Action of Sudation Therapy in Different Diseases

Prof (Dr) Bishnupriya Mohanty, Miss Anjali Anay Phal Dessai, Miss Nikita Navnath Verekar

MD (samhita) , PhD (Basic principle) Professor and head Department of Sanskrit Samhita and Siddhanta
Gomantak Ayurveda Mahavidyalaya and Research Centre Shiroda, Goa 403103
Gomantak Ayurveda Mahavidyalaya and Research Centre Shiroda, Goa – 403103
Gomantak Ayurveda Mahavidyalaya and Research Centre Shiroda, Goa - 403103

ABSTRACT

Sudanam is a therapy which alleviates stiffness, heaviness, coldness & that which brings out sweating from the system is sudation therapy. The perspiration brought about by the sudation therapy is more than the normal. Conventionally the sudation therapy is just understood as the steam bath, but sudation in Ayurveda is something more as a treatment & as a daily routine. Sudana drugs by Ushna and Tikshnaguna are capable of penetrating the microcirculatory channels (Srotas) where they activate the sweat glands to produce more heat. Sudana Karma hastens this process by increasing the permeability of capillary and bringing the morbidities into an extracellular fluid by dilating and clearing the channels of the body. Sudanakarma maintains the thermoregulation system of the body by maintaining equilibrium between core temperature (temp. inside the body) and shell temperature (skin temp).

KEYWORDS: Swedana karma, Sudation therapy, Sweating.

I. INTRODUCTION

Sweating treatment (Swedana) is usually given after oleation- Snehana therapy. Swedana is the procedure that relieves Stambha, Gaurava, Sheeta which induces Swedana (Sweating).[1] It plays a dual role in Purvakarma as well as Pradhanakarma. Swedana has relaxing and detoxifying effects on the human body. Sweda is classified into different varieties according to the different Acharyas.

According to Charaka, two main types are Sagnisweda (thermal) and Niragnisweda. (nonthermal). Niragnisweda is further classified into ten types viz. Vyayama (exercise) Ushnasadana (warm rooms) Guru pravarana (heavy blankets) Kshudha (hunger) Bahupana (excessive drinking)

Bhaya (fear) Krodha (anger) Upanaha (plasters) Ahava (war) Atapa (sunbath)

Whereas Sagnisweda is classified into 13 types viz
Sankara (mixed) Prastara (hotbed) Nadi (steam kettle) Parisheka (affusion) Avagaha (bath) Jentaka (sudatorium) Asmaghan (stone bed) Karshu (trench) Kuti (cabin) Bhu (ground bed) Kumbhi (pitcher bed) Kupa (pit sudation) Holaka (under the bed)

Whereas Acharya Sushruta classified Swedana into main 4 types
Tapa sweda (Direct heat) Ushmasweda (Steam) UpanahAsweda (poultice) Dravasweda (warm liquid).

Swedana Guna (properties) and its action of body.
Ushnata: This is originated from Agneyaguna and is opposite to Shtaguna. It induces enthusiasm, relieves stiffness and promotes unconsciousness, thirst, burning sensation, sweat and digestion in the body. It is Agnimahabhuta dominant property.
Tikshnata: It is also Agnimahabhuta dominant property. It produces a burning sensation, Paka (ripening) and Srava (secretions). Tikshnaguna is responsible for the ripening of vitiated Dosa and Malas and their discharges from their respective places. It alleviates Vata and Kaphadosha and
stimulates Pitta dosha. It decreases the Mansa and Meda dhatu and acts as Lekhanadravya.

Rukshha: It is the opposite property of Snigdhaguna. Rukshha causes dryness in the body. It is the Property of non-unctuous substance. Rukshaguna induces firmness in the body and wards off softness. It is dominant in Vayavya and Agneyamahabhutas.

Sthirata: This property is opposite to Saraguna. It represents immobility. It induces firmness and stability in the body.

Sarata: It has a dominance of Jalamahabhuta and has the property of advancing which is termed as Preranashila.

Snigdhata: It is dominated by Jala and Prithvimahabhuta. It induces unctuousness, softness, strength, and texture to the body.

Dravata: These substances are dominant in Jalamahabhuta which promote stickiness, moistness, Softness, and happiness. A Drava substance possesses liquefaction of the Dosha and helps in the movement of fluid from one part of the body to another.

Sukshmata: It is composed of predominantly with Agnimahabhuta. It is the property by which it can pass through the Srotas (micro channels).

Guruta: Guru Substances are dominant in Prithvi and Jalamahabhuta. It performs actions like Sadakruta, Uplepakruta, Balakruta, and Bruhanakruta.

MODE OF ACTION OF SWEDANA

AYURVEDIC VIEW:

Swedana has its main actions like Stambhaguna, Gauravaghna, Shitaghna, and Swedakarakatva. How Swedana performs their actions, we can understand it as below.

Stambhaguna: Swedana releases Stambha means stiffness. Samana Vayu which promotes agni, Sleshakakapha which lives in Sandhi, Amarasa, Mansa, Meda, Vasa are mainly responsible for Stambha. Samana Vayu, by Rukshaguna, absorbs Snigdha and so causes Stambha. Sleshakapha is Snigdha. Due to its loss of function, Stambha occurs. Swedana is Snigdha and Ushna so it relieves Stambha. Ushnaguna of Swedana does Srotoshuddhi and Amapachana and so it relieves stiffness.

Gauravaghna: Swedana relieves heaviness in the body. Apayaghataka- liquid substances of the body come out through Sweda. Apyatativa is Guru. Due to their expulsion, lightness is achieved. Swedana stimulates muscles and nerves and so lightness is gained.

Shitaghna: Swedana is mainly Ushna so it relieves Shita by opposite property.

Swedakarakatva: Swedana promotes sweating. Sweda is a type of mala. Impurities of the body come out with Sweda. Sweda is related to Dhathagni and Bhutagni (Metabolism). Swedana drugs by Ushna and Tikshnaguna are capable of penetrating the microcirculatory channels (Srotas) where they activate the sweat glands to produce more sweat. after dilatation of micro channels, Laghu and Saraguna of these drugs enable them to act on the snigdhasdosha in the channels and direct them to move towards Kostha or excrete them through micropores of the skin in the form of sweat, resulting in Srotoshodhana. Dosha brought in Kostha are expelled out of the body with the help of Yamana or Virechana therapy.

Vatashamana
Gotra Vinamana
Agnideepana
TwakMardava
TwakPrasadana
Baktha shraddha
Srotoshuddhi
Sandhichesta
Dosa Shodanam

AIM OF THE STUDY

Present study entitled to study the effect of Suddation therapy in different diseases.

OBSERVATIONS

Name of the patients: Mrs. Ujwala Pednekar
Complains - जानुसंधिशूल
उभयहस्तपादततत्त्वकस्फुटन
सर्वांगप्रदेशीकरण

Diagnosis - संधिगतर्ात

<table>
<thead>
<tr>
<th>Name of the patients: Liman Jokin Fernandes</th>
<th>Complains – Lower back pain (radiating pain)</th>
<th>H/O Sciatica</th>
</tr>
</thead>
</table>

Diagnosis - कटिगटवातगृध्रसी

<table>
<thead>
<tr>
<th>Name of the patients: Pooja Sawant</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>11/10/21</th>
<th>12/10/21</th>
<th>13/10/21</th>
<th>14/10/21</th>
<th>15/10/21</th>
<th>16/10/21</th>
<th>17/10/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Din</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>No changes seen in the complaining - no relief</td>
<td>No much relief seen</td>
<td>Lower back pain increased at night due to which there was no proper sleep</td>
<td>Lower back pain ++ - cannot sit for long time - feeling of lightness in the body</td>
<td>Lower back pain ++ - feeling of lightness in the body</td>
<td>Back pain decreased - feeling of lightness in the body - sound sleep</td>
<td>Back pain decreased - feeling of lightness in the body - good proper sleep</td>
</tr>
</tbody>
</table>
Complains – सर्वसंधिशूल
tatpradshishoth
chakramanakshata

Diagnosis – आमर्ात
walukamopottaliyanda

<table>
<thead>
<tr>
<th>Date</th>
<th>01/09/21</th>
<th>02/09/21</th>
<th>03/09/21</th>
<th>04/09/21</th>
<th>05/09/21</th>
<th>06/09/21</th>
<th>07/09/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>D in</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

| सर्वसंधिशूल | सर्वसंधिशूल | सर्वसंधिशूल | सर्वसंधिशूल | सर्वसंधिशूल | सर्वसंधिशूल | सर्वसंधिशूल |
| +++ -शोथ + -चंक्रमणकष्टता | +++ -शोथ + -चंक्रमणकष्टता | Last night no proper sleep | Feeling of lightness | Last night no proper sleep | Feeling of lightness | Last night no proper sleep |

Name of the patients: Stanley Fernandes

Complains – उभयजानुसंधिशूल
उभयगुल्फसंधिशूल
मन्याशूल

Diagnosis – आमर्ात
walukamopottaliyanda

<table>
<thead>
<tr>
<th>Date</th>
<th>24/08/21</th>
<th>25/08/21</th>
<th>26/08/21</th>
<th>27/08/21</th>
<th>28/08/21</th>
<th>29/08/21</th>
<th>30/08/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>D in</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

-शोथ decreased -चंक्रमणकष्टता decreased -sound sleep
Name of the patients: Vinayak More  
Complains – उभयजानुसंधिशूल & उभयगुल्फसंधिशूल 
- no proper sleep
- headache in the evening

Diagnosis – पादतलदाह

<table>
<thead>
<tr>
<th>Date</th>
<th>09/10/21</th>
<th>10/10/21</th>
<th>11/10/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Din</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
|       | -Good sound sleep and no other complaints 
         -Only slight दाह at पादतल 
         -Decreased from day 1 
         -feeling of lightness -sound sleep |
|       | -Burning sensation increased in stomach &पादतल 
         -Evening headache |
|       | -Lighter and energetic feeling 
         -No major complaints |

Name of the patients: Mrs Maria Fernandes  
Complains – कटिशूल & मन्याशूल 
- since 2 years

Diagnosis – कटिगतर्का & मन्यागतर्का

<table>
<thead>
<tr>
<th>Date</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Din</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
No proper sleep due to pain

- कधटशूल +
- मन्याशुल +
- No proper sleep due to pain

Increased at night and patient could not sleep for whole night due to pain

- कधटशूलके
- मन्याशुलके
- Patient have good sound sleep

Present but it is bearable -
- good sound sleep

Decreased but मन्याशुल is present - feeling of lightness

Decreased -
- feeling of lightness

- Feeling of lightness
- उपशायानुगमी
- Pain has decreased compared to day 1

Name of the patients: Vasanti Jambha
Complaints – कटीतेपादसंचारिदेना
उभयजानूसंधिशुल (तोदर्तरे।)
चक्रमणकष्टता

Diagnosis – गृध्रसी
पत्रपपिंडस्वेद

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>D in</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
</tr>
<tr>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
</tr>
<tr>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
<td>- कटीतेपादसंचारिदेना - उभयजानूसंधिशूल ++ - चक्रमणकष्टता</td>
</tr>
</tbody>
</table>

Name of the patients: Anusuya Palyekar
Complaints – Stiffness of left eye
- Stiffness of whole left side

Diagnosis – अथरंगवात

**Patient admitted on 27/08/2021**
(first seven days no relief or improvement seen)

<table>
<thead>
<tr>
<th>Date</th>
<th>04/09/2021</th>
<th>05/09/2021</th>
<th>06/09/2021</th>
<th>07/09/2021</th>
<th>08/09/2021</th>
<th>09/09/2021</th>
<th>10/09/2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Din</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>
| -नामक्रियापलिति-decreases  
-patient feels lightness in the body  
-sound sleep but patient can't have food as slight stiffness in right hand  
-patient can move left leg slightly  
-sound sleep  
-patient can move left hand & lift left hand on his own without support  
-Stiffness seen in right hand decreased  
-patient can lift left leg on his own  
-Patient feeling of lightness -no other major complaint  
-patient can have food on his own  
-patient can now get up and sit on his own  
-felling of lightness -patient today tried walking with the help of walker  
-र्माधक्रयाहाधन-activities, hormones like Epinephrine, Norepinephrine, Cortisol, Thyroid hormones are released which accelerate themetabolic rate. As a result of increased metabolism, there is an increased demand for oxygen and food stuffs and increased output of waste products including metabolites.

**II. DISCUSSION**

Swedana karma is very important purvakarma which is done before any panchkarma procedure. In disease state, the srotas may have many types of abnormalities. They are roughed, contracted, hardened or many time do not possess their normal suppleness and elasticity, in such srotas even after mobilization the dosha are likely to be obstructed so, it is necessary to make srotas suitable for the movement of loosened dosha. This is achieved with the help of swedana, which is suppose to be the best softening method, restoring softness, suppleness and elasticity.

**Mode of Actions**

Swedana by acts by its qualities like Ushna, Tikshna etc. It increases the metabolic rate in the body. Ushna Guna of Sveda dilates the capillaries thus it increases circulation. Increased circulation enhances the elimination of waste products and more absorption of Sneha or drugs through the skin. Also it stimulates muscles and nerves, which promotes its renovation. Heat administration by Svedana may produce hypno-analgesic effect by diverted stimuli.

**Increased Metabolism:** Heating of tissues accelerates the chemical changes i.e. metabolism. Due to increased body temperature, sympathetic activities are also increased. Because of increased sympathetic activities, hormones like Epinephrine, Norepinephrine, Cortisol, Thyroid hormones are released which accelerate the metabolic rate. As a result of increased metabolism, there is an increased demand for oxygen and food stuffs and increased output of waste products including metabolites.

**Vasodilatation:** If the body temperature raises a negative feedback action becomes active to reach at normal temperature. High temperature of the blood stimulates thermo receptors that send nerve impulses to the pre-optic area of the brain, which in turn stimulate the heat losing center and inhibit the heat promoting center. Nerve impulses from the heat losing center cause dilation of blood vessels in the skin so the excess heat is lost to the environment via radiation and conduction. As a result of vasodilatation there is an increased blood flow through the area so that the necessary oxygen and nutritive materials are supplied and waste products are removed (Clayton electrosurgery).

So it can be inferred that the Ushna Guna of Svedana Karma leads to stimulation of Sympathetic Nervous System and there is vasodilatation (Soto Vispharana). Ushna Guna also increases the circulation of Rasa and Rakta in the body.

During Svedana Karma the body temperature rises to more than 2-30C. It results in
increased Sweating by the above said mechanism. Due to the effect of Sara and Sukshma Guna of Svedana Dravya, the Lina Dosha are liquified in our body and they come out through micropores, which are present over the skin as pores of sweat glands. Since there is extreme vasodilatation due to production of heat, it results in increased excretion of liquified vitiated Dosha from the body resulting in Srota Sodhana.

It is mainly done in different vatavyadhi because it has properties such as ushna, tikshna, snigdha, sukshma, etc. Which pacifies the increased ruksha, laghu, sheeta, kharaguna of vata. Thus giving relief to the patient.

III. CONCLUSION:
Swedana is a very important measure in Ayurveda which has become very popular due to its easy administration and effectiveness in several disorders. It is effective in sandhigatavata, amavata, katigatavata, manyagatavata, grudhrasi, pakshaghat. Swedana is easy to perform and the requirements are laso easily available.

REFERENCE:
Charaksamhitasutrassthana 14/39-40,14/64; Sushrutsamhitchikitsasthashana 32/3; Principles and practice of panchakarma by Dr. Vasant C. Patil; Kasture;