



A CRITICAL ANALYSIS OF SHILAJATU TO EVALUATE ITS IMMUNE BOOSTER ACTION

^{1*}Dr.Salini V.S, ²Dr.Radhika Ranjan Geethesh P, ³Dr. Ravindra Angadi, ⁴Dr. Ashok
Kumar B.N

¹PG Scholar, ²Associate professor, ³Professor & HOD, ⁴Associate professor
Department of PG & Ph.D. Studies in Rasashastra and Bhaishajya Kalpana
Sri Dharmasthala Manjunatheshwara College of Ayurveda, Kuthpady, Udupi,
Karnataka. 574 118.

Corresponding author:

Dr. Salini V.S

PG Scholar, SDM College of Ayurveda, Kuthpady, Udupi, 574 118

vssalu9@gmail.com; 9633754791

ABSTRACT:

‘Ayurveda’ – The life science gives prime importance for *Swasthya rakshanam* and then *Atura chikitsa*. The concept of *Rasayana* is one of the unique and holistic approaches in *Ayurveda*. Among the various immune boosters mentioned in *Ayurveda*, *Shilajatu* has been placed foremost due to its therapeutic as well as synergistic properties.

The Concern regarding immunity has become more in the present era due to the outbreak of various infectious diseases. While the people searching to have a remedy for different emerging ailments, immune boosters play a vital role in preventing these diseases. Due to the sedentary lifestyle as well as the deranged food habits, a normal healthy life and immunity has become a great challenge in the society. Therefore, the need of immune boosters are very high in the present scenario.

There are various research studies conducted on *Shilajatu* and proved its wide range of therapeutic actions in the human body. In *Ayurveda* various authors have been mentioned *Shilajatu* as one of the best *Rasayana dravya*. Hence *Shilajatu* is reviewed here to evaluate its immune boosting action.

KEYWORDS: Himalayan rock, *Rasayana prayoga*, Immunity, *Vyadhi kshamatwa*

INTRODUCTION:

Shilajatu is a mineral origin drug found in the Himalayan mountain region of India. It is the essence of Himalayan mountain rocks oozes out due to the high temperature during summer season¹. It also means the one which conquers the mountains². The detailed description regarding *Shilajatu* as well as its uses in the therapeutic field is been evident since time immemorial. 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. It is known as black bitumen and *Alphatum punjabinum*.

There are various in vitro – in vivo studies conducted on *Shilajatu* to prove its different pharmacological actions. Most of the diseases are occurring due to lack of immunity, and this could be tackled only by the administration of some immune boosters along with the treatment. The major active component of *Shilajatu* is fulvic acid, which is a strongest natural electrolyte. It has the property to enhance immune response, stimulate the energy production and improves the oxygen levels³.

MATERIAL & METHODS:

Shilajatu is included under the group of *Maharasa* by the great *rasa vaidhyas*. The description regarding *Shilajatu* is available in all the *brihatraayis* and other *Ayurveda* classical text 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.

RESULTS:

Properties of *Shilajatu* according to various Text books are as follows

Sl No:	Author Name/ Text book	Properties of Shilajatu	Indications
1.	<i>Rasa Tarangini</i> ⁴	<i>Tikta rasa, Katu Vipaka, Mutrala, Yogavahi, Rasayana, Vata prakopa nashaka</i>	<i>Shwayathu, Pandu, Kshaya, Swasa, Pliha, Jwara, Udara, Agnimandhya, Apasmara, Unmada, Mutrakrichra, Kushta, Hridroga, Urakshata, Prameha, udarashula, Udarakrimi, Gulma, Ashmari, Prabala vataroga.</i>
2.	<i>Rasaratnasamu chaya</i> ⁵	<i>Dehe cha Lohe hitam,</i>	<i>Jwara, Pandu, Shotha, Prameha, Agnimandhya,</i>

		<i>Jaramrutyujigeeshaya, Medanaashaka</i>	<i>Yakshma, Shoola, Gulma, Pliha, Udararoga, Hrudshoola, Ama, Sarvatwagata roga.</i>
3.	<i>Ayurveda Prakasha⁶</i>	<i>Tikta and Ushna guna, Katu vipaka, Rasayana, Chedana (Scraping action), Yogavahi.</i>	<i>Kapha Prameha, Ashmari, Mutrakrichra, Kshaya, Swasa, Vatarakta, Arshas, Paudu, Apasmara, Unmada, Shotha, Kushtha, Udara and Krimi.</i>
4.	<i>Charaka Samhitha⁷</i>	<i>Anamla (Devoid of sour taste), Kashaya rasa (Astringent taste), Katu vipaka, Natyushnashitam (Neither hot nor cold in potency), Rasayana (Rejuvenator), Vrushya (Aphrodisiac).</i>	<i>According to Acharya Charaka there is no curable disease in the universe which is not effectively cured by Shilajatu when administered to a right person at right time and adjuvant.</i>
5.	<i>Sharngadhara Samhita⁸</i>	-	<i>Sarvavyadhinashanam (Indicated in all diseases)</i>
6.	<i>Susruta Samhita⁹</i>	<i>Tikta katu rasa, Kashaya anurasa, sara (laxative), Katu vipaka, Ushna virya, Shoshana (Causes dryness) and chedana (cutting/tearing of tissues)</i>	<i>Sarvavyadhinashanam (Indicated in all diseases) Especially in Prameha.</i>
7.	<i>Ashtanga hridaya¹⁰</i>	<i>Tikta and Katu rasa, Naatyushna, Katu vipaka, Chedana karma.</i>	<i>There is no Saadhya roga (Curable diseases) in the world which cannot be cured with the proper administration of Shilajatu.</i>

The *Rasayana prayoga* of *Shilajatu* mentioned in the *Brihatrayis* are analyzed and depicted in the table as follows,

Author/ Text book	Rasayana prayoga	Do's and Don'ts	Therapeutic effect
<i>Charaka samhita¹¹</i>	<i>Shilajatu (after immersing in hot decoction of drugs prescribed for alleviating the aggravation of tridoshas for 7 days) is mixed with loha</i>	<i>The food which are heavy (guru), causes burning sensation</i>	<i>Deerghayu (Long life), Sughanvita (Happyness), Jaravyadhi prashamana (prevents aging & diseases), Dehadardyakara (produces</i>

	<i>churna</i> (Iron powder) and to be administered with milk.	(<i>Vidahi</i>). And <i>Kulattha</i> (Horse gram) should be avoided.	sturdiness of the body) and it promotes <i>medha</i> (intellect) <i>smriti</i> (memory) and <i>dhana</i> (wealth).
<i>Susruta samhita</i> ¹²	<i>Shilajatu</i> has to be kept in <i>Salasaradi gana kashaya</i> overnight and made into paste with the same <i>kashaya</i> and to be consumed according to the strength.	Boiled rice along with soup of meat of animals of arid lands must be taken after the administered <i>Shilajatu</i> gets digested.	1 <i>tula</i> (4 kg) of this <i>Shilajatu</i> if consumed in this manner – Makes the person free of <i>Madhumeha</i> (Diabetes), attains good physical strength and complexion, and lives for hundred years.
<i>Ashtanga hridaya</i> ¹³	Purification of the body by <i>Snehanadi panchakarma</i> procedures and followed by administration of <i>Shilajatu</i> for 7 , 21 and 49 days in a dose of 1 <i>karsha</i> (12 gm), half <i>pala</i> (24 gm) and 1 <i>pala</i> (48 gm) respectively.	<i>Kulatha</i> , <i>Kakamachi</i> , <i>Kapota mamsa</i> are to be avoided.	Increases the energy/immunity of <i>Swastha</i> by the administration of <i>Shilajatu</i> as <i>Rasayana</i> .

Research updates¹⁴:

Few research studies conducted on *Shilajatu* has been evaluated and the results are depicted below.

- **Nootropic activity**¹⁵: It has been proposed in a study that the Nootropic activity can be correlated to the *medhya Rasayana* concept in *Ayurveda*, and the research found a significant nootropic activity of *Shilajatu* (Ghosal 1998¹⁶) and the action of *Shilajatu* in enhancing learning capacity and memory (Mukherjee 1992¹⁷).
- **Anxiolytic activity**¹⁸: The result indicate a significant anxiolytic activity of *Shilajatu*, while comparing with that induced by diazepam.
- **Nutritive tonic**¹⁹: It was found significant in an experimental study that the weight of young rats increased after the administration of *Shilajatu* for one month. This suggests the tissue strengthening activity of *Shilajatu*.
- **Anti-inflammatory activity**²⁰: The anti-inflammatory action of *Shilajatu* was found significant in albino rats by administering it in the form of aqueous suspension.

- **Anti-Alzheimer²¹:** *Shilajatu* showed a significant potent result in treating the incurable Alzheimer's disease (Mukherjee 1992).
- **Anti-ulcerogenic²²:** A significant reduction in the gastric ulcer formation was found in pylorus ligated rats suggesting the action of *Shilajatu* in Peptic ulcer disease which is one among the most troubling disease of GIT.

DISCUSSION:

The current research study is highlighted upon the immune booster actions of *Shilajatu* with respect to its *Rasayana prayoga* in *Ayurveda*. Immunity may be defined as the ability of an animal's body to react to a foreign antigen and eliminate it, in the interest of safety of the animal²³. It can be broadly classified as innate immunity and acquired immunity.

In *Ayurveda* the term immunity can be better understand by the concept of *Vyadhi kshamatwa*. To have a good immunity or *Vyadhi kshamatwa* the *Rasayana* drugs must be administered. Those which invigorate a healthy person are mostly aphrodisiac and rejuvenators²⁴. By doing rejuvenation therapy a person attains longevity, memory, intellect, freedom from diseases, youth, excellence of luster, complexion and voice, excellent potentiality of the body and the sense organs²⁵. There are some other *Rasayana dravyas* which act specifically in disease conditions along with strengthening the body tissues. *Shilajatu* comes under this variety and helps in curing all kinds of curable disease and does rejuvenation also.

According to *Acharya Charaka* there is no curable disease in the universe which is not effectively cured by *Shilajatu* when administered to a right person at right time with proper adjuvant and this indicate the wide range of therapeutic action of *Shilajatu*. Various research studies also highlights the range of *Shilajatu* in curing different disease and also as a preventive medicine too. Hence this is the peak time for using *Shilajatu*, one of the precious medicines of *Ayurveda* as an immune booster to conquer the emerging diseases.

CONCLUSION:

Ayurveda emphasizes both *Swasthya rakshana* and *vikara prashamana*. *Rasayana* is one of the unique and holistic approach from *Ayurveda* to build a healthy life. *Shilajatu* is multi action drug with high potency to boost the immunity in various ways. With the support of information available in the classics along with the new research updates, an attempt is made here to evaluate the immune boosting action of *Shilajatu* with respect to its *Rasayana prayoga*. As the world is now witnessing various new infectious diseases, a medicine which can cure as well as prevent the occurrence of these disease is the need of the hour. In this aspect *Shilajatu* can act as a wonder drug.

REFERENCES:

1. Sharma S. Rasatarangini. Talakadi Vijnaniya. 22/62-63. Edited by Dr. Ravindra Angadi.1st ed. Chaukhambha Surabharatiya Prakasha, Varanasi; 2015.p.382.Pp.523.

2. Dr. Angadi R, A textbook of Rasashastra, Maharasa, Chaukhambha surabharatiya prakashan.Varanasi; 2014.p.204.Pp.702.
3. Dr. Angadi R. A textbook of Rasashastra. Maharasa. Chaukhambha surabharatiya prakashan.Varanasi;2014.p.204.Pp.702.
4. Sharma S, Shastri K. Rasatarangini. 11th ed. Motilal Banarasidas. Delhi; 2016. p.588.Pp:771.
5. Vagbhatta. Rasaratna samuchchaya. Siddhiprada Hindi Translation. Misra S. 1st Ed. Varanasi: Chaukhambha orientalia; 2011.p:49.Pp:697.
6. Madhava A, Mishra G. Ayurveda Prakasha.1st ed. Varanasi: Chaukhambha Bharathi; 2003 .p:428.Pp:504.
7. Agnivesha. Charaka. Charaka samhita. Sutrasthana 11th chapter. Deepika Commentary. Chakrapanidatta. Acharya Y.T(ed). Chaukhamba surbharati prakashan. Varanasi; 2020.p:74.Pp:738.
8. Sharangadhara. Sharangadhara samhita. Dipika- Gudartha dipika commentary. Sastri PP, Vidyasagar. (ed). 2018.p:254.Pp:398.
9. Sushrutha. Dalhana. Sushrutha Samhita. Sutrasthana. Dravadravyavidhi. Chaukhambha Sanskrit Sansthan. Varanasi; 2010.p: 213.Pp: 824.
10. Vagbhata. Ashtangahridayam, Hindi commentary. Tripathi B. Chaukhamba Sanskrit Pratisthan. Delhi; 2009.p:1199.Pp:1295.
11. Agnivesha. Charaka. Charaka samhita. Sutrasthana 11th chapter. Deepika Commentary. Chakrapanidatta. Acharya Y.T(ed). Chaukhamba surbharati prakashan. Varanasi; 2020.p:74.Pp:738.
12. Sushrutha. Dalhana. Sushrutha Samhita. Sutrasthana. Dravadravyavidhi. Chaukhambha Sanskrit Sansthan. Varanasi; 2010.p: 213.Pp: 824.
13. Vagbhata. Ashtangahridayam, Hindi commentary. Tripathi B. Chaukhamba Sanskrit Pratisthan. Delhi; 2009.p:1199-1200.Pp:1295.
14. Giurgea C. The nootropic approach to the pharmacology of the integrative action of the brain. Cond Reflex 1973; 8: 108-15.
15. Ghoshal. S. 1990. Chemistry of Shilajit, an immunomodulatory Ayurvedic Rasayana. Pure and Appl. Chem., 62 (7), 1285-1288.
16. Mukherjee, Biswapati. Traditional Medicine, Proceedings of an International Seminar. Nov. 7-9 1992, pg:308-319. Hot taj Bengal, Culcutta India. Oxford & IBH Publishing, New Delhi, 1992.
17. Jaiswal AK, Battacharya SK. Effects of Shilajit on memory, anxiety and Brain monoamines in rats. Indian Journal of Pharmacology 1992; 24:12-17.

18. Gupta SS, Seth CB, Mathur VS. Effect of Gurmar and shilajit on body weight of young rats. *Indian J of Physiol Pharmacology*. 1996 Apr; 9(2): 87-92.
19. Goel RK, Banerjee RS, Acharya SB. Antiulcerogenic and inflammatory studies with shilajit. *J of ethnopharmacology*. 1990 Apr; 29(1): 95-103.
20. Mukherjee, Biswapati. *Traditional Medicine, Proceedings of an International Seminar*. Nov. 7-9 1992, pg:308-319. Hot taj Bengal, Culcutta India. Oxford & IBH Publishing, New Delhi, 1992.
21. Goel RK, Banerjee RS, Acharya SB. Antiulcerogenic and inflammatory studies with shilajit. *J of ethnopharmacology*. 1990 Apr; 29(1): 95-103.
22. R.S. Satoskar, Rege.N.N, Tripathi R.K, S.D Bhandarkar(et.al). *Pharmacology and Pharmacotherapeutics*. 25th ed.2017.p:1043.Pp:1155.
23. Agnivesha. Charaka. *Charaka samhita. Rasayana 3rd pada. Deepika commentary. Chakrapanidatta. Acharya Y.T(ed). Chaukhambha prakashan. Varanasi;2020.p:386.Pp:738.*
24. Agnivesha. Charaka. *Charaka samhita. Rasayana 3rd pada. Deepika commentary. Chakrapanidatta. Acharya Y.T(ed). Chaukhambha prakashan. Varanasi;2020.p:386.Pp:738.*

