



## REVIEW ARTICLE

### USE OF STHANIKA (EXTERNAL) BASTI IN SPONDYLITIS DISEASES

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#### Abstract

Spondylitis is a type of arthritis caused by spinal wear and tear. It can impair the spine's movement and affects the nerves and other functions. Spondylolysis affects 6-10% of the general population and 25-60% of athletes. The most prevalent form of spine dysfunction in the elderly is scoliosis. The Sthanika (External)basti therapy is a localized form of svedana procedure. Warm medicated oil is pooled over specific parts of body by a special arrangement for local pain relief. Svedana is a pain-relieving therapy in and of itself. It is proved to be effective in disease like, lumbar spondylitis, ankylosing. Spondylosis, sacroiliitis, disc prolapse (IVDP).

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#### Introduction:-

In this context, the term Basti is a misnomer because the word "basti" describes the process of administering medication through the rectal tract with using the specially designed basti instrument. Possibly, this word would have been used in the sense of settlement, habitation or dwelling for some time. It is performed on the Sthanika (External)surface. But the Sthanika (External)basti therapy does not involve any such procedure rather this is a localized form of svedana procedure. This is a combo therapy comprising of Synchronized of snehana and svedana.(1)

Sthanika(External)basti is to treat Cervical spondylosis, lumbar spondylosis, thoracic spondylosis, multilevel spondylosis, osteoarthritis, lumbar or cervical degenerative disc degeneration, or lumbar or cervical spinal stenosis are all examples.

Spondylitis disease is a broad term that refers to any sort of spine deterioration. It is a term that is often used to describe any type of spinal degeneration, although it is most commonly used to describe osteoarthritis of the spine. It means both pain and degeneration in the spine, regardless of what's causing the pain or where the degeneration is happening. It's a type of arthritis caused by spinal wear and tear. It happens when discs and joints degenerate, when bone spurs grow on the vertebrae, or both. These changes can impair the spine's movement and affects the nerves and other functions. (2)

The prevalence rate of Spondylolysis affects 6-10% of the general population and 25-60% of athletes. It's more common in young athletes under the age of 18 who participate in sports that require twisting or backward bending of

the spine. This injury appears to run in some families, indicating that it may be inherited. (3) Where Asymptomatic lumbar spondylosis affects 27-37% of the population and affects more than 80% of people over the age of 40 in the United States, up from 3% of people aged 20 to 29. (4)

The prevalence of Ankylosing Spondylitis is estimated to be between 0.1 and 1.4 percent, while exact figures are difficult to come by according to a door-to-door study conducted in India, there are 3.5 incidences per 1000 people (5). The prevalence of cervical spondylosis is comparable in both sexes, while males have more severe cases (6). The most prevalent form of spine dysfunction in the elderly is scoliosis (6). Spondylotic alterations in the cervical spine occur in 15-40% of patients with a single disc space and 60-85% of individuals with multiple disc spaces because Cervical is the most typically impacted group, with 4-7 being the most prevalent. Congenital bony deformity affects 10% of patients. The use of laptops, smartphones, sedentary habits, and bad body posture, often known as text posture, is on the rise among young people. (6)

#### **Sthanika(External)Basti: -**

It is one of the modalities of Panchakarma therapy under Ayurvedic healing system. In this basti, warm medicated oil is pooled over specific parts of body by a special arrangement for local pain relief. Vranabasti is used over wounds for relieving pain and for rapid healing. (1)

#### **Discussion:-**

Kati basti, Greeva (Manyu) basti, Janu basti and Hrida / Urotharpanabasti are the components of Panchakarma. These procedures are known to be special Sthanika(External)treatments of Panchakarma. In these Sthanika(External)Basti therapy, warm medicated oil is retained within a boundary made by dough and is kept for a certain period of time over the lumbar region (Kati basti), cervical region (Greevabasti), knee joint (Janu basti) and Cardiac region (Hridabasti/ Urotharpanabasti) as a variety of Snigdhasveda. (1)

These are some clinical evidences show the effects of the Sthanika(External)Basti therapy which are largely from South Asia. Patients of Gridhrasi Roga (Sciatica) treated with Kati Basti presented with moderate improvement in their symptoms of the disease like Toda, Sphurna, Tandra, Stambha. (7) They also mentioned that the result can be observed in the same group of the patients who have received Kati Basti combined with Parijat Patra Ghana Capsule (herbal preparation). (7)

When discussing "Dhamani vyakarana Sharir," Acharya Sushruta indicated the path through which Sthanika(External)procedures will be absorbed and penetrated. Through bahiparimarjanchikitsa, Tiryakgatadhamanies (Subcutaneous vessels) are the mediators for absorption and penetration of medicaments from the skin's surface up to Kha-vaigunya or sampraptisthana or mulasthana of vyadhi. (9)

Vitiation of vyanavata and shleshmakaphakshaya, Katibastibhy its snigdha, guru and ushnaguna pacifies the increased rooksha, laghu and sheetaguna of vitiated vata as taila(oil) gives nourishment and corrects the shleshmakapha. So, it is the time to get the thorough knowledge related to the mode of action of Sthanika(External)Basti. (9)

#### **Material:-**

1. Masha powder (Black gram powder) – ½ kg to 1 kg.
2. Oil (according to disease indications) – 200 ml to 500 ml.
3. Plastic or Steel ring – (2" height and 18-20" circumference)-ring of different sizes).

#### **Methods:-**

Kati basti is used to treat discomfort in the low back region. Svedana is a pain-relieving therapy in and of itself; however, the medicated oil that is absorbed via the skin has unique therapeutic properties. (8)

It is proved to be effective in disease like, lumbar spondylitis, ankylosing spondylosis, sacroiliitis, spondylolisthesis, disc prolapse (IVDP), radiculopathies, fracture dislocation of vertebra, mechanical backache, lumbosacral strain, lumbosacral muscle spasm, lumbar canal stenosis and sciatica. (8)

Greeva Basti is used to treat cervical spondylosis, spondylolisthesis, disc prolapsed or bulging, neck stiffness, frozen shoulder, trapezius muscular spasm, ankylosing spondylitis, manyagatavata, avabahuka, and vishwachi.(8)

Janu basti is indicated in SandhigataVata, Sandhi sula, ligament damage, painful state of the knee, osteoarthritis, rheumatoid arthritis, and other conditions.(8)

Hrid/ Urotarpana Basti is to be performed on the left side from the 2nd intercostal space to the 6th intercostal space. It is commonly used to treat Non-Myocardial Infarction, Muscular Spasm, and Bronchial Asthma, strengthening for heart muscles, Cardiomyopathy, painful conditions of anterior chest, costochondritis etc. (8)



**Kati Basti**



**Manya/Greeva Basti**

#### **Probable mode of action of Sthanika(External)basti:-**

It depends on the selection of proper area for procedure, base oil, medicament used, duration of contact of oil with area of application, amount of oil placed, duration of procedure and temperature of oil applied.

According to modern science, relief from the treatment is nothing but drug efficacy. Effect of drug depend on pharmacokinetic as well as pharmacodynamics. Whatever may be the route of administration, drug must achieve desirable concentration at particular area. For this purpose, penetration must be proper, Katipradesh, i.e. superficial or deep, manyaprades (Greevabasti), januprades (Janu basti), and hridyaprades (Hridabasti/ Urotarpanabasti) are the illnesses for which Sthanika(External)basti is prescribed. The treatment's effect should extend to the site of pathogenesis.

Pharmacokinetics and Acharya Sushruta's "Tirayakdhamani" sharir can both be used to explain the efficiency of Sthanika(External)basti.(9) by Absorption via Romakupa via Twacha, Vasodilation is the process of dilation of the blood vessels, Dhamani is a participant in "Poshana," i.e. (nutrition), Changes in temperature have an effect on nerve endings.

Oil should be absorbed correctly from the place of Sthanika(External)basti application in order to reach beneath the skin. Skin enables penetration based on the ingredient's molecular size, concentration, solubility, and other factors. Whatever oil is used in Sthanika(External)basti, the foundation oil is sesame oil. Sesame oil is easily absorbed and penetrates deep into the body. (10,11)

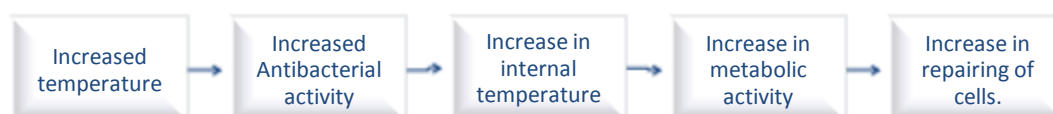
Hair follicles are connected to the oblique and subcutaneous arteries.

Neuronal stimulation can be caused by topical drugs or treatments. When administered to the diseased area, many types of Sthanika(External)basti also alleviate pain. This action could be accomplished through neural stimulation. Longer Sthanika(External)basti (approximately 30 to 45 minutes) results in more heat fomentation and acetyl chloride secretion. Warming has a calming effect via sensory nerve end ropes and increases vasodilation, which reduces muscle spasm and pain associated with tonic muscle contraction. Vasodilation is caused by hot fomentation and oil absorption via the dermis which increases blood circulation and nutrition to the tissue. (12)

Dhamani can be thought of as both a nerve and an artery. Artery is suggested by the fact that Dhamani is pulsatile in character. Nerve might be deemed Dhamani who practices Vayu Purana. (9)

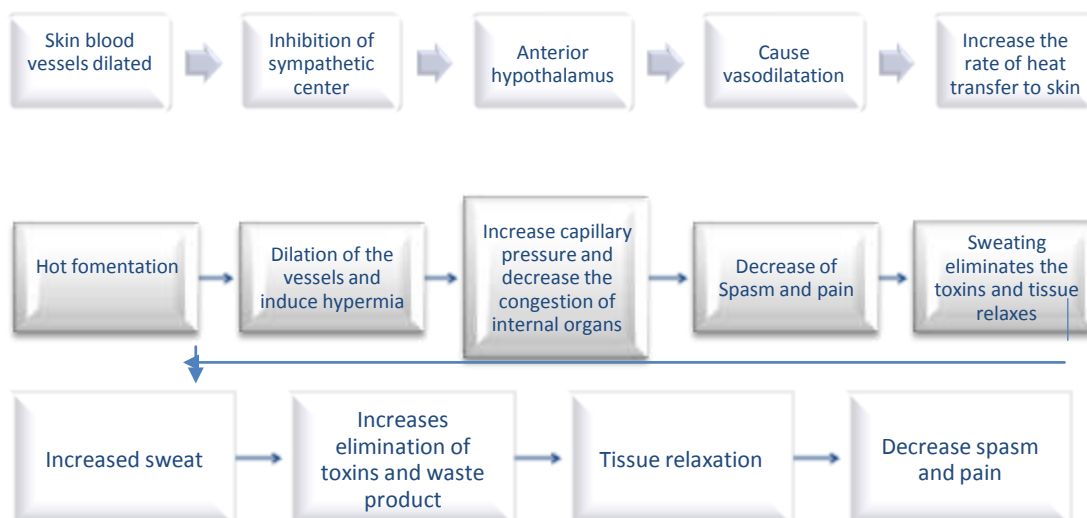
#### Action on Nerves: -

Hot fomentation acts as stimulant for less than 5 mins also act as sedative. During fomentation, WBC activity increases, long duration of fomentation causes secretion of acetylcholine. Efficacy of fomentation noted in psychosomatic pain also.



When temperature of skin surface rise by  $10^{\circ}\text{C}$ , inner temperature increases up to  $3^{\circ}\text{C}$ . Temperature maintained during Sthanika(External)basti is  $40^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . (18)

#### Vasodilation



1. Sthanika(External)hot fomentation with oil causes irritation to the receptor in nerve endings causes immergence of new biological substances lead to increased metabolism and does nutrition.
2. These biochemical substances act on vessels in subcutaneous and skin area leads to release of histamine or adrenaline.
3. Massage reduces the activities of proteins called inflammatory cytokines and thus reduces pain and inflammation. (13)

#### Conclusion:-

Sthanika(External)basti is a type of svedana procedure that is performed on a smaller scale.

This is a combination therapy that combines snehana and swedana to aid with both pain and degeneration in the spine, which is on the rise among young people due to the use of laptops, cellphones, sedentary habits, and poor body posture. It has pharmacokinetic and pharmacodynamic effects. Warmth lowers muscle spasm and pain associated with tonic muscle contraction and acetyl chloride production by relaxing sensory nerve end ropes (neuronal activation) and increasing vasodilation.

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