Minireview Article

THE PHYSIOLOGICAL ASPECT OF BACKBENDING ASANA'S

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ABSTRACT

The Hathyogic Asanas are the preparatory limbs for spiritual awakening, but they are also an essential health science. True, practicing Asanas takes more time and work for a long-term and beneficial effect, but it is a very potent and effective therapy.

The numerous organs and systems in the physical body each have their own function to fulfil, but there should be total coordination between them, which is achieved via the practice of Hathyogic Asanas. Asanas serve to control psychosomatic disorders by improving physiological efficiency, anatomic balance, and mental poise and equilibrium in the body.

It was employed by yogis and rishis in ancient times for the relief and elimination of all kinds of ailments and faults, and it was only recently recognized that asana are more powerful and effective techniques of managing the entire body. Hathyogic asana has been the subject of scientific research and investigations for the past three decades, proving that it offers biological benefits.

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KEYWORD Back Bending Asana, Physiological Effect, Sympathetic Nervous System

1.INTRODUCTION

Yoga is a traditional and cultural science of India. Yoga has been taught and practiced for centuries. Yoga has been defined as the most scientific way to achieve the "divine consciousness" of the "God". Hathyoga, Asthanga Yoga, Bhaktiyoga, Mantra Yoga etc. Yoga is one of the best philosophies of India but in the present time it is also an experimental science, the scientific nature of yoga Asana and Pranayama was first established by Swami Kaivalyanand in 1924 established Kaivalya Dham Institute of Scientific research on yoga. He and Dr S.L. Vinekar described the principle of yoga therapy in term of anatomy and physiology of yogic asanas and Pranayama practices. it helps to understand the mechanism of yogic practices and

their appropriate application for the patient of the normal individual. However, there was no book available on it in 1984 this research finding remove various misconceptions about yoga and mystical sheath flying over it and also open a door for further research in Yoga.

Yoga is one of the best philosophies of India but in the present time it is also an experimental science, [1]

"**Effect of yoga practices on micronutrients absorption and physical fitness**" In this research the included hath yogic Asana Dhanurasana, Matseyendrasana Mayurasana Padmasana Goumukhasana and the result found that yoga practices improve micronutrients absorption in adolescence and it also helpful in improving overall physical fitness. [2]

2.PHYSIOLOGY OF BACK BENDING ASANA

Back-bending asanas defy gravity and hence necessitate a lot of strength and energy to complete. Because they enlarge the chest and facilitate inhaling, they are both invigorating and extroverting. They tone and strengthen the muscles that regulate the spine while stretching abdominal muscles. Preventing a slipping disc and other back problems. The nerves that arise from the spaces between the vertebrae are also toned. Because these nerves provide energy to all of the other nerves, organs, and muscles in the body, this is advantageous throughout the body.

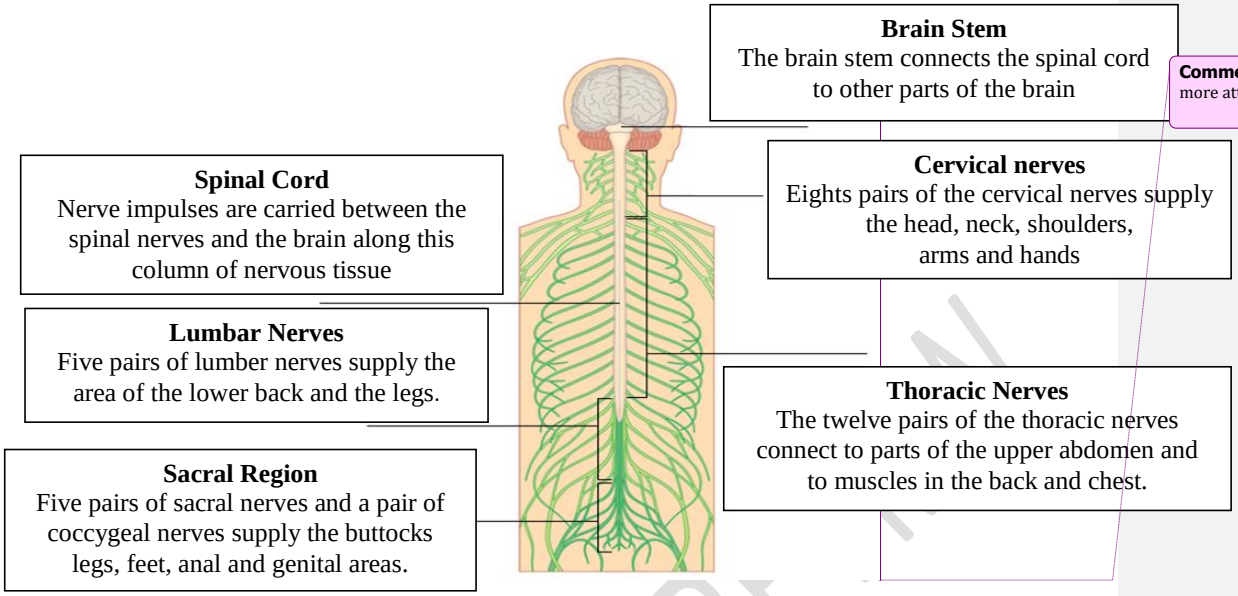

Figure 1. Structure of spine and spinal nerve association with body part.

Practice of back-bending asana can cure postural defects and neuromuscular imbalances of the vertebral column. Because of the constant maintenance of an upright position, impure blood tends to build in the back region, where circulation is sluggish. Back-bending asana helps to circulate, purify, and enrich blood in this area. These asanas aid neuro-toning of all connected organs by creating a negative pressure in the abdomen and pelvis. Stretch the muscles in this area, especially the rectus abdiminis, to massage the abdominal and pelvic organs. They assist relieve menstruation and other gynecological diseases by toning the ovaries and uterus. Enhance appetite, relieve constipation, a benefit all abdominal organs, particularly the liver, kidneys, and adrenal glands. Pressurizes the air within the lungs and help to open inactive alveoli, improving both the removal of CO2 and intake of O2. The heart is toned and strengthened by massage, due to the increased pressure within the chest cavity. When we are breathing naturally, inhalation restricts standing back-bending and exhalation assists it, because diaphragm increases intra-abdominal pressure as it presses the abdominal organs inferiorly during inhalation. Increase intra-abdominal pressure restricts the bend by making the torso a taut.

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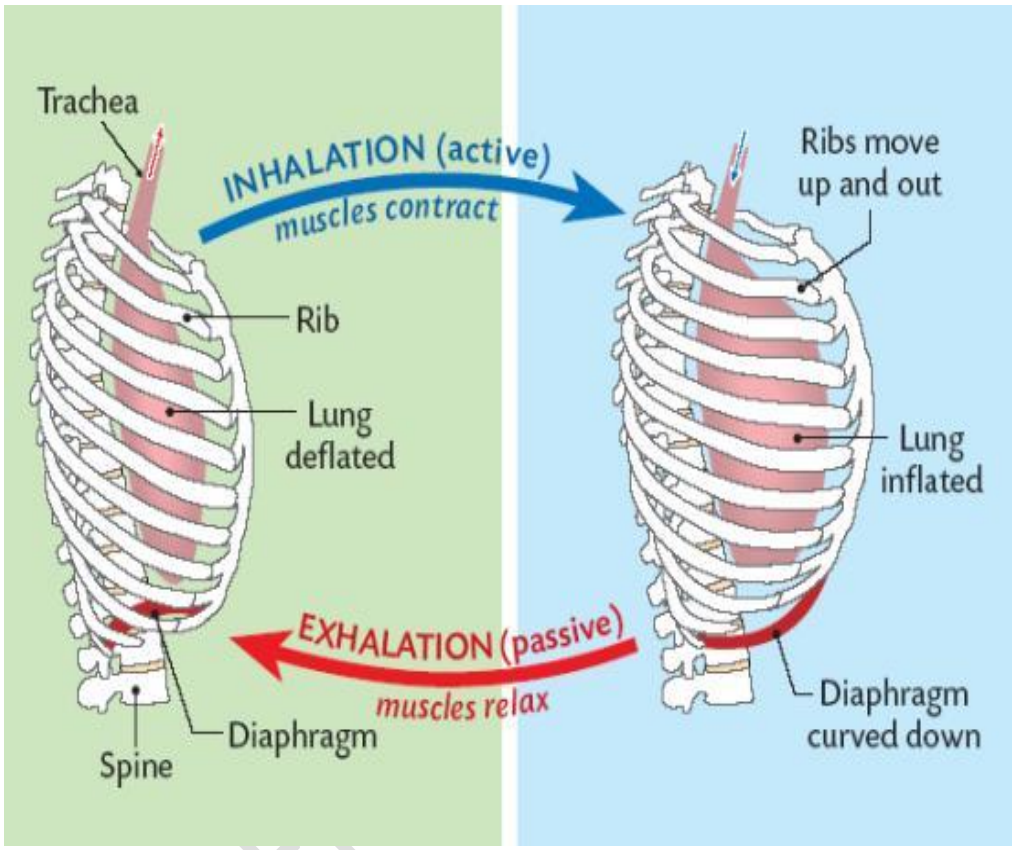

Figure 2. Intercostal muscle expansion and contraction.

Protecting the lumber region by spreading the vertebrae apart and easing compression on all the intervertebral discs. They stimulate sympathetic nervous system.

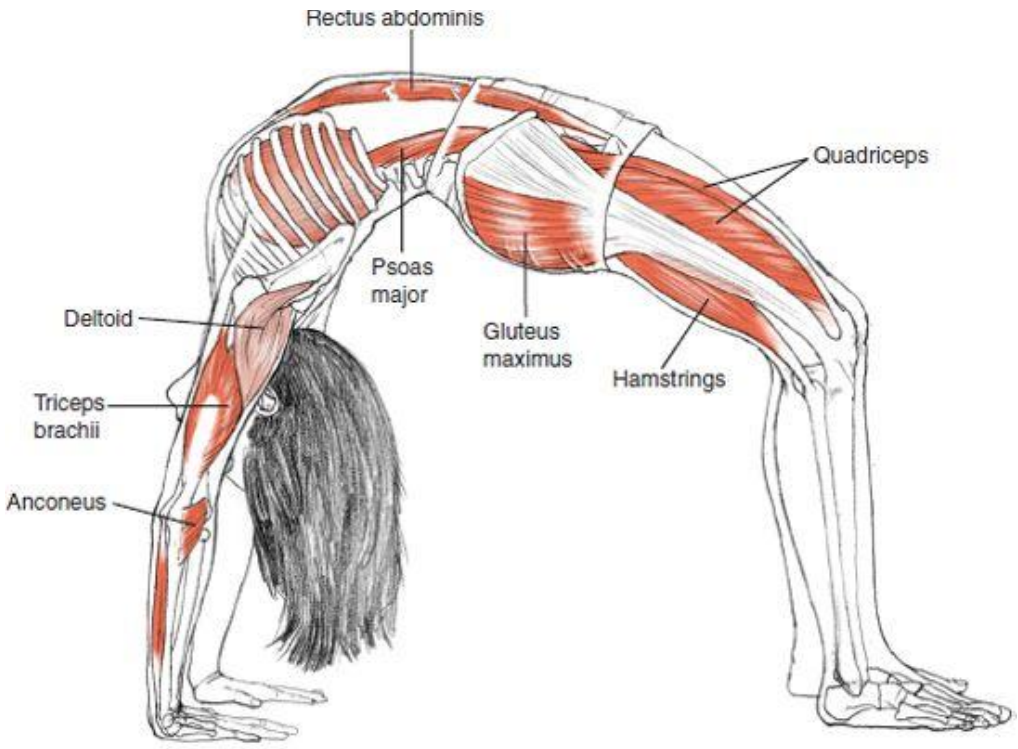

Figure 3. Muscles Involvement During Chakrasana.

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3.CONTRAINDICATIONS

Chronic & acute backache, hiatal hernia, hypertension, angina, peptic ulcer etc. Recent or chronic injury to the hips, back or neck. Later stage of pregnancy.

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4.CONCLUSION

Hathyogic asanas are not only preparatory step for "Samadhi" even it is conducive to the health and longevity. Regular practice of asanas regulates the physiological action of heart, lungs, brain, visceral organs. It promotes the proper digestion and circulation of blood. Visceral organs like kidney, liver, colon, ureter and all other internal Viscera work efficiently, as well as each particular. Asana's have impact on the regional anatomy of Musculo-skeleton system, tissues and breathing process. Hathyoga is a great science which everyone practices according to his or her own capacity may be not all but few Hathyoga technique along with asanas and few pranayama are sufficient for most people to coordinate the biological balance of body.

CONSENT

It is not applicable.

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ETHICAL APPROVAL

It is not applicable

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authorsg

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