COMPARATIVE ANALYSIS OF YOGA AND TRACTION IN SPINAL DISORDERS

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ABSTRACT

This study was conducted to clarify the difference in therapeutic effects between traction and yoga. Yoga is based on the structure and function of the human body because yoga practice gives special importance the relationship of the breath and the spine. The vertebral column problems like neck and back pain are very difficult to live and can affect every part of the life. Spinal column problems are treated many types of methods like physical therapy, hot/cold therapy, alternative medicine treatment, pain medications, massage are get back to normal and confortable activity. However, if tried the treatments weeks or months with reduction the pain. The physical therapy particularly the spinal traction is increase between the vertebrae, relaxing the pressure on vertebral discs, nerve roots, ligaments muscles and increase blood flow to the area making it heal much faster. The devolpment and monitoring of spinal traction was necessary for weeks or months and cost effective treatment to the patients. The comparative study improve the appropriate therapy and reduce the economic burden and adverce contra indications. Yoga therapy should be closely monitor for cost, safety and potency.

KEY WORDS

Yoga therapy,Traction, Spinal disorders.

INTRODUCTION

Back pain is a common disorder involving the nerves, muscles,and bones of the vertebral column. The pain is generally unpleasant feeling to either damage. The process of pain sensation starts when the pain causing event triggers the endings of suitable sensory nerve cells. In common the low back pain develops after movement that involve lifting, twisting and forward bending. The spinal degenerative condition include the symtoms such as localized pain at the site of the compression, pain that travels the length of the pinched nerve, into the extremities, Muscle weakness, tingling or burning sensation, numbness . The

symtoms may start after the movements or upon waking up the morning. The human spine is unique among all mammals that it exhibits both primary and secondary resolution .The spine in particular, exhibits an extraordinary resolution between the contradictory requirements of rigidity and plasticity. Intrinsic equilibrium is the concept that explains not only why the spine is a self supporting structure but also any spinal movement produces potential energy that returns the spine to neutral. This fact about the core structures of the axial skeleton reveals a deeper truth about how yoga practice appears to liberate potential energy from the body.

SPINAL TRACTION

This is force applied in longitudinal of the spine. Traction is an effective way to get relief from back pain without surgery and the therapy could improve general health conditions because of opening spaces and increase oxygen and supplemental fluid flow into the spinalcord and spinal brain. The traction will slowly, gently stretch the spine, allow any compressed discs or joints to be moved into their proper position in the spine. The method used following spinal problems are spinal stenosis, arthritis of the spine, muscle spasm, bone spurs, spondylosis, bulging disc.

MECHANISMS OF YOGA PRACTICES WHICH IMPROVE SPINAL DISORDERS

Practice of Piraiyasanam, Bhujangasana, Virabhathrasana, Ustrasana, Sethu bandhasana, Matsyasana, Dhanurasana, Adho muga svanasana, Urthuva muga savasana, Purvottanasana, Bhujangasana, Salabasana, Uttana padhasana are beneficial in spinal problems.

When practicing group of asana for spinal disorders, it improve the functioning of the vertebral column, promotes flexibility in the body so that the muscles become relax, improving circulation and improving posture when the body stronger, one will feel less pain as well. Regular practice of asana will lead to stretching of the muscles.

Ustrasana

In the cervical spine, the anterior neck muscles such as longus capitis, longus coli, rectus capitis anterior, supra hyoid and infra hyoid work accentrically and prevent collapsing into the lumbar spine. In cervical spine, the anterion neck muscles are working at length. The scalene are providing support the anterior spine. In the thoracic region, the internal

intercostals are stretched by the opening of the rib cage. This yoga is very challenging to extension of the spine at the top of the thoracic spine.

Sethu bandhasana

Spinal extensors especially in the mid and lower thoracic. Psoas minor and abdominal muscles eccentrically to prevent overextension in the lumbar spine.

Matsyanasana

Spinal extensors especially lower fibers and it helps the lengthening of anterior neck muscles.

Bhujangasana

The entire spinal extensor group such as intertransversari, interspinalis, semi spinalis, splenius capitis, longissimus,ilio costalis. In addition, there is strong action in the serratus posterior and superior which assists chest expansion. The rectus abdominus and obliques work accentrically to prevent overmobilization of the lumbar spine.

It is important to find deeper intrinsic back muscles to do the action of spinal extension in this pose. In cobra the serratus anterior is active to maintain a neutral position of the scapulae against the push of the arms. When the arms push, the shoulders don't elevate, but the spine is lifted.

Dhanurasana

This pose can be worked in a variety of ways by emphasizing different actions by deepening the action in the spine extension and sacrum counternutation.

Salabasana

Working to extend the spine are the spinal extension group such as intertransversarii, interspinalis, multifidi, spinalis, semi spinalis, spelenius, longissimus, iliocostalis. It can be a challenge to lift the arms in this relationship to gravity, with the spine in extension. If the latisssimus dorsi used to extend the spine.

Adho muga savasana

Psoas minor, obliques are deep extensors work to maintain neutral spinal alignment in axial extension.

Urthuva muga savasana

Throughout the spine, the extensors are active, though mostly in the thoracic spine. Gravity creates much of the extension in the lumbar spine, so the psoas minor is active accentrically to resist too much lumbar lordosis and the obliques do the same. In the cervical spine, gravity, acting on the weight of the head, creates extension, so the anterior neck muscles

work accentrically to keep the action distributed throughout whole spine, there will need to be more action in the thoracic region and less in the lumbar and cervical regions. This translates into concentric work for the extensors in the thoracic spine and accentric work for the flexors in the cervical and lumbar spines.

Purvatasana

Throughout the spine the extensors are active, although they are not most active in the thoracic spine. Gravity does much of the work of extension in the lumbar spine, so the psoas minor canbe active accentrically to resist too much lumbar lordosis. The obliques do the same, in the cervical spine, gravity creates the extension, and anterior neck muscles such as longus capitis, longus coli can work accentrically to keep the forces in the neck balanced. In the thoracic spine, semi spinalis thoracis, spinalis thoracis, thethoracic part of inter spinalis and the rotators are most active.

Veerabhathrasana

Spinal extensors that is intrinsic, transverse spinalis, erector spinae and latissimus dorsi used to the spinal extension necessary in this deeper action.

Pirai asana

It is important to find deeper intrinsic back muscles to do the action of spinal extension in this pose and accentrically to prevent overmobilization of the lumbar spine.

Uttanapadhasana

It is very important the entire spinal extensor group of muscles.

DISCUSSION AND CONCLUSION

The findings of a study, suggested that patients with spinal disorders improved applying this asanas. Asanas promote health by increasing the range of motion in the joints, keeping the body mobile. At most joints, muscles are arranged in opposing pairs, movement takes place when one muscle contracts or shortens, while the order relaxes and lengthens. Most people don’t have well aligned posture. Practicing asanas the centre of attention on strengthing stretching muscles. This will help to improve gradually any faulty alignment,particularly in the upper and lower back.

Aligning posture involves improving the balance between muscle length and muscle strength. Yoga does this perfectly, because when hold an asana and then practice its counterpose, the major muscles on the front and back of the body are both stretched and

strengthened. This creates tone as well as flexibility. Yoga asanas also have a positive effect on the muscles connective tissue or fascia. Muscles are elastic after they stretch or contract, the fibres return to their original length, fascia, however, is plastic not elastic, which means that only if enough pressure is applied.

In the conclusion of a study demonstrated the efficacy of yoga in spinal disorders. The human body is superbly intelligent. It manages to maintain an intricate physiological balance day and night, through every stage of life. Practicing yoga helps the body to maintain this complex balance, which boost the capacity for self healing. So yoga asanas practice is helpful in patients of spinal disorders. These studies have been conducted to show the effectiveness of yoga therapy in spinal disorders in natural way.

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