

Impact Of Yogasana On Cervical Spondylosis

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ABSTRACT: Age-related wear and tear on your neck's spinal discs is commonly referred to as spondylosis of the cervical spine. Osteoarthritis signs, such as bony bulge along the outermost portion of bones (bone spurs), appear as the discs shrink and losing fluids. A prevalent disorder that grows worse with age is cervical spondylosis. Cervical spondylosis affecting more than 85% among people over 60. Cervical spondylosis is a very big problem which is increasing continuously due to wrong diet and nowadays due to excessive use of phones and laptops, the young generation is more affected by this disease, due to cervical spondylosis people are feel difficulties in their routine work as well as daily tasks. therefore, a need of solution for the problem of cervical spondylosis. the practicing of Yogasana and healthy lifestyle cervical spondylosis can be managed. Yogasana relieves neck pain by gently stretching and relaxing the muscles in the neck. It also improves the flexibility, relieving pain and strengthening to the muscles of spine. Practicing yogasana also leads to more energy and therefore better productivity. Some effective yogasana are Tadasana Bhujangasana, Makrasana, Mandukasana, Gomukhasana, Dhanurasana, Ushtrasana, Ardhamatsyendrasana, Vakrasana, and sookshma vyayam such as Skandha and Greeva Sanchalan.

KEY WORDS: cervical spine, osteoarthritis, intervertebral disc, sukshma vyayam, yogasana ,Greeva sanchalana.

INTRODUCTION:

A "wear and tear" condition of the neck's vertebrae and discs has been identified as cervical spondylosis. Among many people, it doesn't trigger symptoms and is a normal aspect of aging. But occasionally, it might be the cause of neck pain. [1] Age is the main risk factor for spondylosis, while a history of neck injuries may also be a role. For individuals with chronic neck discomfort who are older than thirty, cervical spondylosis is frequently applied. After 40 years, 50% of patients show radiological evidence of deterioration, and up to 85% do so after 60 years.[2] The word "cervical spondylosis" indicates common changes in the rear of the neck spine resulting from aging by lifestyle habits. Age leads the spine's component bones, or vertebrae, eventually grow bone spurs and lose part of the shock-absorbing discs.[3] C5-C6 and C6-C7 cervical spine levels are frequently affected by cervical spondylosis. Changing these factors may affect the spine's stability and alignment. They may not be felt, or they can lead to difficulties with pressure on the blood vessels, nerves, and spine. Numerous bodily parts may experience discomfort, numbness, and weakness as a result of this pressure.[4] One or more of the nerve roots may eventually become compressed as a result of the degeneration's cumulative effects. In more severe situations, the spinal cord might also be affected. Some patients may experience high cervical spine

abnormalities as a result of this illness, however depending on the location and severity of the spinal damage, the symptoms may differ in intensity. cervical spondylosis generally arises from problems with the ligaments and facet joints. Neck pain, numbness in the area of nerve root innervation, nausea, vomiting, vertigo, and other associated symptoms. [5] People have long yearned for a healthy and tranquil existence, but in the modern day, with fast-paced technological advancements, sedentary lifestyles, and lack of time, individuals find it difficult to focus on their proper routines and confronted with numerous issues. [6] Spondylitic alterations occur in the cervical spine region as a result of occupational stress, incorrectly curved sitting postures, extensive traveling, needless sleeping, excessive use of mobile and laptops and other factors. [7] A significant role for neck discomfort is also played by psychological risk factors, such as chronic stress, a lack of social support, anxiety and depression. Within The majority of individuals who experience degenerative changes in their cervical spine without any symptoms are often older than 30 to 40 years of age and exhibit symptoms that result from compression of neural tissues. [8] Yoga relaxation techniques have a significant role in the therapy of cervical spondylosis. These techniques can be used to improve sitting or spinal posture, increase willpower, and ease pain and stiffness in the neck. [9]

PATHOPHYSIOLOGY

The major pathophysiological process entailing the crucial degenerative event leading to cervical spondylosis is a worsening state that causes biomechanical changes in the cervical spine. It appears as vascular and neuronal structures being compressed secondarily. Age causes the nucleus pulposus to lose elasticity and become smaller and more fibrous. It begins with the cervical disc desiccation, which is caused by an increase in the keratin-chondroitin ratio that causes alterations to the proteoglycan matrix, resulting in the loss of water, protein, mono and poly saccharides. Then, when the interstice gets smaller, the annulus fibrosus assumes a greater role in weight bearing and is more prone to protrude into the spinal canal. Cervical lordosis may be lost as a result of this disc space height decrease, which starts ventrally. A kyphotic deformity is subsequently caused by applying additional stresses to the ventral surface of the

Vertebral bodies. [10, 11]

always observed that an interrelationship between stress and cervical spondylosis. Stress is a common issue in the modern world, according to numerous research. People feel a great deal of burdens on their mental health as a result of everyday problems. In case of stress, sadness and certain spinal cord injuries patient may adopt incorrect posture and it may be cause of cervical spondylosis. [12] Asanas that are useful for managing cervical spondylosis. It has been noted through applied research that regular yoga practice not only controls these diseases but also maintains and improves physical and mental well-being and stops the disease process. [13] The yoga system was not created with the intention of treating patients. Yoga has also been demonstrated to be a useful method for lowering stress and pain levels. It can be done in a supine or sitting position to promote good health, strengthen the will to live, focus, and ease pain and stiffness in the neck. Tadasana Bhujangasana, Makrasana Gomukhasana, Dhanurasana, Ushtrasana, Ardhamatsyendrasana, Vakrasana, and sookshma vyayam such as Skandha and Greeva Sanchalan are effective in reducing pain and stiffness in the neck area while treating cervical spondylosis. [14]

METHOD: (according to Aasan Pranayam Mudra Bandh)

Sukshma vyayam:

1. Mushtika Bandhana, or clutching the hands: Take a seat in the base position or cross-legged. At shoulder height, hold both arms straight in front of the body. With the palms facing downwards, spread the fingers as widely apart as possible. Keeping the thumbs inside, tightly close the fingers to form a hand. Ten times, repetition. Opening the hands and taking a breath: inhale. Breathe out as you close your hands.

2. Manibandha Naman (wrist bending): Bend the hands forward from the wrists so that the fingers point toward the floor. Repeat 10 times. Breathing: Inhale with the backward movement. Exhale with the forward movement.

3. Chakra manibandha: Rotating your wrist joints with the Manibandha Chakra Make sure your fist always faces downward as you slowly rotate it around your wrist. Draw a circle as wide as you can. Repeat ten times in a clockwise and ten times counterclockwise direction.

4. Kehuni Naman (bending the elbow): The palms of the hands should be facing up while they are open. Bring

the fingers to the shoulders and bend the arms at the elbows.

5. Rotating the Shoulder or Skandh Chakra: Put your right hand's fingers on your right shoulder. Keep the back straight and the left hand on the left shoulder. Turn your elbow in a wide circle. elbows at the same time in a large circle. Try to touch the elbows in front of the chest on the forward movement and touch the ears while moving up. The shoulder asanas relieve the strain of driving and office work, and also help relieve the pressure in cervical spondylitis and frozen shoulder. They maintain the shape of the shoulders and chest.

6. Greeva Sanchalana : (neck motions) Try to touch your chin to your chest by slowly extending your head forward. Put your head as far back as you can comfortably. As you move backward, take breath. Breathe out as you move ahead. Move your head slowly to the right, keeping your right ear near to your right shoulder without lifting your shoulders. Turn the head to circular motion, slowly rotate the head downward, to the right, backward, and finally to the left. Feel the neck's muscles and joints become more flexible, as well as the moving stretch around the neck.

Contraindications: People who are elderly, have low or high blood pressure, experience vertigo, or have severe cervical spondylosis should not practice these neck movements. For any of these issues, professional assistance should be sought. Patients with cervical spondylosis should never bend their neck forward.

Advantages: All of the nerves that link the body's many organs and limbs run through the neck. Thus, stress builds up in the shoulder and neck muscles, particularly after extended desk labor. These poses relieve stiffness, weight, and tension in the neck, shoulders, and head.

Yogasana: Tadasana In the palm tree pose, or tadasana, stand with your feet together or slightly apart and your arms by your sides. Maintain a steady posture and equally distribute your weight across both feet. Lift your arms above your head. Link your fingers and raise your palms. Put your hands atop your head. Fix your gaze on a spot on the wall that is just a little bit higher than your head. This point should be the focus of the practice the entire time. Breathe in and raise your arms, shoulders, and chest. Ascend to your toes by raising your heels. Extend your entire body from top to bottom without wobbling your feet or losing your balance. For a few seconds, maintain both the position and the breath. Asana practice increases the body's flexibility and capacity to adapt to changes in its surroundings. We activate every muscle in our body to hold and balance yoga poses, which helps to maintain our bodies strong. Our shoulders, lower back, hands, and feet are all strengthened by the many yoga poses.

Benefits: This pose improves equilibrium both mentally and physically. Stretching and loosening the entire spine helps to relieve congestion in the spinal nerves where they emerge from the spinal column. Stretching the muscles and ligaments allows the growing bones to grow longer, which contributes to a rise in height. Stretching the rectus abdomini muscles and the intestines.

Bhujangasana: Place your feet together, your legs straight, and your soles up on the stomach while you lie flat. Lay the palms of your hands flat on the ground, slightly off-center from your shoulders, and point your fingers forward. Raise the head slowly. Raise the neck and then the shoulders after gently cocking the head backward until the chin points forward and the back of the neck is compressed. raise the shoulders, then the neck. To lift the trunk and arch the back, straighten your elbows by engaging your arm and back muscles in that order. In the most ideal posture, the navel is lifted to a maximum of three cm while the pubic bone stays in contact with the floor. If the navel is raised too high, the bend tends to be in the knees and not in the back.

It helps people with cervical spondylosis. It works well to deepen cervical flexion and stretch the trapezius muscle. It improves flexibility in the upper back region by strengthening the muscles in the chest, shoulders, and neck joint and reducing stiffness in these areas. In an attempt to sustain the pose, the bhujangasana muscles are stretched against some resistance from the tendons and joints. Because of this, the tension in the muscles grows.

Makrasana: Makarasana Crocodile posture, or Makarasana On your stomach, lie flat. Raise your head and shoulders, place your elbows on the ground, and rest your chin in the palms of your hands. Erector spinae is efficiently straightened in Makarasana, which is named after the Sanskrit word "Makar," which means

"crocodile." Those with cervical spondylosis and tight necks can benefit from this yoga practice.

Ushtrasana: The term "Ushtra" in Sanskrit means "camel." To perform this asana, participants were first instructed to sit on the floor, stretch their legs, maintain an upright spine, and place their palms on the floor next to their buttocks. After that, bend your leg at the knees, sit on your heels with your buttocks between them, keep your knees in line with your shoulders, and turn your feet so that the soles face the ceiling. In addition to keeping the hands on the thighs, the person breathed in an arched back, put their palms on their heels, and maintained their arms straight. There was no strain on the neck since it was kept in its natural posture. Those with neck problems can benefit from this yoga practice.

Gomukhasana: Cow's face posture, or Gomukhasana Place your right knee squarely above your left knee while sitting in dhyana veerasana. Raise your left arm to the side, then fold it behind your back. The right arm should be stretched above the head and then crossed over the right shoulder. The palm of the right hand should rest against the spine, and the back of the left hand should be in touch with the spine. Make an effort to hold both hands behind the back with your fingers. Ten minutes or more of practice will reduce fatigue, stress, and anxiety. By boosting vitality and awareness and opening up the chest, it improves posture and relieves back pain, sciatica, rheumatism, and general stiffness in the shoulders and neck. It reduces leg cramps and increases the flexibility of the leg muscles.

Ardhamatsyendrasana: it promotes spinal flexibility, tones the spinal nerves, strengthens the sternocleidomastoid and elevator scapulae, and enhances spinal cord function. Both appetite loss and cervical spondylosis benefit from it.

Pranayam: Stages 1 and 2 of Nadi Shodhana Pranayama, Bhramari.

Meditation: imagination, Om meditation.

Relaxation: yognidra in shavasana for relaxation.

Yogic counselling: Guidance, Literature, Inspiration, Speech

Work in blissful awareness, complete your tasks, and practice Karma yoga.

DISCUSSION- cervical spondylosis causes by disc desiccation and cervical vertebrae degeneration and it can cause symptoms including stiffness, neck pain and vertigo. practicing yogasana with correct posture can be management of cervical spondylosis but a bad posture can put additional strain on the cervical spine, which cause of worsen of the symptoms of cervical spondylosis.[15] some yoga posture can target particular neck and upper back muscles, which can be a gentle and useful kind of physical therapy for the cervical spine. these yoga poses treat cervical spondylosis. First, by using a variety of stretching and strengthening exercises, it increases range of motion and flexibility in the neck and upper back. Cervical spondylosis symptoms may be significantly impacted by stress and anxiety reduction, which yogasana can help with. The symptoms of cervical spondylosis can be made worse by stress, which can also induce muscle tension and tightness in the neck and upper back. By emphasizing breathing and relaxation, yogasana can assist in lowering stress levels, which will lessen pain and tightness in the muscles. In general, yoga poses can aid with posture, which is crucial for managing cervical spondylosis. Inadequate posture can exacerbate already-existing cervical spine deterioration by putting additional strain on it. [16] Yogasana helps lessen the strain on the cervical spine, which improves function and lessens pain by encouraging good alignment and strengthening the muscles that support the neck and upper back.

Conclusion: Yogasanas (yoga postures) can be beneficial in managing cervical spondylosis by: Improving flexibility and range of motion, strengthening neck and shoulder muscles, Reducing pain and inflammation. Enhancing posture and spinal alignment, Relieving stress and tension. Some beneficial yogic practices for cervical spondylosis is sukshma vyayam (Greeva sanchalana) some yogasana (Tadasana, Ustrasana, Bhujangasana, Makarasana, Ardhamatsyendrasana, Gomukhasana). (Sarasvati, 2015) some pranayama (Nadishodhan techniques 1 and 2, Bhramari) relaxation (yognidra in shavasana) and meditations (imagination, Om meditation). Consult a healthcare professional or yoga therapist before starting yoga practice. Avoid deep or extreme neck bends, twists, or extensions. avoid poses that exacerbate pain or discomfort.

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