



## EXPLORATION OF SHILAJATU WITH SPECIAL REFERENCE TO ITS ACTION ON CARDIOVASCULAR SYSTEM

<sup>1</sup>Dr. Aishwarya C. Anchan, <sup>2</sup>Dr. R.R. Geethesh P., <sup>3</sup>Dr. Ravindra Angadi

<sup>4</sup>Dr. Sushmitha V.S, <sup>5</sup>Dr. Ashok Kumar B.N.

<sup>1</sup>PG Scholar, <sup>2</sup>Associate Professor, <sup>3</sup>Professor & Hod, <sup>4</sup>Assistant Professor, <sup>5</sup>Associate Professor, Department Pg & Ph.D. Studies In Rasashastra And Bhaishajya Kalpana, Sri Dharmasthala Manjunatheshwara College Of Ayurveda, Kuthpady, Udupi.Karnataka, India

### Abstract:

Cardiovascular diseases (CVDs) are the leading cause of death globally, taking an estimated 17.9 million lives each year. One in 4 deaths in India is now because of CVDs with ischemic heart disease and stroke. The most important behavioural risk factors of heart disease and stroke are unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol. The effects of behavioural risk factors may show up in individuals as raised blood pressure, blood glucose, blood lipids, overweight and obesity. The increase in incidence, prevalence and mortality rate of cardiac disorders has increased the demand for Ayurvedic medicines, as a preventive care.

*Hrid roga* (heart disease) is a broad entity considered in *Ayurveda* covering all the cardio vascular diseases. *Shilajatu*, a mineral origin drug exuding out of rocks in the Himalayan area is mentioned in *Rasagranthas*. '*Shilajatu*' possess qualities like *medaschedakara*, *balya*, *mootrala*, *yogavahi*, *rasayana*. In this article, a review is made to know the probable action of *Shilajatu* on cardiovascular system.

**Key words:** *Hridroga*, *Shilajatu*, cardiovascular system.

### Introduction:

*Acharya Agnivesha* affirms that "*hrudaye moordhni bastau cha nrunaam praanaaha pratishtithaaha*" that is he considers *hrudaya*, *moordhni* and *basti* as the vital points of human body which always need to be taken care of<sup>1</sup>. In classical texts, *hrudaya* has been given prime importance. *Acharya Shivadasa Sen* states that *hrudayashritha vyadhis* should be treated quickly. *Hrid roga* is a broad entity considered in *Ayurveda* covering all the cardio vascular diseases.

*Shilajatu*, a mineral origin Drug exuding out of rocks in the Himalayan area is mentioned in *Rasagranthas*. The word '*Shilajatu*' comprises of two words '*Shila*' (mountain) and '*jatu*' is a laksha that trickles down from the Himalayan Mountains region of India during summer. It is known as 'black bitumen'<sup>2</sup>. The synergistic and rejuvenating property of '*Shilajatu*' makes it a wonder Drug in the field of Ayurveda by providing a platform to cure many diseases.

*Shilajatu* mainly contains plant source organic complex minerals and trace elements. The main active component in *Shilajatu* is fulvic acid – one of the natures most miraculous molecular substance which is responsible for the rejuvenative property of *Shilajatu*<sup>3</sup>.

In *Rasatarangini*, *acharya Sadananda Sharma* has mentioned that '*Shilajatu*' possess qualities like *medaschedakara*, *balya*, *mootrala*, *yogavahi* and *rasayana*<sup>4</sup>.

### Aims and objectives:

To evaluate probable action of *Shilajatu* on cardiovascular system

### Materials and methods:

Description regarding the details of '*Shilajatu*' is clustered from different classical test books. It is stated in all the treatises unanimously that *Shilajatu* plays a vital role in curing various diseases as well as in the rejuvenation of the body tissues.

### Knowledge of *Shilajatu*:

*Shilajatu*, a wonder medicinal drug mentioned Ayurvedic *Samhitha*. It is a mineral rich resin that trickles down from the rocks of Himalayan Mountains region of India during summer. It is grouped under *maharasa varga* by the *acharyas of Rasashastra*. The Latin name of *Shilajatu* is *Asphaltum punjabinum*. It has been used as rejuvenator and adaptogen for thousands of years.

### Chemical composition:

*Shilajatu* is composed of humic acid (80-85%) of total organic mass and non-humic (15-20%) substances<sup>5</sup>. Fulvic acid is one of the major constituent of *Shilajatu*. It is likely that the curative properties attributable to *Shilajatu* are provided by the significant levels of fulvic acids that *Shilajatu* contains, considering that fulvic acid is known by its strong antioxidant actions<sup>6</sup>.

1. Table showing the properties of *Shilajatu* in various treatises:

Sl. No	Treatise	Properties	Therapeutic uses
1.	<i>Rasatarangini</i> <sup>4</sup>	<i>Tiktarasa, katu vipaka, yogavahi, rasayana, balya</i>	<i>Shvayathu shaman, panduharana.</i>
2.	<i>Ayurveda prakasha</i> <sup>7</sup>	<i>Katutiktarasa, ushna veerya, katu vipaka, yogavahi,</i>	<i>Pandu, kshaya, shvasa, shotha</i>
3.	<i>Rasachandamshu</i> <sup>8</sup>	<i>Medaschedakara</i>	<i>Pandu, shopha, hridshoolagna</i>
4.	<i>Rasa ratna samucchaya</i> <sup>9</sup>	<i>Medaschedakara</i>	<i>Pandu, shopha, hridshoolagna</i>
5.	<i>RasenDra sara sangraha</i> <sup>10</sup>	<i>Tiktakatu rasa, rasayana</i>	<i>Shotha, kshaya, udara</i>
6.	<i>Charaka samitha</i> <sup>11</sup>	<i>Anamla kashaya rasa, katu vipaka, nathyushna sheetha, rasayana</i>	<i>Vrushya, roganuth</i>
8.	<i>Sushruta Samhitha</i> <sup>12</sup>	<i>Tiktakatu rasa, kashaya anurasa, sara, katu vipaka, shoshana, snigdha</i>	<i>Sarva-vyadhi nashanam</i>
9.	<i>Sharnghadhara Samhitha</i> <sup>13</sup>		<i>Sarvavyadhinashanam</i>

**Importance of Shilajatu:**

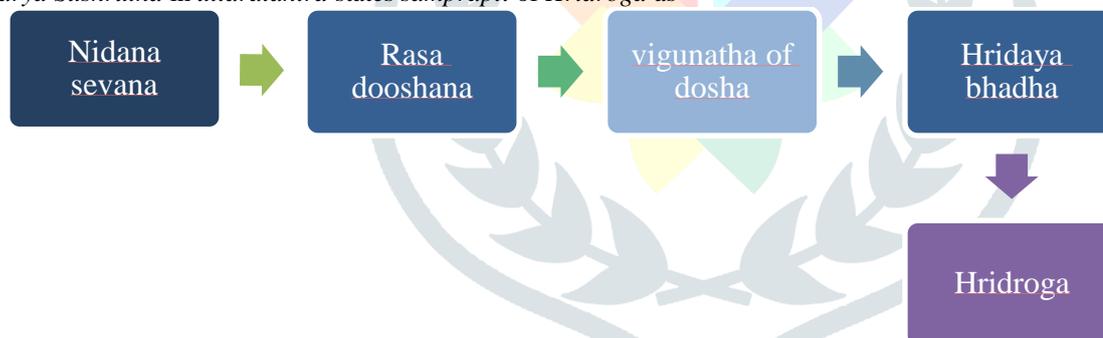
*Acharya Charaka* asserts that when used in appropriate condition of the disease, there is no disease which cannot be cured by '*Shilajatu*'. It also helps in maintaining the good health of an individual<sup>11</sup>.

2. Table showing the probable mode of action of *Shilajatu* on CVDs:

Property	Action
<i>Tikta rasa</i>	<i>Medolekhana,</i>
<i>Katu rasa</i>	<i>Bandaanschinatti, maargaan vivrunoti</i>
<i>Yogavahi</i>	<i>Bio-enhancer</i>
<i>Rasayana</i>	<i>Rejuvenating</i>
<i>Balya</i>	<i>Gives strength</i>

**Knowledge of hridroga<sup>14</sup>:**

*Acharya Sushruta* in *uttaratantra* states *samprapti* of *Hridroga* as

3. Table showing *lakshana* of different types of *hridroga* mentioned in *Sushruta samhitha* are enlisted in table below<sup>15</sup>:

<i>Vataja</i>	<i>Pittaja</i>	<i>Kaphaja</i>	<i>Krimija</i>
Pain in cardiac region 1. <i>ayamyate</i> 2. <i>Tudyate</i> 3. <i>Nirmatyate</i> 4. <i>Deeryate</i> 5. <i>Spotyate</i> 6. <i>Paatyate</i>	<i>Trusna, daaha, hridaya klama, Dhoomayana, moorcha, sweda, mukha shosha</i>	<i>Gaurava, kaphasamsrava, stambha, agnimardhava, aasyamaadhurya,</i>	<i>Utklesha, stevana, toda, shoola, hrullasa, tama, aruchi, shyaava netratha, shosha</i>

**Discussion:**

The present study emphasizes on knowing the action of '*Shilajatu*' on cardiovascular system. Due to the qualities of *Shilajatu* it acts as a wonder drug in treatment of many diseases. *Shilajatu*, by its *lekhana and medaschedana* property helps in the removal of atherosclerosis which is the common cause for cardiovascular disease in the present era. Due to its *balya and rasayana* property provides strength to the blood channels in turn reduces hypertension. It may also helps in overcoming obesity which is one of the leading causes for CVD due to its *lekhana* property. *Shilajatu* because of its *yogavahi* nature will help other medicines to reach the target organ. *Shilajatu rasayana* has been prescribed for *kaphaja hridroga* by *acharya Charaka*. *Shilajatu* is prescribed widely in conditions such as diabetes mellitus and anaemia which are considered as the predisposing factors for CVD's.

**Conclusion:**

*Shilajatu* one among the maharasa varga plays a major role in the treatment of ailments. It is prescribed as the best *rasayana*. *Shilajatu* is useful in treatment of CVD as well it works as cardio protective Drug. Further more studies should be carried out to know the exact action of *Shilajatu* over cardiovascular system.

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