

## *Shirodhara* – An Ayurvedic Therapeutic

Dhananjay V. Patel<sup>1\*</sup> and Sarika Patel<sup>2</sup>

<sup>1</sup>Dept. of Kayachikitsa, Govt. Akhandanand Ayurved College, Ahmedabad, Gujarat, India

<sup>2</sup>Ayurveda Consultant, Ahmedabad, Gujarat, India

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### Abstract

*Shirodhara* is an allied *Panchakarma* procedure, which has got worldwide popularity because of its simple administration and efficacy in variety of disorders. Pouring of liquid on head in *Shirodhara* is designed to relieve the psychological stress and mental fatigue. *Acharya Vagbhata* has considered it under the broad heading of *Moordha Taila*. He recommended it for the prevention of *Khalitya*, *Palitya*, etc. disorders. A variety of material is used for the *Shirodhara* procedure depending on the disease and involved pathological factors. In the present review article, attempt has been made to understand the mode of action i.e. pharmacodynamics of *Ayurved* technique *Shirodhara* along with its therapeutic utility.

### Keywords

*Shirodhara, Dharapatra, Droni, Moordha Taila*



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## INTRODUCTION

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*Shirodhara* is a unique form of ancient therapy of pouring oil on the forehead from a specific height and for a specific period; continuously and rhythmically with allowing the oil to run through the scalp and into the hair. It is one of the important and globally recognized as a stress relieving procedure of *Ayurvedic* system of medicine. It is not only used in disease of skin or hair but also used in psychic and psychosomatic conditions. Depending upon the drug components used for *Shirodhara*, it is known by different names viz. *Jaladhara*, *Kwathadhara*, *Takradhara*, *Tailadhara* and *Kshiradhara*<sup>1</sup>.

## MATERIALS AND METHODS

The literature was collected from *Samhitas*, various *Ayurvedic* and modern books, theses, published papers and e-media.

### METHOD OF SHIRODHARA:

For the descriptive purpose, it can be divided into three stages:

(1) *Purvakarma* (2) *Pradhanakarma* (3) *Paschatkarma*

#### 1) *Purvakarma*<sup>2</sup>:

It is related with the preparation of *Shirodhara*. First it should be examined that whether the patient is fit for *Shirodhara* or not. Then the patient is advised to pass his/

her natural urges. Afterwards, he/she lie down in supine position on the *Droni*. The eyes and ears are covered with cotton so that liquid may not enter in them. His/her head is rested in slightly elevated position, preferably on soft cotton pad.

*Droni*<sup>3</sup>: In *Shirodhara*, a special type of wooden table is used which is known as *Droni*. The edges of *Droni* should be raised at all the four sides so that the poured material may not flow out.

*Dhara Patra*<sup>4</sup>: It is a vessel in which liquids used for *Shirodhara* are filled in. The mouth of vessel is wide and sides are tapering gradually to a central point in the bottom. At this point a hole is made approximately of little finger size. The depth of vessel is about 5 to 6 inches with a capacity of 2½ liters. Nowadays a nozzle having the provision to stop and open cork is fitted to control the flow. *Dharapatra* is suspended three *Angul* (4 inches) above the forehead<sup>5</sup>.

*Medicament for Shirodhara*: It can be performed with various liquid medicaments like *Jala*, *Kwatha*, *Takra*, *Taila*, *Kshira* etc., depending on the involvement of *Dosha*, *Dushya*, *Kala* etc. pathophysiological factors in the disease<sup>6</sup>. Drugs specifically indicated in certain diseases are<sup>7</sup>:

- *Vataja Roga: Bala taila, Dashmula Kwatha and Ghrita* etc.
- *Pittaja Roga: Chandana, Ushira Kwatha, Takra, Jala* etc.
- *Kaphaja Roga: Nagara, Mustaka and Madhuyasti Kwatha*.

As per the recommendation of *Dharakalpa*, *Sneha* is taken for *Shirodhara* according to the condition of *Doshas*<sup>8</sup>.

- *Vata Dosha: Taila*
- *Pitta Dosha: Ghrita*
- *Kapha Dosha: Taila*
- *Rakta Dosha: Ghrita*
- *Vata + Pitta + Rakta: Ghrita + Taila* in equal portion
- *Vata + Kapha + Rakta: ½ part Ghrita + 1 part Taila*

## 2) **Pradhanakarma**<sup>9</sup>:

The medicament fills in the *Dharapatra* and pours continuously, neither very fast nor very slow on the forehead of the patient. When the liquid starts pouring then the vessel is moved in the pendulum manner starting from one lateral side to the other lateral side. The poured liquid is collected in another vessel and is used to refill the vessel before it become empty.

*Dharakala*: As *Shirodhara* is one type of *Bahya Snehana Karma*, it can be done in the

morning on empty stomach or after 3 hours of taking food<sup>10</sup>.

According to *Dharakalpa*, patient having dryness and *Pittanubandhit Vata*, the period of *Shirodhara* is  $2\frac{1}{2}$  *Prahara* or 2 *Prahara* while in *Snigdha Kaphanubandhit Vata*, it is one *Prahara* or it should be upto initiation of perspiration<sup>11</sup>.

*Dhara* process can be done for half an hour to 90 minutes in the morning upto 21 days. It is believed that through this irrigation method of head, the effect of medications can be achieved upto the limbs and entire body within 21 days. Usually *Dhara* process is performed in different course of 7 days, 14 days or 21 days like wise<sup>12</sup>.

*Period for Changing the Liquid*<sup>13</sup>: When milk or water is used for *Parisechana*, it should be changed everyday, whereas *Dhanyamla* can be used upto three days. The oil also should be changed every third day, but it can be reused. In seven days of *Tailadhara* course, for the first three days half of the oil is used and for next three days later half of oil is utilized. While on the seventh day, remaining oil of first and second half are mixed together and used, then it should be discarded.

## 3) **Paschatkarma**:

After *Shirodhara*, oil on the head is wipeout and advised rest for a short duration. Followed by massage of the body including head is given. Then a bath with lukewarm water is suggested<sup>12</sup>.

*Pariharyani*<sup>14</sup>: The patient should avoid physical exertions, mental excitement such as anger, grief, sexual desire and exposure to cold, sun, dew, wind, smoke or dust. Riding, excessive walking, travelling, speaking too long or loudly and such other acts that give strain to the body must be avoided. Sleeping during daytime and standing continuously for long period must also be avoided. It is also advisable to use a pillow which is neither very high nor very low, during sleep at night.

*Pariharakala*<sup>15</sup>: The patient should follow *Pathya Ahara-Vihara* and remain as *Jitendriya* during the *Dharakarma*.

## DISCUSSION

### POSTULATED MECHANISM OF JALADHARA:

Clinically the efficacy of *Jaladhara* is proved, still it is a difficult task to understand the mode of action of *Jaladhara*. Generally, *Shirodhara* is effective in following two ways.

1) Therapeutic effect of medicament,

2) Procedural effect of the process.

#### Therapeutic effect of medicament:

- As per the principle of drug absorption, maximum absorption is in the scalp region and comparatively oil is better absorbed than water<sup>16</sup>. That's why most of the *Ayurveda* formulations are based on oil for the *Shirodhara* purpose. Moreover, *Shirodhara* helps to prevent *Khalitya*, *Palitya* etc. diseases<sup>17</sup>. Therefore, it can be said that the medicament used for *Dhara* is certainly absorbed.

#### Procedural effect of the process:

- The procedural effect of *Shirodhara* is also significant. The water has no any chemical or therapeutic properties but has only physical properties, however practically it is observed that the *Jaladhara* i.e. *Shirodhara* with water is found beneficial because of its mechanical effect<sup>18</sup>.
- *Acharyas* have given four type of techniques for *Moordha Tail*, which include *Abhyanga*, *Seka*, *Pichu* and *Basti*. They are mentioned "*Uttarottara Gunaprada*"<sup>19</sup>. It means that one after one it becomes more and more beneficial. The description itself indicates that there is a mechanical effect of therapy.

- Mind, body and spirit are intimately connected and *Shirodhara* by calming the stressful mind, relaxes the entire physiology<sup>20</sup>.

- In *Shirodhara* liquid is poured on a forehead, which induces the somato-autonomic reflex through thermosensors or pressure sensors of the skin or hair follicles via the trigeminal cranial nerve and provides physiological effect of therapy<sup>21</sup>.

#### **Aromatic science:**

- The well-known relaxing action of medicated aromatic oils used for *Shirodhara* mediated by olfactory nerves<sup>21</sup>.

#### **Ayurveda science:**

- Imbalance of *Prana, Udana and Vyana Vayu, Sadhaka Pitta* and *Tarpaka Kapha* can produce stress and tension. *Shirodhara* reestablishes the functional integrity between these three subtypes of *Dosha* through its mechanical effect<sup>20</sup>.

#### **Yogic science:**

- In *Shirodhara*, patient is asked to lie down in supine position as in *Savasana*. This position is used for relaxation in Yogic science. Again during *Shirodhara* patients concentrate where *Dhara* poured on the forehead. Moreover, he is devoid of surroundings during the procedure, which helps him to calm the stressful mind. As the

patient concentrates on a particular place, the thought process decreases and thus entire physiology relaxes<sup>22</sup>.

- *Ajna Chakra* (the space between the two eyebrows) is the seat of Pituitary and Pineal gland. As we know, the pituitary gland is one of the main glands of the endocrine system. *Shirodhara* regulates its stimulation by its penetrating effect, which helps in bring the hormonal balance<sup>23</sup>. It also decreases the brain cortisone and adrenaline level; synchronizes the brain wave (alpha waves), strengthens the mind and spirit and this continues even after the relaxation<sup>24</sup>.

#### **Marma science:**

- The forehead and head are areas of many vital spots (*Marma*) as mentioned in *Ayurvedic* classics. Mainly *Sthapani, Utkshepa, Avarta Marma* are situated in this region. As mentioned earlier it is also a place of *Ajna Chakra*. According to *Acharya Bhela*, the location of *Chitta (Mana)* is *Bhrumadhya*. It is place of *Sthapani Marma*<sup>25</sup>. *Shirodhara* makes the patient concentrate on this area by which the stability arrives in the functions of mind.

In this way, the probable mode of action of *Shirodhara* can be understood from different aspects.

## CONCLUSION

On the basis of above description, it is clear that *Shirodhara* has both therapeutic effect of medicament and procedural effect. These can be understood from the aspect of *Ayurveda*, mechanical, *Marma*, aromatic and yoga science. The complicated pharmaco-physio-psychologic action of *Ayurvedic Shirodhara* treatment may provide a useful model for future pharmaco-physio-psychotherapy. *Shirodhara* can be used for the treatment of scalp, hair, psychological and psychosomatic disorders.

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