The Effect of Yogic Practices and Siddha Treatments for Lumbar Spondylosis: A Case Report

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ABSTRACT
Lumbar spondylosis is the degeneration of the spinal column from any cause. In the more narrow sense, it refers to spinal osteoarthritis. Yoga is an art and science of healthy living. It is one part of the Siddha system. It develops into a separate field and treating diseases. As per yogic scriptures, the practice of yoga leads to the union of individual consciousness with that of the Universal Consciousness. This is a case of lumbar spondylosis treated with yoga asana and Siddha medicine in an OP set up. The patient was given Siddha medicine in the form of internal oral and topical application. The present case report showed promotive effects of Siddha and yogic intervention on lumbar spondylosis.

Keywords: Lumbar spondylosis, Siddha medicine, Yoga asana

INTRODUCTION
The word yoga is derived from the Sanskrit root yoj-meaning to unite, to combine or to integrate and these may be taken to mean state of union or integration. Though the exact word yoga has not appeared in Vedas most probably, the concept of the union of the individual soul (Atma and spirit) with that of the universal is well accepted. The word yoga appears very frequently in Bhagavad Gita. In fact, the name of each of the 16 chapters of Gita ends with the word yoga, such as Sankhya yoga, Jnana yoga, Karma yoga, Bhakti yoga. In Siddha, ashtanga yoga is described as Yama, Niyama, Asana, Pranayama, Dhara, Dhya, and Samadhi. It is known as raja yoga or king of yogas. The word asana has been derived from the Sanskrit root as-asit-asana, which means to sit in a posture where your buttocks touch the ground; this is the etymology of the word asana. It can be divided into two broad categories meditate and cultural (physical) [1]. Meditative postures are those which adopted to practice pranayama, concentration, meditation. Cultural postures are those which help us to maintain our positive health and to prevent from psychophysical disorders. Yogis have long claimed that yoga can cure diseases and alleviate human suffering. Researches carried out in the past few decades however have shown undoubtedly that the effect of yoga is not only physical but also biochemical and physiological. Spondylolysis refers to a posterior defect in the vertebral body at the pars interarticularis [2,3]. Usually, this defect is due to trauma or from a chronic repetitive loading and hyperextension. If this instability results in translation of the vertebral body, spondylolisthesis has occurred. The signs and symptoms may resemble the Thandagavatham in Siddha system. The epidemiology of lumbar spondylosis is present in 27% to 37% of the asymptomatic population. In the United States, more than 80% of individuals older than 40 years have lumbar spondylosis, increasing from 3% of individuals aged 20-29 years. Lumbar osteophytes have been found to be present in about 20% of men and 22% of women aged 45-64 years and in 30% of men and 28% of women aged 55-64 years. Sex ratio reports have been variable but are essentially equal. Spondylolysis occurs in 6-10% of the general population and has been found to be as high as 25% to 60% in athletes. It is especially common in young athletes younger than 18 years who participated in the sports that involve twisting or backward bending motions of the spine [4,5]. Yoga asana is prescribed for a generally healthy lifestyle and preventive care of the disease worldwide. According to the medical system, it is necessary to proven the yoga asana along with Siddha medicine is worked well in lumbar spondylosis.

Case Report
The 45-year-old women visited the OPD of Sirappu Maruthuvam, GSMC, Palayamkottai for complaints of lower
back pain, pain worse by forwarding bending, sitting or standing none for a long time, pain radiating down the legs. For 6 months, she was diagnosed with lumbar spondylosis. The MRI reports show the mild degenerative changes in the lumbar spine.

**General Examination**

Inspection of the entire spine was done and there was swelling present. No deformity of scoliosis, kyphosis, loss of lumbar lordosis or hyperlordosis of the lumbar spine. In palpation, tenderness was present over bone and soft tissues. In the abdominal examination, there was no identification of any masses. In movement, the pain was noted in flexion, extension, lateral flexion and rotation of hip joint and knee joint [6]. Neurovascular examination, normal in sensation, tone, power, and reflexes should be assessed. All peripheral pulses should also be checked.

**Treatment**

Intervention: Table 1 describes the complaints of the patient and the prescribed Siddha medicine and the asana.

<table>
<thead>
<tr>
<th>Date</th>
<th>Complaints</th>
<th>Siddha Medicine</th>
<th>Yoga Asana</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.01.2019</td>
<td>lower back pain, pain worse by forwarding bending, sitting or standing for a long time, pain radiating down the legs</td>
<td>MV*Pills 1 OD early morning adjuvant hot water</td>
<td>nil</td>
</tr>
<tr>
<td>22.01.2019</td>
<td>lower back pain, pain worse by forwarding bending, sitting or standing for a long time, pain radiating down the legs</td>
<td>TP* Oil External oil bath</td>
<td>nil</td>
</tr>
<tr>
<td>23.01.2019-31.01.2019</td>
<td>lower back pain, pain worse by forwarding bending, sitting or standing for a long time, pain radiating down the legs</td>
<td>Internal: TK* Chooranam AR* Chenduram BD adjuvant honey External: K2* thailam</td>
<td>Pranayama*</td>
</tr>
<tr>
<td>01.02.2019-11.02.2019</td>
<td>Pain reduced while in rest and standing</td>
<td>Internal: TK* Chooranam AR* Chenduram BD adjuvant honey External: K2* thailam</td>
<td>Pranayama*</td>
</tr>
<tr>
<td>12.02.2019-18.02.2019</td>
<td>Pain reduced in walking and in squat position</td>
<td>Internal: TK* Chooranam AR* Chenduram BD adjuvant honey External: K2* thailam</td>
<td>Pranayama*</td>
</tr>
<tr>
<td>19.02.2018-01.03.2019</td>
<td>Pain reduced and able to sit and stand, an absence of pain radiating to lower limbs.</td>
<td>nil</td>
<td>Pranayama*</td>
</tr>
</tbody>
</table>

MV*Pills: Murukkan vithai pills; TP*Oil: Thriphala oil; TK*: Thrikadugu chooranam; AR*: Arumuga chenduram; K2*: sivappu kukkil thailam; Pranayama*: Anuloma viloma pranayama

**Yoga Intervention**

**Pranayama:**

- Anuloma viloma pranayama: Sit in a meditative asana, close the right nostril with the right thumb and inhale on the left side for 4 seconds, use the ring finger to close the other nostril too and hold your breath for 16 seconds, release your thumb to exhale on the right side for 8 seconds. Then inhale on the same side for 4 seconds, close both nostrils again and hold your breath for 16 seconds. Release your ring finger to exhale on the left side for 8 seconds. Back is straight, shoulders are not tense. Head should not drop forward, breath is smooth. Inhalation and exhalation should not be too rapid. Don’t exhale quickly

**Pawanmuktasana:** This asana is performed with both the legs. This asana is very simple but effective. Persons having excess fat in the abdominal region may find it difficult to touch the chest with a nose. They should do with one leg only [7,8].

Spread a folded blanket on the floor and lie down straight facing the sky. Inhale and raise both the legs up, bend them from the knees and hold them with both the hands and bring them close to the chest. Then raise the head up so that the face remains between two knees. Exhale and breathe slowly after inhalation holds the breath and bring head, legs, and hands to the original position and relax.
Bhujangasana: The asanas belong to the category of sacrum asana. This asana is highly beneficial for persons suffering from a hernia, peptic ulcer, and intestinal tuberculosis should not do this asana.

Lie flat on the stomach with legs straight and the feet extended, place the hands, palms down under the shoulders, slowly raise the body above the navel until the arms are straight but the stomach and the legs must touch the floor. Bend the head, back upwards. Remain in this pose for a couple of seconds, breathe in while raising your head, retain the breath for a couple of seconds and exhale while putting the head downwards (Table 2) [9,10].

Table 2 Before and after a prognosis of the treatment

<table>
<thead>
<tr>
<th>Prognosis</th>
<th>Before Treatment</th>
<th>After Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain scale (VAS)</td>
<td>Severe pain (8)</td>
<td>mild pain (2)</td>
</tr>
<tr>
<td>Grade</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Oswestry questionnaire</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Tenderness</td>
<td>present</td>
<td>Absent</td>
</tr>
<tr>
<td>Radiating pain</td>
<td>present</td>
<td>Absent</td>
</tr>
<tr>
<td>Joint stiffness</td>
<td>present</td>
<td>Absent</td>
</tr>
<tr>
<td>Spasm</td>
<td>present</td>
<td>Absent</td>
</tr>
<tr>
<td>Numbness</td>
<td>present</td>
<td>Absent</td>
</tr>
</tbody>
</table>

DISCUSSION

Lumbar spondylosis can be described as all degenerative conditions affecting the discs, vertebral bodies, and associated joints of the lumbar vertebrae. Spondylosis is not a clinical diagnosis but instead a descriptive term utilized to designate spinal problems. Pathogenesis is degenerative in the intervertebral disc and vertebral body. Changes may occur in disc space narrowing. Nerve compression from posterior osteophytes is a possible complication only if a neuroforamen is reduced to less than 30% of normal. If lumbar spondylosis projects into the spinal canal, spinal stenosis is a possible complication. If osteophytes disappear, look for an aortic aneurysm. Aortic aneurysms can cause pressure erosions of the adjacent vertebrae. Lumbar spondylosis usually produces no symptoms. When back or sciatic pains are symptoms, lumbar spondylosis is usually an unrelated finding. Lumbar spondylosis is usually not found unless a complication ensues. It considers spondyloarthropathy, spinal stenosis, diffuse idiopathic skeletal hyperostosis, fibromyalgia, postural disturbance, aortic aneurysm, psychogenic rheumatism, ischial bursitis, trochanteric bursitis, hip arthritis, spondylolysthesis, osteoporosis, compression fracture, neoplasia, hemangioma, infectious spondylitis, endocarditis, disk disease. In this case, results show the 40 days of medicine and practicing asanas. The patient experienced the improvement of flexion of the lumbar region and knee joint. In Siddha system of medicine, it is compared to Thandagavatham. It is caused by the rearrangement of thridoshas. Vatham, Pitham, Kabam are the uyir thathukal for the body. According to thridosham, in the lumbar region, santhegam and abanavaayu are located. Pain and degeneration are caused by the vatham, numbness is caused by kabam, inflammation is caused by pitham. In this disease, degenerative changes are caused by coldness and dryness of increased vatham, heaviness and lubricity are due to increased kabam. From the line of treatment yoga and Siddha interventions show the results, it exposes the decrease in pain and normal day to day life which is not affected after the treatment. The line of treatment is treating with yoga asanas, external thailam and administrating the internal medicine with dietary changes. And advice to follow strict dietary changes, avoid the sourness and reduced quantity of salt intake. The patient was advised to report at an interval of weekly once or report as for when required for appraisal.

CONCLUSION

This paper shows the results of the case study, treating lumbar spondylosis with yoga asana and Siddha intervention. In recent decades, there is an increasing number of the patient for lumbar spondylosis, because of the occupation and postures. Siddha physicians mostly focus on pain management for chronic diseases. Therefore the majority of cases like lumbar spondylosis, disc herniation, disc bulge, and degenerative changes are treated. The prognosis is compared with the previous visit and examined the patient. In the future, this case study is support for searching pain management in yoga asana along with Siddha medicine.
DECLARATIONS

Conflict of Interest
The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

REFERENCES