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CHRONIC LOWER BACK PAIN TREATED WITH COMBINATION OF INDIVIDUALISED HOMOEOPATHY AND YOGA- A NOVEL CASE STUDY

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ABSTRACT

Chronic low back pain is a common health problem these days. Low back pain (LBP) affects nearly 60-80% of people throughout their lifetime. 5-10% of all low back pain patients will develop chronic low back pain (CLBP). The condition can be disabling, and imposes an enormous social and economic burden on the community. CLBP is more prevalent in females and this prevalence increases with age in both sexes. Risk factors include occupations that include lifting heavy loads, prolonged static posture, prolonged working hours as well as psychological factors such as anxiety, depression and mental stress. There is a need to have scientific data on viable treatment modalities that are safe, effective and without side-effects. A combination of Individualized Homoeopathy along with Yoga Asanas was used in 20 patients as per the inclusion and exclusion criteria and willing to be a part of this study. Results indicated statistically significant improvement as measured by Oswestry disability index (ODI) (P<0.0001) and VAS scale for severity of pain (P<0.0001). The combined therapy of Homeopathy & Yoga can be useful for a large population of patients having chronic back pain who continue to suffer due to lack of a viable treatment option.

KEYWORDS: Chronic lower back pain, Homoeopathy, Yoga.

INTRODUCTION

The American Society of Anesthesiologists defines chronic pain as pain of any etiology not directly related to neoplastic involvement, associated with a chronic medical condition or extending in duration beyond the expected temporal boundary of tissue injury and normal healing, and adversely affecting the function or wellbeing of the individual. Low back pain (LBP) affects nearly 60-80% of people throughout their lifetime. Low back pain that has been present for longer than three months is considered chronic, although there is still no consensus about the definition of CLBP. 5-10% of all low back pain patients will develop CLBP.

Chronic low back pain is a major health problem, can be disabling, and imposes an enormous social and economic burden on the community. [3] Most patients that suffer from CLBP experience pain in the lower area of the back (lumbar and sacroiliac regions) and mobility impairment. Pain can also radiate in the lower extremities, or generalized pain can be present. Patients with CLBP can also experience movement and coordination impairments. This could affect the control of voluntary movements of the patient. [2] Chronic musculoskeletal low back pain may be due to

Lumber Disc Disease, Back pain post-traumatic fractures, Osteoarthritis, Spondylolisthesis, immune disorders like ankylosing spondylitis, rheumatoid arthritis, psoriatic arthritis, Reiter's syndrome, Spinal stenosis with severe neurological deficits like paralysis, Osteoporosis etc.^[4] CLBP is more prevalent in females and this prevalence increases with age in both sexes. Risk factors include occupations that include lifting heavy loads, prolonged static posture, prolonged working hours as well as psychological factors such as anxiety, depression and mental stress. Associated factors include low socioeconomic status and poor education.^[5]

The multifactorial cause of the low back pain demands multi dimensional approach. [6] A study by Eisenberg has shown that multidisciplinary approach involving multiple complementary and alternative medicines (CAM): and conventional therapies for low back pain is not only beneficial for low back pain but also feasible to deliver individualized intervention.^[7] coordinated and Epidemiological studies conducted in India have reported that nearly 35% of patients suffering from CLBP took no consultation. Of the 65% who sought treatment; nearly 60% received traditional treatments, 27% modern treatments and 13% both. [5,8] In this context, it is relevant to explore safe and holistic

AYUSH system of medicine that may be effective for this common distressing condition. This paper reports the results of an observational clinical study using combination of Homoeopathic treatment and Yoga for the management of CLBP in 10 patients over a period of 3 months.

Homoeopathy is increasingly becoming the treatment of choice among patients for chronic diseases. Homeopathy is a holistic system of medicine that believes that body and mind are integrated. It attempts to go to the root level of disease in each individual patient by studying the physical make-up of the patient as well as the intellectual and mental characteristics i.e. each patient is treated on basis of individualization. The homeopathic medicine initiates a healing process in the patient that beneficial for the overall health of the patient. [9,10,11]

Yoga has also generated a great deal of interest and attention among the general public and the Western scientific community as an alternative treatment for a variety of chronic health conditions, including chronic pain. Yoga is an ancient practice that originated in India more than 4000 years ago and consists of several key components, including physical postures ('asanas'), breathing techniques ('pranayama'), relaxation and meditation ('dhyana'). [12]

OBJECTIVES

To evaluate the efficacy of Individualized Homeopathy and Yoga in the management of Chronic back pain.

MATERIALS AND METHODS

10 patients who reported to the OPD with symptoms back pain more than 12 weeks duration and agreeing to be a part of this clinical study were recruited as per the inclusion criteria and exclusion criteria.

Inclusion Criteria

- Patients of both sexes between the age group 20 to 60vrs.
- Patients who consented to participate in the study.
- Presence of self-reported low back pain for more than 12 weeks.

Exclusion Criteria

- Pregnancy or recent childbirth.
- Patient having symptoms or signs that might suggest serious medical/ psychiatric illness/ history of drug abuse
- Back pain referred from visceral diseases.
- Vertebral Metastases with systemic cancer.

Patient Evaluation

The patient evaluation included pain history and physical examination of the patient as per practice guidelines for chronic pain management by the American Society of Anaesthesiologists Task Force, 2010 described below:

Pain History

- A pain history including a general medical history with emphasis on the chronology and symptomatology of the presenting complaints was taken.
- A history of current illness including information about the onset, quality, intensity, distribution, duration, course, and sensory and affective components of the pain and details about exacerbating and relieving factors were noted.
- Additional symptoms (e.g., motor, sensory, and autonomic changes) were noted.
- Information regarding previous diagnostic tests, results of previous therapies, and current therapies were reviewed by the physician.
- In addition to a history of current illness, the history included (1) a review of available records, (2) medical history, (3) surgical history, (4) social history including substance use or misuse, (5) family history, (6) history of allergies, (7) current medications including use or misuse, and (8) review of systems.
- The causes as well as the effects of pain (e.g., change in occupational status, and psychosocial dysfunction) and the impacts of previous treatment(s) was evaluated and documented. [1]

Physical examination: The physical examination included an appropriately directed neurologic and musculoskeletal evaluation with attention to other systems as indicated.

Study design: Observational clinical study.

Duration of treatment: Three months.

Treatment protocol: The patients were asked to discontinue NSAIDs if they have been taking them. A single suitable homeopathic remedy was prescribed after case taking, individualizing each patient and consulting Material Medica/ Repertory. Medicine was prescribed in 30/200/1M potency and repeated as per case requirement. The following set of yoga asanas (Patil NJ, 2015^[13]) were prescribed to patients:

- 1. Bhujangasana (Serpent Pose)
- 2. Shalabasana (locust pose)
- 3. Pavanamuktasana (wind releasing pose)
- 4. Setu bandhasana breathing (bridge pose lumbar stretch)
- 5. Artha Katichakrasana (lateral arc pose)
- 6. Uttanapadasana(Straight leg raise pose)
- 7. Supta Udarakarshanasana (folded leg lumbar stretch)
- Shava Udarakarshanasana (crossed leg lumbar stretch)
- 9. Nadi Suddhi (alternate Nostril Breathing).

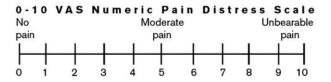
Assessment criteria: Oswestry disability index (ODI) being the gold standard of low back functional outcomes

and VAS scale for severity of pain was used as subjective assessment criteria.

Oswestry Disability Index= ODI is a validated self-report questionnaire that is composed of 10 sections (questions). Each question is rated on 6 point (0-5) scale measuring activities like personal care, sleep, social life etc. The point total from each section is summed and then divided by the total number of questions answered and multiplied by 100 to create a percentage disability. The scores range from 0-100% with lower scores mean less disability.

ODI = (Sum of items scored/Sum of sections answered) X 100

Severity of pain (VAS scale)



Statistical Analysis

The information collected on the basis of above observations was subjected to statistical analysis in terms of mean (X), standard deviation (S.D.) and standard error (S.E.) Paired 't' test was carried out at P > 0.05, P < 0.01 and P < 0.001 levels. The obtained results were interpreted as: - Insignificant P > 0.05 Significant P < 0.05 highly significant P < 0.01

RESULTS AND DISCUSSION

The incidence of CLBP is increasing in the modern scenario. The reported prevalence of CLBP in Indian population varies between 6.2% in general population to 92% in construction workers as per the published literature. The cost of modern medicine treatment is high and it also has known side effects. The Indian population has a preference for being treated for CLBP with traditional methods. [5,8]

Published literature has indicated the efficacy of Homoeopathy in CLBP. A prospective multicentre observational study conducted over a period of 2 years has shown that individualized homeopathic treatment improved health-related quality of life and reduces the use of other healthcare service in patients suffering from lower back pain. 129 adults (64.3% women, mean age 43.6 +/- 12.7 years) who suffered from CLBP (average duration 9.6 +/- 9.0 y) and other chronic diseases were treated by 48 physicians. Nearly all the patients (91.3%) had been pre-treated. The patients received an average of 6.8 +/- 6.3 homeopathic prescriptions. Patients reported marked and sustained improvements with large effect sizes (Cohen's d from 1.67 to 2.55) and QoL improved accordingly (SF-36 physical component scale d = 0.33; mental component scale d = 0.54). The use of

conventional treatment and health services reduced to half. A randomized, double-blind, placebo-controlled trial conducted in Germany from December 2003 to May 2007 in 192 patients, showed that the homeopathic drug combination can improve the treatment of chronic low back pain. December 2003 to May 2007 in 192 patients, showed that the homeopathic drug combination can improve the treatment of chronic low back pain.

Published literature has shown that Yoga is beneficial in low back pain as the isometric contraction of the involved muscles during yoga-asanas produce the effect of analgesia, bring muscular stabilization of spine, increase range of movement of spine and reduce stiffness of the spine. [16,17] A randomized controlled study conducted in Bangalore; eighty subjects (females, n = 37) with CLBP were randomly assigned to receive voga or physical exercise for 7 days. The ODI score in the yoga group compared to the control group were reported to be statistically significant (p = 0.01; effect size 1.264). Spinal flexibility measures improved significantly in both groups however, the yoga group had greater improvement as compared to controls on spinal flexion (p = 0.008; effect size 0.146), spinal extension (p =0.002; effect size 0.251), right lateral flexion (p = 0.059; effect size 0.006); and left lateral flexion (p = 0.006; effect size 0.171).^[18] A systematic review and metaanalysis that included 10 RCTs with a total of 967 CLBP patients, reported strong evidence for short-term effects of Yoga on pain (SMD=-0.48; 95% CI, -0.65 to -0.31; P<0.01), back-specific disability (SMD=-0.59; 95% CI, -0.87 to -0.30; P<0.01), and global improvement (risk ratio=3.27; 95% CI, 1.89-5.66; P<0.01). Strong evidence for a long-term effect on pain (SMD=-0.33; 95% CI, -0.59 to -0.07; P=0.01) and moderate evidence for a longterm effect on back-specific disability (SMD=-0.35; 95% CI, -0.55 to -0.15; P<0.01) was also reported. No adverse events of Yoga were reported in any of 10 RCTs included in the study.^[19]

In the present study, the mean age (±SD) of the patients was 36.20 (± 11.06) years and the mean duration of complaints (\pm SD) was 15.40 (\pm 13.80) months. The patient characteristics are described in Table 1. Homoeopathic medicines were prescribed in 30/200/1M potency after detailed case taking, case analysis and repertorization along with Yoga asanas to be practiced daily. A total of 6 homeopathic remedies were prescribed for chronic back pain after individualizing the case. The most prescribed remedies were Kali carb (n=3), Nux vomica (n=2), Rhus toxicodendron (n=2). Bryonia alba, Cimicifuga and Ruta graveolans were prescribed to one patient each. The result of patient assessment before and after 12 weeks of treatment is described in Table 2. Patients reported significant improvement in subjective criteria of assessment by VAS (P<0.001) and Oswestry Disability Index (P<0.001) (Table 2). The indication of prescribed homoeopathic medicines is given in Table 3.

Table 1: Patient characteristics.

Characteristics	N=10
Mean age \pm SD (range)	36.20 <u>+</u> 11.06
Male (%)	4 (40%)
Female (%)	6 (60%)
Duration of complaints in months \pm SD (range)	15.40 <u>+</u> 13.80
Family history of similar complaint	3 (30%)
History of heavy lifting/ Injury to back	2 (20%)
Sedentary work	4 (40%)

Table 2: Assessment before and 12 weeks after treatment.

Aggagement Critoria	Mean <u>+</u> SD		T value	P value
Assessment Criteria	BT	AT	1 value	P value
Pain (VAS scale)	7.80 ± 0.78	2.60 <u>+</u> 0.51	-17.64	P<0.0001
ODI	50.88 <u>+</u> 5.18	20.44 <u>+</u> 1.75	-17.60	P<0.0001

Table 3: Indications of prescribed Homoeopathic medicines.

S No.	Medicine	Potency	No. of patients	Indications
1.	Bryonia alba	200	1	Backache is aggravated by walking and turning in bed. Any movement increases backache. Better by lying on back. Dry tongue, excessive thirst, hard and dry constipated stool.
2.	Cimicifuga racemosa	30	1	Pain in nape of neck, upper and lower back. Back feels stiff as if from contraction of muscles. Heaviness and stiffness felt all over body.
3.	Kali carb	200	3	Backache with weakness and history of complaints starting since childbirth, abortion or with menstrual complaints. Sudden shooting pains. Aggravation from walking, wants to lie down but pains are aggravated during rest and lying on painful side.
4.	Nux vomica	30, 200	2	Sedentary habits. Backache in dorso-lumbar region with hemorrhoids and constipation. Cannot turn over in bed without first sitting up. Aggravation of back pain while standing and in the morning.
5.	Ruta graveolans	30, 200	1	Backache with bruised feeling. Pains are worse in the morning before getting up from bed and better by pressure.
6.	Rhus toxicodendron	200	2	Stiffness and pain of lower back with history of complaints starting since lifting heavy weight or more than usual exertion. Pain aggravated in morning when patient gets up and starts to walk; better by continued movement. Thirst with dry mouth. Triangular red tip of tongue.

SCOPE AND LIMITATIONS OF THE STUDY

While the results of this study are promising, this is essentially a preliminary study due to small sample size. Clinical study with larger sample size and longer follow up duration may be undertaken to further validate the results of this study.

CONCLUSION

Combined homoeopathy and Yoga is effective in patients suffering from chronic backache and warrant further studies with more stringent criteria.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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