experimental period of eight weeks, post-test was taken from all the two groups. The differences between initial and final Pain and Cadence were considered as the effect of Yoga therapy with Varma Therapy on selected subjects. Analysis of Covariance (ANCOVA) was used to find out the difference among the experimental group and control groups. The test of significance was fixed as 0.05 level of confidence.

RESULTS AND DISCUSSION

The data pertaining to the variables collected from the two groups before and after the training period were statistically analyzed by using Analysis of Covariance (ANCOVA) to determine the significant difference and tested at 0.05 level of significance.

RESULTS ON PAIN

The Analysis of Covariance (ANCOVA) on Pain among Yoga therapy

with Varma Therapy practices and control group was analyzed and are presented in Table-I.

Table I Analysis Of Co-variance Of The Means Of Experimental Group And The Control Group In Pain (in Scores)

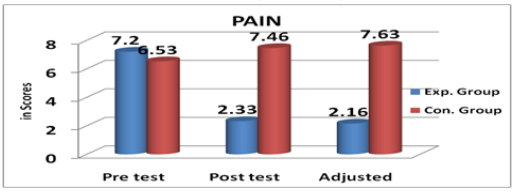
Test	Exp Group	Con Group	SV	SS	Df	MS	F
Pre test	7.2	6.53	Between	3.33	1	3.33	1.50
			Within	62.13	28	2.21	
Post test	2.33	7.46	Between	197.63	1	98.81	74.64*
			Within	37.06	28	1.32	
Adjusted	2.16	7.63	Between	213.72	1	106.86	142.06*
			Within	20.31	27	0.75	
Mean gain	4.86	0.93					

*** Significant at 0.05 level of confidence (Table F ratio at 0.05 level of confidence for df 1 and 28 = 4.20, 1 and 27 = 4.21).**

The obtained F-ratio value for the Pain were greater than the table value, it indicates that there was a significant difference among post test and adjusted post-test means of the yoga therapy with Varma Therapy group than the control group.

The pre-test, post-test and adjusted post-test mean values of yoga therapy with Varma Therapy and the control group on Pain were graphically presented in Figure 1.

FIGURE I BAR DIAGRAM SHOWING ORDERED ADJUSTED MEAN POST TEST OF THE EXPERIMENTAL GROUP AND CONTROL GROUP FOR PAIN (in Scores)



***Significant at 0.05 level of confidence**

RESULTS ON CADENCE

Table Ii Analysis Of Co-variance Of The Means Of Experimental Group And The Control Group In Cadence (in Per Minutes)

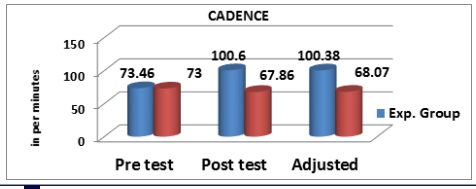
Test	Exp Group	Con Group	SV	SS	Df	MS	F
Pre test	73.46	73	Between	1.63	1	1.63	0.05
			Within	809.73	28	28.91	
Post test	100.6	67.86	Between	8036.03	1	4018.01	35.85*
			Within	3137.33	28	112.04	
Adjusted	100.38	68.07	Between	7812.57	1	3906.28	42.81*
			Within	2463.25	27	91.23	
Mean gain	27.13	5.13					

*** Significant at 0.05 level of confidence (Table F ratio at 0.05 level of confidence for df 1 and 28 = 4.20, 1 and 27 = 4.21).**

The obtained F-ratio value for the Cadence were greater than the table value, it indicates that there was a significant difference among post test and adjusted post-test means of the yoga therapy with Varma Therapy group than the control group.

The pre-test, post-test and adjusted post-test mean values of yoga therapy with Varma Therapy and the control group on Cadence were graphically presented in Figure 1.

Figure II Bar Diagram Showing Ordered Adju Sted Mean Post Test Of The Experimental Group And Control Group For Cadence (in Scores)



***Significant at 0.05 level of confidence**

CONCLUSIONS

It was concluded that the significantly reduced in Yoga therapy with Varma Therapy than the control group on Pain and improved Cadence variables among middle aged low back pain men.

REFERENCES

1. Dr. Swami Karmananda (2010), Yogic Manangement of Common Diseases, Bihar School of Yoga Pp.153.
2. B.K.S.Iyengar, (1993) The Illustrated Light on Yoga, U.K., Harper Collins Publishers Pp.45
3. Dorling Kind Ersely, (1969), Yoga - Mind and body, (USA D.K. publishing book.), Pp.75
4. Colgrove, Y. M., Gravino-Dunn, N. S., Dinyer, S. C., Sis, E. A., Heier, A. C., & Sharma, N. K. (2019). Physical and physiological effects of yoga for an underserved population with chronic low back pain. International journal of yoga, 12(3), Pp. 252.
5. Rayat, S. (2010). Effect of Yogasana Training on Low Back Pain among College Players, Journal of Sports and Physical Education 2 (4), Pp. 31-36
6. Williams, K. A., Petronis, J., Smith, D. Goodrich, D., Wu, J., Ravi, N.& Steinberg, L. (2005), effect of Iyengar yoga therapy with Varma Therapy for chronic low back pain, Pain, 115(1-2), Pp.107-117.

WEBSITES

7. www.wikipedia.org
8. www.pubmed.com
9. www.yoga point .com
10. www.ncbi.org.in
11. www.onlinelibrary.wiley.com