

## Low Back Pain: It's Prevention and Management through Yoga and Ayurveda

Suryawanshi Pradipkumar R.<sup>1\*</sup>, Suryawanshi Pradipkumar R.<sup>2</sup>, Shweta V Musale<sup>3</sup> and Rucha Shinde<sup>4</sup>

<sup>1</sup>Department of Swasthavritta, M.G.AC.H & R.C, Salod (H), Wardha. (M.S.), India

<sup>2</sup>Department of Kaumarbhritya, K.V.T.R Ayurved College, Boradi, Dist- Dhule. (M.S.), India

<sup>3</sup>Shweta V Musale, (Dravyaguna), Ayurved peadiatrician, Shaishvam Child Speciality Clinic, Shirpur, Dist-Dhule (M.S.), India

<sup>4</sup> Rucha Shinde, B.A.M.S., Ayurved Consultant, Wardha (M.S.), India

---

### Abstract

Backache is one of the most common and widely prevalent ailments. These days due to sedentary living habits and hazardous work patterns its occurrence is increasing day by day. The psychological conditions associated with emotional stress, which bring about spasm of the muscles, may also cause backache. Chronic low back pain (CLBP) affects millions of people worldwide. There are several treatment options for chronic low back pain, although no single therapy stands out as being the most effective. It is estimated that 80% of all people will experience at least one episode of Back pain in their lifetime, with point prevalence ranging from 15% to 39%, 70% of patients with an episode of Low Back Pain recover with one month, and 90% within 3 months, only 4% patients will have symptoms larger than 6 months. According to Ayurveda degeneration is a process that occurs mainly due to ageing and in Ayurveda *vata* is the *dosha* that is mainly dominant during old age and 90% of degenerative disorders are due to vitiated *vata dosha*. Specific procedures such as *Basti*, *Podikizhi*, *Navarakizhi*, *Pizchil* etc. pacify the deranged *vata* externally where as internally some *vata* pacifying medicines are also administered to the *Panchakarma* procedures such as *Katibasti*; may also be employed. The primary goal of Yoga therapy for low back pain (LBP) is the relief of pain and functional limitation caused by a chronic lower back disorder. This is achieved by minimizing, healing, and ultimately correcting underlying physical malfunctions through a series of anatomically correct postures.

### Keywords

*Low back pain, Ayurveda, Yoga*



## INTRODUCTION

Low back pain is the most common type of back pain and is a prevalent condition that afflicts about 70% of people in developing countries at some point in their lifetime. The incidence of low back pain is maximum in young adults and middle age individuals with 74% of all health visits for low back pain made by persons between the ages of 18 and 64 years<sup>1</sup>. In addition to chronic pain, CLBP is associated with increased disability, psychological symptoms, and reduced health-related quality of life (HRQOL)<sup>2</sup>. The etiology of low back pain is not fully researched and understood; however, the psychological, psychosocial/occupational and physical factors are considered as strong causative factors.<sup>3</sup>

### *Role of Ayurveda in Low back pain:*

Ayurveda divides the Low Back Pain into two different conditions-

- *Vatakapha* predominant: Mostly in middle age

- *Vata* Predominant: Mostly in old age

In old age *vata dosha* is dominant which the main cause of 90% degenerative disorders is. Degeneration can occur due to wear and tare, in Ayurveda these are mainly called *abhighata* which will lead to a diseased condition<sup>4</sup>. In degenerative spine disorders most of the diseases are due to disc degeneration, prolapsed, bulging, dehydration, bony changes which are mainly due to different *dosha's* imbalance. In most of the disorders bone is involved with soft tissues like cartilage and nerves, leading to a *vata* predominant disorder as these are mainly the seats of *vata*, depending upon the causative factor the level of *doshic* imbalance vary and the treatment approach will be different.

### *Lumbar Spondylosis and Ayurved*

Lumbar Spondylosis can be a professional hazard with computer operators, clerks, office workers etc. or can express itself in old age due to degenerative changes. The deranged *Vata* is responsible for the typical symptoms such as morning low back

stiffness after getting out of bed, pain that decreases with rest or after exercise, low back tenderness or numbness, difficulty in walking, weakness, numbness or tingling in the low back, legs or feet.

**Ayurvedic Management:** Treatment in Ayurveda is bring the vitiated *Dosha* back to the state of health. For treating Low back pain internal as well as external treatments are done.

- Role of Panchakarma: Panchkarma therapy should be advised to every patient before starting the Shaman therapy, Rasayan therapy or Vajikaran therapy. Ayurveda describe Asthigata Vata treatment as “*Asthyashrayanam vyadhinaam Panchakarmani bheshajam, Bahyaabhyantaratah snehairsthimajjagatanam jayet*”<sup>5</sup>

In Ayurveda treatment of Asthyashrayit Vatavyadhi is clearly mentioned Panchakarma procedures such as *Katibasti*, *Basti*, *Podikizhi*, *Navarakizhi*, *Pizchil* etc. pacify the deranged *vata* externally where as internally some *vata* pacifying medicines are also administered<sup>6</sup>.

- Role of Rasayana: Rasayana or rejuvenation is such a form of

treatment in which all the tissues are nourished and enhanced. Ideal and ultimate choice to treat low back pain is *Rasayana* drug only. It is ideal to start *Rasayana* after *shodhana* i.e *Vamana/ Virechana/ Basti* etc. Herbal drugs like *Guduchi*, *Guggulu*, *Triphala*, *Trikatu*, *Chaturjataka*, *Parijataka*, *Asthisamharaka*, *Chandrashura*<sup>7</sup>. Nirgundi root powder with taila in the form of leha relieves pain in *Sandhivata*, *Kativata*, and *kampavata*<sup>8</sup>

### ***The Goal of Yoga Therapy for Low Back Pain***

The primary goal of Yoga therapy for low back pain (LBP) is relief from pain and functional limitation caused by a chronic lower back disorder<sup>9</sup>. This is achieved by minimizing, healing, and ultimately correcting underlying physical malfunctions through a series of anatomically correct postures. Yoga, as a branch of complementary alternative medicine, has emerged and is showing to be an effective treatment against nonspecific spinal pain. Recent studies have shown positive outcome of yoga in general on reducing pain and functional disability of the spine.

Proper exercise is achieved through *asanas* or postures that stretch and tone the muscles and ligaments, increase spine and joint flexibility, and ease physical tensions through movement. Proper relaxation relieves muscle tension, conserves energy, and regulates body and mind function. There are many well-documented benefits to yoga, including improved flexibility and range of motion, improved posture, increased strength, decreased pain, improved balance, and improved coordination. Individuals with an aging spine get benefit from yoga because Yoga promotes a full range of motion, helps to restore flexibility, and improve circulation in muscles and around joints.” Yoga therapy also creates a sense of well-being through the release of beta-endorphins, breaks up chronic muscle tension and stress, and prevents osteoporosis through weight-bearing exercises<sup>9</sup>.

Yoga places “an emphasis on standing poses to develop strength, stability, stamina, concentration, and body alignment<sup>10</sup>. Abnormalities of the deep spinal intrinsic muscles lead to postural and functional imbalances. Yoga therapy goals for the treatment of the aging spine include educating patients on proper body mechanics, correcting underlying internal

malfunctions, and preventing recurrence of pain through healthy postural movement patterns. According to yoga philosophy, a person’s age is determined by the flexibility of the spine and not by the number of year’s lived<sup>11</sup>. Yoga benefits the aging spine by imparting flexibility to the spine, firming up the skin, eliminating tension from the body, and strengthening abdominal muscles.

Yoga-based spinal exercises attempt to correct dysfunctions of the head, spine, thoracic cage, and pelvis. Altering leg positions changes the movement at different levels of the spine; flexed legs target the thoracic region, while extended legs target the lumbar segments<sup>12</sup>. Correct posture and proper breathing enhance spinal stability. There are certain exercises that can be used for both strengthening and stretching of the spine<sup>13</sup>.

In pranayama the *vata* control is the chief intention. In low back pain with the help of *pranayama vata* get again in *koshtha* then severity of the disease will reduce<sup>14</sup>.

### ***Yoga poses for back pain relief***<sup>15</sup>

While treating the diseases, it should be kept in mind that *asanas* or exercises with forward bending should be avoided. *Asanas* with backward bending like *Bhujangasana*, *Shalabhasana*, *dhanurasana*,

*Suptavajrasana*, *Gomukhasana*, *Ardhamastendriyasana*, *Ushtrasana*, *matyasana* and *chakrasana* etc. are helpful in this disease. One should practice long and deep inhalation and exhalation. When pain reduces, *Suryanamaskara* may also be practiced. *Nadishodhana* and *Ujjayi Pranayama* as well as exercises of back and waist described in *sukshma vyayama* also yield special benefit<sup>16</sup>. Some yoga poses that focus on spinal conditioning and restoration are depicted in **Table 1**.

**Table 1** Yoga poses for spinal conditioning

S. No.	Yogic Posture	Benefit
1	<i>Pavanmuktasana</i>	Stretches the low back muscles and thighs
2.	<i>Ardhakati Sarvangasana</i>	Strengthens the lower abdominal wall muscles
3.	<i>Makarasana</i>	Develops back extensor muscles
4.	<i>Paschimottasana</i>	Strengthens the spinal and hamstrings muscles
5.	<i>Shalabhasana</i>	Strengthens back, buttocks, thighs and leg muscles.
6.	<i>Bhujangasana</i>	Develops spinal extensor muscles
7.	<i>Shashankasana</i>	Stretch the back muscles

8.	<i>Kurmasana</i>	Strengthens the side muscles of side & abdomen
----	------------------	--

## DISCUSSION

Low back is made up of five lumbar vertebrae joined to the sacrum, the L5, S1 segment being the most mobile. The nerve roots coming out of this go into the lower extremity and pinching or compression of these nerves in the lower back would result in pain radiating into the lower extremity. According to Ayurveda, Low back pain is mainly due to *Asthimajagata Vata*, the recipe can alleviate the disease effectively moreover, the drugs processing *vatahara* property, naturally it should be work on the disease caused by the vitiated *vata*. *Basti* while eliminating accumulated *doshas* (morbid matter) from the entire body it alleviates all the diseases<sup>17</sup>. In Low back pain, continuous *Bahyasneha*, *sweda* may give a better result. *Snehana* helps in cure *vata* disorders quickly and effectively due to the *vatahara* as well as *Brihmana* (nourishing) properties. *Oleation* (*Snehana*) therapy alleviates aggravated *Vata*, Softens the body and disintegrates the adhered morbid material<sup>18</sup>. In case of postural

diseases and occupational disorders *Ninidana parivarjana* is most important.

It should be kept in mind while treating low back pain that forward bending *asanas* should be avoided. The backward bending postures give quick relief. Constant sitting for a longer period should be prevented. Back should be kept erect while sitting in chair. Use of thin mattress on hard bed is advised instead of using very thick & soft mattress. Yoga therapy exercises require relaxation of the rib cage through complete activation of the diaphragm in inhalation. This will activate the deep spinal stabilizers, including the abdominal wall (core training), diaphragm, multifidi, and pelvic muscles, which will increase abdominal pressure while reducing axial pressure on the vertebral discs and spine.

The goal of yoga-based spinal exercises is to restore normal motor function. People who have degenerative spine disorders, such as spinal arthritis, a bulging disc or a herniated disc sometimes practice yoga as a way to strengthen back muscles and lengthen the ligaments of the back, thereby promoting flexibility and taking stress off of the facet joints, vertebrae and intervertebral discs. However, if you have neck or back pain, it is important that you tailor your yoga regimen

to your specific needs because certain exercises can make your condition worse. Remember to always consult a physician and a fitness professional about determining the proper intensity of your yoga practice.

## CONCLUSION

The practice of Yoga is designed to educate students in the use of a daily regimen of self-care that acts to manage and ultimately prevent the recurrence of chronic LBP through healthy postural and movement patterns. Yoga can benefit individuals with an aging spine in many different ways, if practiced under proper guidance. The diet of those suffering from backache should consist of a salad of raw vegetables such as tomato, carrot, cabbage, cucumber, radish, lettuce and at least two steamed or lightly cooked vegetables such as cauliflower, cabbage, carrot, spinach and plenty of fruits, all except bananas. The patients should avoid fatty, spicy, and fried foods, curd, sweetmeats, sugar, condiments as well as tea and coffee. Those who smoke and take tobacco in any form should give them up completely.

## REFERENCES

1. <http://cdn.intechopen.com/pdfs-wm/36707.pdf>, Yoga as a Treatment for Low Back Pain: A Review of the Literature, Erik J. Groessl<sup>1,2</sup>, Marisa Sklar<sup>3</sup> and Douglas Chang<sup>1,2</sup>, 2.<http://cdn.intechopen.com/pdfs-wm/36707.pdf>, Yoga as a Treatment for Low Back Pain: A Review of the Literature Erik J. Groessl<sup>1,2</sup>, Marisa Sklar<sup>3</sup> and Douglas Chang<sup>1,2</sup> 1VA San Diego Healthcare System, 2University of California San Diego, 3SDSU/UCSD Joint Doctoral Program in Clinical Psychology, USA
- 3.<http://medind.nic.in/icc/t15/i1/icct15i1p3.htm>, Effectiveness of Iyengar yoga in treating spinal (back and neck) pain: A systematic review, Edith Meszaros Crow<sup>1</sup>, Emilien Jeannot<sup>2</sup>, Alison Trehwela<sup>2</sup>.
- 4.<http://www.kottathilayurveda.com/spinal-disorders.html>
- 5 Acharya YT; Charak Samhita with ayurveda dipika treaty; 5<sup>th</sup> edition, Munshiram Manoharlal Publisher, New Delhi-1992, page no.323
- 6.<http://www.moossayurveda.com/treatment1.asp>
7. Acharya Y. Charak Samhita with ayurveda dipika treaty; 5<sup>th</sup> edition, Munshiram Manoharlal Publisher, New Delhi-1992,Page no 237
8. Shastri A. Rasaratna Sammurchaya,11<sup>th</sup> Edition, Chaukhamba Surabharti Publication, Varanasi, Page no 64.
- 9.[https://en.wikipedia.org/wiki/Low\\_back\\_pain](https://en.wikipedia.org/wiki/Low_back_pain)
10. <http://m.yogabywater.net/About.html>
11. <http://yoga.iloveindia.com/yoga-benefits/anti-aging.html>
12. Gandhi. Yoga and aging, spine, news. [laserspineinstitute.com /.../ Yoga Article](http://laserspineinstitute.com/.../Yoga%20Article), updated
13. <http://www.intechopen.com/download/pdf/36704>, Exercise in low back pain,
14. Vinod Babu, Ayurvedic management of low back ache, documentation of workshop, 2010, page no-110
15. [www.laserspineinstitute.com/beendoctors/section/exercise/22/yoga/63/](http://www.laserspineinstitute.com/beendoctors/section/exercise/22/yoga/63/)
16. Yogic & Naturopathic treatment for common ailments, CCRYN, New Delhi, Fourth edition 2010, page no,41-42.
17. R.K.Sharma,charak Samhita,Vol 5, Edition 2013, Choukhamba

Sanskrit series office, Varanasi,page  
no-158

18. R.K.Sharma,charak Samhita,Vol  
5,Edition 2013, Choukhamba  
Sanskrit series office, Varanasi,page  
no-142.