

The Role of Markataasan for Low Back Pain in Menopause

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Abstract

Menopause is defined as the permanent cessation of ovulation. A woman's reproductive end begins around age 45 or 50. It is an essential part of every woman. Menopause is a condition for women in which their menstrual cycle stops as women get older. The exact time of menopause depends on the health and hormones of the woman. 3 out of every 4 women complain during menopause. For many women, this period can be a difficult physical and psychological change. Symptoms experienced include vasomotor (hot flushes and night sweats), psychological (depression, insomnia), somatic (palpitations, back pain, and dizziness), and sexual (decreased libido and vaginal dryness). Menopausal symptoms are associated with a decline in physical, mental and sexual health, leading to a reduction in women's quality of life. Menopausal women are more likely to have heart disease, obesity, depression, decreased fertility, and osteoporosis. Along with this, there is also deficiency of Vitamin D and calcium etc., due to which many problems have to be faced. In which back pain is also a problem. Back pain appears to be an integral part of most human lives and causes a variety of sufferings and disabilities.

Low back pain is a very common ailment that has a tremendous impact on society, low back pain is the second leading cause of absenteeism from work in our country, causing more productivity loss than any other medical condition. .Becomes the reason for. Most of the time the diagnosis mainly depends on the history, nature, location and duration of the pain. Back pain accounts for 32 to 50 % of rheumatic complaints in general medical practice and more than 70 % over a lifetime in most industrialized countries. By this count, it is estimated that more than three-quarters of the world's population experiences lower back pain at some point in their lives. The highest prevalence is seen among individuals aged 45–55, a highly productive and important age group.

The commonly used synthetic and semi-synthetic drugs for the treatment of low back pain in women are undoubtedly very useful and effective, but their well-known severe adverse effects have restricted their use for long-term therapy. Is Therefore, to overcome these problems, there is a great need to overcome the pain.

Yoga has been found to be extremely useful for the management of back pain in women.

We will study the role of Markataasan for the management of back pain in menopause.

Objective: *This paper summarizes that women suffering from low back pain during menopause can be treated with yoga exercises.*

Methodology- *The study used reviews of various articles, publications, books and topics available online related to yoga practice [PubMed]. [Google Scholar) etc.*

Key Word- Menopause, back pain, Markataasan.

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Introduction

Menopause –

Menopause is defined retrospectively as the cessation of spontaneous menses for 12 months. Worldwide, most women enter menopause between the ages of 49 and 52 years.^(1,2)

In the United States, the average age of menopause is 51 years. An estimated 6000 US women reach menopause each day, and with increasing life expectancy, will spend approximately 40% of their lives in the Postmenopause phase. Factors associated with earlier menopause include smoking, lower body mass index, null parity, and lower educational attainment.^(3,4)

Although menopause is often seen as a single point in time, correlating with the cessation of ovarian production of oocytes, the menopausal transition actually occurs over several years and is a dynamic period when women experience predictable changes to their menstrual cycle. The Stages of Reproductive Aging Workshop staging system (STRAW110) is considered the gold standard for characterizing the changes associated with reproductive aging. This staging system consists of three phases (reproductive, menopausal transition, and Postmenopause), and includes seven stages within the phases. It describes the typical duration, menstrual cycle characteristics, hormone levels, antral follicle count, and symptoms for each stage.⁽⁵⁾

Scope of Menopause Problem in India

India has a huge population, which has already crossed the 1 billion mark, with 71 million people above the age of 60 and about 43 million post-menopausal women. According to the estimated data, in 2026, India's population will be 1.4 billion, the number of people above 60 years of age will be 173 million and the post-menopausal population will be 103 million. The average age of menopause in Indian women is 47.5 years and the average life expectancy is 71 years. The diverse lifestyle of the people in the country, the rural-urban divide (72% is rural), the economic imbalance between the poor, the middle class and the rich, and the multicultural, multi-ethnic, multi-religious composition of the population make it difficult to prepare.⁽⁶⁾

Common problem in menopause

The distribution of menopausal symptoms is extremely diverse. Individual differences exist in India as they exist all over the world. Menopausal symptoms have been found to differ in rural and urban areas. Urogenital symptoms, fatigue and weakness, body aches and pains are the major symptoms in both rural and urban menopausal women. Hot flushes, psychotic symptoms, mood swings and sexual dysfunction are more common in urban women.⁽⁷⁾

Signs and symptoms of menopause

Menopausal Transition

- Menstrual irregularity
- Hot flashes
- Night sweats
- Sleep disruption
- **Osteoporosis (low back pain)**

Postmenopause

- Vaginal dryness
- Vulvovaginal atrophy
- Lower urinary tract symptoms
- Dyspareunia
- **Osteoporosis (low back pain)**

Back pain in menopause

Women spend about one-third of their lives in menopause.⁽⁸⁾ In this period, apart from other concomitant conditions, women also suffer from various musculoskeletal disorders. One such problem is low back pain (LBP), which is more prevalent in women than men, and tends to increase with age.⁽⁹⁾ According to Dediccao et al, approximately 70% of menopausal women are estrogen deficient. Associated symptoms, such as vasomotor instability, sleep disorders, decreased bone mineral density, genitourinary atrophy, and lipoprotein.^(10,11)

Most Studies suggest that women with higher menopausal symptoms may be most susceptible to back pain.⁽¹²⁾ Despite this, very little attention has been paid to spinal pain/low back pain and various peripheral joint problems that are equally prevalent in this period of life.^(13,14) The bio-psychosocial model attributes gender differences in pain to interactions between biological, and psychological,⁽¹⁵⁾ The increased pain sensitivity in women may also partially explain the greater reports of pain by women than men. More recently, it has been shown that genetics also play a role in the development of LBP.⁽¹⁶⁾

Estrogen participates in a variety of biological processes through various molecular mechanisms. The loss of collagen in bones and skin is commonly observed in the postmenopausal period due to decreased estrogen levels.⁽¹⁷⁾

This is a major medical and socio-economic challenge to the extent that some researchers consider it a lifestyle disease. They say. It is the leading cause of absenteeism in the workplace and the second reason for visiting primary health care professionals. Spinal pain has negative psychological consequences as it disrupts the daily functioning of the affected person. It also poses a serious socio-economic problem – it is costly due to disability-related absenteeism in the workplace.⁽¹⁸⁾

Causes of back pain

The causes of low back pain can be very complex and there are many structures in the low back region which can cause pain. One of the common cause for the backache is poor posture habit. Balance posture decreases stress on back by keeping the muscles, bones and supporting parts in their natural position. Any changes from normal spine curve can stress or pull muscles. This leads to increase muscle contraction which causes pain. The following parts of spinal anatomy can cause pain.

- ❖ The large nerve roots that go to the legs and arms may be irritated.
- ❖ The smaller nerves that innervate the spine may be irritated
- ❖ The large paired back muscles (erector spine) may be strained.
- ❖ The bone, ligaments or joints may be injured.
- ❖ The intervertebral disc may be injured.⁽¹⁹⁾

Common treatment modules for LBA management through Yogic Exercise

Various modalities for the management of LBA that have been proposed include physiotherapeutic procedures, exercise, manual therapy, massage, and physical therapy. The American Pain Society and the American College of Physicians state that there is good evidence that specific physical exercises recommended by physiotherapists have a moderately positive effect on LBP. These organizations also state that there is no good evidence for physical therapy (transcutaneous electrical nerve stimulation and ultrasound) for LBP and therefore they do not recommend their use. Exercise in a safe position (with minimal risk of increasing pain), i.e. the supine position, and exercises to strengthen the pelvic floor, trans versus abdominis, and multifidus muscles are the most important stabilizers of the lower spine. It is thus concluded that the menopausal stage of life is associated with an increased incidence of LBP. An increased body mass index (≥ 30) is one of the factors increasing the prevalence of pain.

LBP pain affects millions of people. There are many treatment options, but few have strong evidence of effectiveness.^(20,21) Several randomized control trials (RCT) have been completed regarding the effect of yoga on low back pain; however, their outcomes with respect to pain and functional disability differ. A few meta-analysis studies were completed with findings as of 2011, showing a generally positive effect, but limited in general by the relatively small total number of eligible RCT.⁽²²⁻²⁵⁾

According to Mishra et al.⁽²⁶⁾ An exercise program for menopausal women should include endurance (aerobic) exercise, strength exercise, and balance exercise. Of these, aerobics, weight lifting, and resistance exercise are effective in increasing bone mineral density of the spine in menopausal women.⁽²⁷⁾ This is a highly desirable effect considering the fact that bone mineral density tends to decrease at this stage of a woman's life.⁽²⁸⁾

Newer Approach for LBA management through Markataasan

The word "yoga" literally means "to join", or "to join together" in order to create a harmonious relationship between body, mind and emotions in order to unite the individual human soul with the Divine Soul or True Self.^(29,30)

Yoga involves a process of physical and mental training towards self-realization, the practice of which consists of eight component parts. The eight components guide conduct within society, personal discipline, posture/mudra ("posture"), breathing, concentration, contemplation, meditation and absorption/peace. As described classically, yoga posture is one of the eight components of a comprehensive discipline of physical, mental and spiritual health. Modern hatha yoga typically combines elements of asana positions, breathing, concentration, and meditation. A typical hatha yoga program consists of a group led by an instructor for sessions of ~60–90 minutes. The instructor provides guidance on correct posture, breathing and focus. They often encourage positive self-images. Iyengar yoga focuses on the use of modifications (such as blocks, belts, chairs, blankets) to maintain posture and accommodate individual physical abilities. Other yoga styles exist and the experience within one style or class can vary greatly. Intensity can range from mild to intense, with some types of yoga providing a cardiovascular workout, and others focusing on relaxation and calmness. Another experiential factor comes from the yoga center itself, which can provide a sense of social and spiritual community.

Yoga has grown in popularity over the past several years. National Health Interview Survey data conducted by the Centers for Disease Control and Prevention (CDC) show increased use for complementary and alternative medicine (CAM) treatments.⁽³¹⁾ In 2007, yoga was the 7th most commonly used CAM therapy. CAM therapy is mostly used to treat musculoskeletal conditions, especially back pain and to a lesser extent neck pain.

Physical and mental therapy is one of yoga's most important achievements. What makes it so powerful and effective is the fact that it works on the holistic principles of harmony and unification. Yoga has succeeded as an alternative form of therapy for diseases. According to medical scientists, yoga therapy is successful because of the balance created in the nervous and endocrine systems which directly influences all the other systems and organs of the body.⁽³²⁾

In Yogic Asanas so many Asanas (kriyas) and therapies are mentioned to relieve the symptoms of low back pain in Menopause. Out of them, I have chosen Markata-asana, to see the effect in low back pain in menopausal women.

Markataasan: - Markataasan is a composite term having two Sanskrit words, "markata" meaning "monkey" and "asana" refers to "pose" and English name, spinal twist pose. Markataasan is described in Haṭha ratnavali as Hatha yoga in 17th century.

There are three variation of Markatasana-

Markataasana-1

Markataasana-2

Markataasana-3

Method of Markataasan-

Variation-1

1. Lie straight and spread both the hands parallel to the shoulders. The palms should be open towards the sky. Then bend both the legs from the knees and keep them near the buttocks.
2. Now bend the knees to the right and rest it on the right knee. The left knee should be resting on the right knee and the left foot should rest on the heel of the right foot. Keep the neck twisted to the left.
3. Similarly do this asana from the left side also.



Variation-2

1. Lie straight and spread both the hands parallel to the shoulders. The palms should be open towards the sky. Then bend both the legs from the knees and keep them near the buttocks. There should be a difference of about one and a half feet in the feet.
2. Now bend the right knee to the right and rest it on the ground. Bend the right knee so that the left knee reaches near the right toe and also rest the left knee on the ground near the right knee on the right side. Keep the neck folded to the left.
3. Do the same way with the other leg.



Variation-3

1. Lie straight and spread both the hands parallel to the shoulders. The palms should be open towards the sky.
2. Lifting the right leg 90 degrees, slowly move it to the left hand, keeping the neck folded to the right.
3. After staying in this position for some time, lift the leg straight at 90 degrees and slowly rest it on the ground.
4. Similarly do the asana with the left leg.
5. In the end, raise both the legs together at 90 degrees and keep them near the left hand. Bend the neck in the opposite direction and look to the right, after some times straighten the legs as before.
6. Similarly, lift both the legs and keep them near the right hand. Turn your neck to the left and look to the left. It happened one frequency. Do 3-4 repetitions like this.
7. Precautions - Those who have more pain in the back, do not do it with both feet simultaneously, they should do 2-3 repetitions with each leg.



Benefits of Markataasan -

1. Promotes spinal flexibility
2. Tones the abdomen
3. Stimulates the respiratory organs
4. Calms the mind
5. Boosts creativity

Therapeutic use of Markataasan

- Markataasan helps to relieve back pain.
- This pose is effective in treating sciatica.
- Spinal twist also involves stretching the muscles of the neck, thus help in to relieve neck pain.
- People with cervical spondylitis also get relief from this pose.
- It is beneficial to cure the indigestion, constipation and other digestive disorders.
- It also acts as are medial pose to relieve stiffness in the lower back.^(33,34)

Conclusion

Yoga is the foremost science of self-realization and right living. It is described as one that pacifies and destroys inner turmoil. Through various methods, it awakens the calmness of the soul, enabling one to look at life equally in all its aspects. The principles strive to bring about balance and harmony in all aspects of existence. Man is believed to experience every interaction simultaneously through physical, vital, emotional, intellectual and spiritual experiences, with the physical being the grossest and the others being progressively subtler; And intellectual and spiritual concepts are the most subtle. It also states that the waves in the emotional sheath affect the vital energy flow and the gross dimensions of the physical body.

Cultivation of body and mind through regular yogic input brings equanimity of perception, which makes traditional input without painkillers more effective in controlling menopausal back pain crisis. Let us learn and use the components of this timeless science to awaken the inner resources of our patients suffering from back pain, and channelize the multidimensional vortex of distress to improve quality of life and achieve "freedom from pain". Calm down.⁽³⁵⁾

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