Effect of isolated and combined practice of Yoga and Ayurveda Therapy on pain among Cervical Osteoarthritis Patients

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ABSTRACT

Cervical Osteoarthritis is one of the most common disorder of the cervical spine. It is caused by degenerative changes in the vertebral and intervertebral discs, that occur because of constant improper stress on the cervical spine due to abnormal posture, injury, ageing, rheumatoid disease. The medical management options include use of analgesics for pain. However due to the adverse effects that they produce it has its own limitations. This study has been designed to evaluate the combined effect of Yoga Therapy and Ayurvedic Medications in Cervical Osteoarthritis. It was a Randomized single blind study conducted in 30 patients attending O.P.D. of S.H.E.S. A.M.C. College Kalaburagi, Karnataka and grouped into three. The first group of subjects received Yoga treatment, the second group received Ayurvedic treatment and the third group received both Yoga and Ayurvedic treatment for eight weeks. The result of the study showed that the combined group of Yoga and Ayurveda treatment (Group C) shows good response compared to Ayurveda (Group A) and Yoga (Group B).

Key words: Yoga, Ayurveda, Osteoarthritis, Dhanurasana, Trikonasana, Bhujangasana.

INTRODUCTION

Cervical spondylosis is usually an age related condition that affects the joints in your neck. It develops as a result of the wear and tear of the cartilage and bones of the cervical spine.¹

It is caused by degenerative changes in the vertebral and intervertebral discs, that occur because of constant improper stress on the cervical spine due to abnormal posture, injury, ageing, rheumatoid disease. The medical management options include use of analgesics for pain.² However due to the adverse effects that they produce it has its own limitations.

Yoga is an ancient art that focuses on the spiritual enlightenment and physical fitness of a human being. This art has derived its principles from the “Patanjali Shastra” and focuses on the concept of healthy being and healthy living.³

It’s widely known that Yoga can enhance physical and emotional well being, but when yoga is practiced with a therapeutic intention in the form of Yoga Therapy, it can help prevent and aid recovery from physical and mental ailments. Yoga has long been practiced with therapeutic intentions as way of transforming both the body and the mind.⁴

Practitioners of many Eastern forms of medicine believe that every illness involves a certain level of...
energy blockage. By promoting the flow of prana, or vital force of yoga clears those blockages, returning the basic condition for health. Common applications may even aid more intractable problems such as AIDS and Cancer.\[5\]

By combining different techniques such as massage, stretching or alterations of the circulatory patterns, Yoga promotes specific changes in muscles, joints and organs altering the vital functions of the body. A good example would be the way Yoga Therapy can help overcome panic attacks.\[6\]

This present study has been designed to evaluate the combined effect of Yoga Therapy and Ayurvedic Medications in Cervical Osteoarthritis. It was hypothesized that there may be significant difference between the isolated and combined groups pain among the cervical osteoarthritis patients.

**MATERIALS AND METHODS**

**Study design and Patient selection**

This was a randomized single blind, comparative clinical study. Patients attending O.P.D. of S.H.E.S. A.M.C. College Kalaburagi, Karnataka, irrespective of sex, religion etc. who had presented the clinical symptoms of Cervical Osteoarthritis were included in to the study.

An elaborate case taking proforma was specially designed for the purpose of incorporating all aspects of the disease. Informed consent was taken from the patient before including them in the trial.

**Inclusion and exclusion criteria**

Patients in between 35 to 45 years of age with signs and symptoms of Cervical Osteoarthritis were included in the trial. Patients who had chronicity for more than five years and suffering with other systemic disorders and having major illness like cardiac diseases, diabetes, etc. were excluded from the trial.

**Grouping:**

A total of 30 patients fulfilling the inclusion criteria were enrolled in the study. 10 patients were registered in Group A, among them all the patients completed the treatment, whereas in Group B, total 10 patients were registered amongst them 10 patients completed the treatment. In Group C, 10 patients were registered and all the patients completed the treatment.

**Trial drug and posology**

1. **Group A (Yoga):** 10 selected patients of Cervical Osteoarthritis were placed in this group and Yogasana was taught, i.e. **Bhujangasana, Trikonasana, Dhanurasana for ½ hour daily for 8 weeks**

2. **Group B (Medication):** 10 selected patients of Cervical Osteoarthritis were placed in this group and were administered with **Pratimarsha Nasya** by **Ksheerabala 101 oil** (Nasal instillation therapy) and **Gandha Taila** capsule 1 B.D. for 8 weeks.

3. **Group C (Yoga + Medication):** 10 selected patients of Cervical Osteoarthritis were placed in this group and were administered with both Yoga Therapy and Ayurvedic Medications for 8 weeks.

**Duration of treatment:** 8 weeks (56 days).

**Diet:** Patients were kept under normal diet.

**Table 1 : Grouping of the Patients**

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapy</td>
<td>Yoga Therapy</td>
<td>Ayurvedic</td>
<td>Combined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Treatment</td>
<td></td>
</tr>
<tr>
<td>Number of</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>patients</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Duration</td>
<td>8 weeks</td>
<td>8 weeks</td>
<td>8 weeks</td>
</tr>
<tr>
<td>Advised treatment</td>
<td>Yogasanas 1) Bhujangasana 2) Trikonasana 3) Dhanurasana</td>
<td>Ayurvedic Treatment Ksheerabala Taila for partimarsha Nassya (Nasal inhalation) Gandha taila capsules internally. (One tables morning &amp; one at evening).</td>
<td>Yoga Therapy and Ayurvedic Treatment is given.</td>
</tr>
</tbody>
</table>
The purpose of the study was to find out the analysis of holistic approach through Yoga & Ayurveda in management of Cervical Osteoarthritis.

The investigator randomly choose 30 subjects for this study. These subjects were selected from S.H.E.S Ayurvedic College & Hospital OPD Kalaburgi. The thirty subjects were equally divided into three groups. Group 1 was selected for Ayurveda therapy, Group 2 for Yoga therapy & Group 3 for Ayurveda and Yoga therapy. Yoga therapy was given for period of 8 weeks training for 6 days, in a week. Ayurvedic medicines Ksheerabala 101 oil for Nasya, Gandha taila capsules internally for 8 weeks was given.

The subjects included under the study were oriented and the purpose of the study was explained. Before the commencement of the training the method of performing each test item was explained to the subjects. The investigator demonstrated the ‘asana’ and Ayurvedic treatment given to the patients with adequate explanation. It is hypothesized that there is significant difference between the three groups.

The result of the study showed that the Yoga and Ayurveda (groups) shows good response compared to

### Criterion for assessment

McGill pain questionnaire format was used for before and after the treatment was used to access the change in the pain. Goniometry was used for assessing the flexibility before and after the treatment. A goniometry was used to measure the range of motion.

### Statistical analysis

The obtained data was analyzed statistically and presented as mean ± SEM. The data collected from the three groups on the selected variables were statistically examined to find out whether there was any significant difference or not between the adjusted means by analysis of covariance method. ANOVA test was applied to assess the significant difference between the adjusted means.

### Observations and Results

There was marginal different in pre-test mean on cervical spondylosis in goniometry, whereas the difference in post-test on cervical spondylosis level across the third group (Ayurveda & Yoga) is remarkable. The post-test mean of goniometry was 76.02, 76.27 & 88.14 in Yoga group, Ayurveda group, Ayurveda & Yoga group respectively. It is noted that good response in third group compared to the other two group. (Figure 1)

There was marginal different in pre-test mean on symptoms of pain in cervical spondylosis, whereas the difference in post-test pain in cervical spondylosis level across the third group (Ayurveda & Yoga) is remarkable. The post-test mean pain was 20, 33.9 & 12.07 Yoga group, Ayurveda group, Ayurveda & Yoga group respectively. It is noted that good response in third group compared to the other two group.
Ayurveda (Group-A) and Yoga (Group-B) This may be due to the Judicial combined effect of Yogasana and the Ayurvedic Medicine cause oleation and by Yogasana increasing the flexibility of joints and increasing the blood circulation.

It was noted that good response was seen in Ayurveda & Yoga Group (Group C) and moderate response in Yoga group (Group B) and Poor response in Ayurveda Group. This shows that combined therapy is better compared to individual therapy.

CONCLUSION

In Conclusion, both the therapies Yoga and Ayurveda were effective in reducing the mean sign and symptom score of Cervical Osteoarthritis over 8 weeks of treatment. But the combined effect of Yoga and Ayurveda was more effective in reducing the mean sign and symptom score of Cervical Osteoarthritis. On the basis of this study, a better line of management can be offered to the patients by combining both Yogic and Ayurvedic therapies. Further there were no clinically hazardous effect which is really a great benefit to the patient and is of vital importance in view of the global acceptance, and the overall acquiescence to the therapy was excellent.

REFERENCES


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