JETIR.ORG

ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A Literary Review on Incredible Drug – Shilajatu

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Abstract

Shilajatu (Black bitumen) is one of the Rasa Dravya (herbomineral) grouped under Maharasa in Rasa Shastra. It is obtained from the mountain rocks in the form of exudate which oozes out in summer season. Based on the region and mountain area, the appearance and the composition vary. Shilajit is pale brown to blakish brown in color and bitter in taste and it's smell resembles cow's stale urine. Depending on abundance of metals present in the rocks, it has been classified by the texts into six types namely Suvarna (gold), Rajat (silver), Tamra (copper), Lauha (iron), Naag (lead) and Vanga (tin). The Loha variety is commonly found and used therapeutically. After Shodhan Shilajatu can cure many diseases like Mutravaha Shrotas Vikar, Medoroga, Prameha and Madhumeha Roga, Kamala, Swasa Roga, Kasa Roga etc. and have Rasayana (rejuvenating) properties. Contemporary research proved Shilajit as analgesic, antiinflammatory, anti-ulcer, anxiolytic, and nootropic effects, primarily due to bioactive compounds such as fulvic acid and dibenzo-α-pyrones present in it. Additionally, Shilajatu has been shown to enhance cognitive function, physical endurance, and longevity.

Keywords: Shilajit, Shilajatu, Black bitumen, Maharasha, Rasashastra, Rasaushadhi, Ayurvedic description.

Introduction

Shilajit is a thick tar-like substance having a dark brown colour which exudes from rocks of mountains predominately in Himalayas, Karkuram, Tibet, Caucasus, Atlai, Gulgit Baltistan, Arunanchal Pradesh, Kashmir, Afghanistan, Bhutan, Nepal in the month of summer due to extreme heat of sun. It is formed from organic and plant compounds that have been compressed by layers of rocks. Due to sun heat on mountains during summer the Shilajit material seep out of rock cracks. The word Shilajit is composed of two parts "Shila" means rock and "jit" means having won. So its literary meaning is "conqueror of mountains". Its Sanskrit meaning is "Conqueror of mountains and destroyer of weakness" .The discovery of power of Shilajit is said to have been made by Himalayan villagers. They began to consume it and reported a broad spectrum of improvements in health and as powerful tonic^{1,2}. It has a number of pharmacological activities and has been used for ages as a rejuvenator and treatment of a various diseases. Modern scientific research has systematically validated a number of properties of Shilajit used in Indian medicine.

Synonyms of Shilajatu: Silaja , Saileya, Girija, Adrija, Asmottha, Asmalaksha, Gaireya, Silasweda, SailaDhatuja, Silamaya, Silaniryasa, Asmajatuka, Asmaja, Mandarottam, Girisanujam, Nadeejam, Shailadhatujam, Ushnajam, Sadloha sambhavam, Silamala, Shiladadru etc³.

Historical background

Vedic Period (1500 BC): Mention of words such as Shilanjal, Ghritaci, Shilasi which were used to increase virility and indirectly referred to as Shilajatu.

Acharva Charaka: He has mentioned that metals like gold and others are present in the rocks which receive heat and secrete the exudate, which is called Shilajit. He described Shilajatu in Karaprachiteeya Rasayana Pada and explains its importance stating that when Shilajatu is administered with appropriate dose, time and combination, there is no disease in the universe that it cannot cure. He has included Shilajatu in Parthiva Dravya and gives various combinations with Shilajatu in various diseases⁴.

Acharva Sushruta: Sushruta in its chikitsa sthana specifies the origin of Shilajatu that due to intense and bright scorching heat of sun in the month of Jyeshtha and Ashadha, a gelatinous substance is secreted from the mountains and this substance is known as Shilajatu. He has included Shilajatu under Ushakadi Gana⁵.

Astanga Sangraha and Astanga Hridaya: Shilajatu is described in Rasayana Vidhi Adhyaya and is explained to be formed during churning of ocean as sweat of Mandara Parvata which was deposited in the mountains by Lord Brahma.

Rasaratna Samucchaya: Shilajatu is included under Maharasa and detailed description of its Utpatti, Bheda, Guna, Shodhana, Marana, Sattvapatana, Pareeksha and Amayika Prayoga is found⁶.

Sarangadhara Samhita: He has described emergence of Shilajatu from Pashana in Dhathu Shodhana Maran Aadhyaya of Madhyama Khanda. He has given detail description of Shodhan of Shilajatu. It is also found as an ingredient in various Rasa Ausadhi such as Mehaabaddha rasa, Kusthakuthara rasa⁷.

Bhavaprakasha: Bhava Mishra in his Nighantu and Chikitsa Pada describes Shilajatu under Dhatu Varga and also gives details of its Utpatti, Guna, Bheda and Shodhan⁸.

Rasatarangini Detailed description of Shilajatu such as its synonyms, types, properties, Shodhana methods, therapeutic utility, dosage is found⁹.

Properties of Shilajit:

Author	Rasa	Guna	Virya	Vipaka	Karma
Charaka	Anamla,		Natyushna	Katu	Rasayana, Vrishya
Samhita	kashaya		sheeta		
Sushruta	Tikta,Katu	Sara	Ushana	Katu	Mridu Virechaka,
Samhita		1 1		-367	Chhedana
Ashtanga	Katu, Tikta	4 45	Natyushna	Katu	
Hridya					

Shilajatu properties according to type¹⁰:

- 1. Swarnagarbha: Appears as Japakusuma and has Madhura, Tikta, Katu Rasa; Shita Guna, Katu Vipaka. It is Vatapittaghna and has Rasayana properties.
- 2. Rajatagarbha: Pandu Varna, Sita Guna, Tikta Rasa and Madhura Vipaka. It is Sleshmapittaghna and Pandurogahara.
- 3. Tamragarbha: Nilabha Varna or blue in colour, Tikta Rasa, Tikshna and Ushna Guna. It has Kaphaghna and has Lekhana properites.
- 4. Lohagarbha: Krishna Varna, Tikta, Lavana, Kashaya rasa, Katu Vipaka, Shita, Guru, Snigdha Guna. It has Tridoshaghna, Rasayana and Vrishya properties.

Chemical Composition: Shilajit from different regions contained a large variation of organic compounds that can be broadly grouped into humic acid (80-85%) and non-humic (15-20%) substances. Generally Shilajit contains 14-20% humidity, 18-20% minerals, 13-17% proteins, 4-4.5% lipids, 3.3-6.5% steroids, 18-20% nitrogen free compounds, 1.5-2.0% carbohydrates and 0.5-0.8% alkaloids, amino acids and other compounds. It contains a large number of organic compounds like sterols, tri- terpenes, fulvic acids, ellagic acid, benzoic acid, mhydroxyl benzoic acid, 3 benzo coumarins and as many as 18 free amino acids. 11,12

Types of Shilajit:13

Rasaratnasamucchaya, Acharya Vagbhatta: 2 types: 1. Gomuta Gandhi Shilajatu 2. Karpura Gandhi Shilajatu

Charaka Samhita, Rasatarangini: 4 types: 1. Hemagarbha 2. Raupyagarbha 3. Tamragarbha 4. Lohagarbha

Sushruta Samhita, Ashtanga Hridaya, Rasjalanidhi: 6 types: 1. Swarnagarbha 2. Rajatagarbha 3. Tamragarbha 4.Lohagarbha 5.Nagagarbha 6.Vangagarbha

Rasarnava: 2 types 1. Patita: which is fallen on ground 2. Apatita- Exudation that is in the source itself and not fallen on the ground.

Shodhana (purification):

Charaka Samhita (Ch.Chi.1/3/51): Bhavana with Vata, Pitta, Kapha Shamaka drugs.

Sushruta Samhita (Su.Chi.13/10): Bhavana with Salsaradi Gana drugs.

Astanga Hridaya: Bhavana with drugs according to Doshas & Vyadhi.

Rasaratnasamucchaya (RRS 2/117-118): Cleaning with Kshara, Amla, Gomutra and Bhavana with each of Godugdha, Triphala kwatha, Bhringaraja Swarasa.

Rasa Tarangini (R.T 22/ 79-80): Extraction of Shilajatu with hot water, Triphala kwath, Gomutra or Bhringaraja Swarasa.

Ayurveda Prakash (A.P 4/106): Cleaning with water to remove external impurities. To eliminate internal impurities, it is advised to triturate the drug with a decoction of Neem, Guduchi, and Indrayava, specifically in an iron container, up to seven times utilizing each decoction.

Rasajalanidhi: 3 methods described for Shilajit purification. 1st Bhavana with Triphala, Godugdha, Bhringaraj. 2nd Bhavana with each drugs are selected according to disease. 3rd dissolve Shilajatu stones in water and collect the supernatant portion of fluid, then it is subjected to the Dhuma of Agurvadi Gana and finally evaporate the liquid to get Santanika with Vataghna, Pittaghna and Kaphaghna Dravya's Kwatha.

Moreover, ancient Rasacharyas have described the Shodhana of Karpura Shilajeet, which involves trituration with a decoction of cardamom followed by a drying process (RRS 2/118, R. Chudamani 10/109, Basavarajiyam 25th chapter, RP 45).

Sreshtha Shilajatu: Shilajatu which is like Guggulu, having Tikta Lavana Rasa, Shita Virya, Katu Vipaka and that which is obtained from Ayasa or iron is said to be the best. Sushruta mentions that Shilajatu which is of Krishna Varna, Alaghu, Snigdha, Nihsarkara or without any sand particles and having Gomutra Gandha is Shreshta.6

Tests for Pure Shilajit:

- 1. When exposed to flame, Shilajeet will stand upright and burn without producing smoke.
- 2. If pure Shilajeet is introduced into water via the tip of a thin, upright glass, it will descend slowly, dispersing like fiber.
- 3. Pure Shilajeet must possess the distinct aroma of cow urine.

Marana: The Marana process is generally not applicable to Shilajit however certain texts have referenced its Marana. The author of the Rasa Ratna Samucchaya indicated that Shilajit should be combined with Gandhaka, Manahshila and Hartala followed by triturating this mixture with lime juice, then subjected to incineration using the Gajaputa. Ayurveda Prakasha indicated Kapota Puta instead of Gajaputa, rest of method is same as RRS (RRS 2/113, AP 4/131).

Satwapatana: Shilajatu is subjected to Bhavana utilizing the Dravaka Varga along with a specific vegetable acid. This mixture is then heated in a crucible using a strong coal fire. The resultant extract exhibits characteristics similar to iron. (R.Chu-10/107).

Dosage:

Charaka and Ayurved Prakash classifie the dosage of Shilajeet into three categories: Uttama, Madhyama and Avara. For the Uttama classification, the dosage is one Pala (approximately four Tolas) over duration of seven weeks. For the Madhyama classification, the dosage is ½ Pala (approximately two tolas) for a period of three weeks, and for the Avara classification, the dosage is one Karsha (approximately one Tola).

In Sushruta the dose of Shilajeet is 100 pala for gaining Pushti, Bala, Varna, curing Madhumeha and longevity up to 100 years (thousand Pala for attaining the life upto one thousand years).

Ashtanga Sangraha in the context of Guggulu Rasayana mentions dosage pattern for Shilajatu Rasayana not exceedingly more than 1 Pala a day.

In Rasa Tarangini 22/87, the dose of Shilajeet is from 2 to 8 Ratti depending upon the factor like age, strength etc.

Anupana: Shilajeet contains Katu Tikta Kashaya and Ushna properties. If it is not administered with any vehicle, causes irritation in the stomach. So this is administered with milk, fruit juice etc. Ancient Acharyas believe that the Anupana should be given as per the factors like Dosha, Kala, quantity of the drug etc. According to Charaka Samhita Dugdha, Takra, Mamsa rasa, Yusha, Jala, Gomutra and different disease curing Kwatha should be used. Rasa Tarangini has listed 20 Anupana can be given along with Shilajeet under different conditions (RT 22/88-109)

Impure Shilajatu side effects: If Shilajatu is not properly purified, causes burning sensation, syncope, Giddiness, hemorrhage, emaciation, loss of appetite and constipation.¹⁵

Antidote of Shilajatu: The disease due to use of impure Shilajatu may be cured by taking Maricha (in doses of ¹/₄ of tola a day) mixed with ghee for seven days. ¹⁶

Conclusion

Shilajatu is a humus-rich substance with a blackish brown hue. Its origin remains a topic of debate for researchers. However, most of the researchers concluded that Shilajatu exuding from mountainous rocks is primarily derived from a vegetative source. The term Shilajatu translates to "conqueror of mountains and destroyer of weakness" in Sanskrit. In the ancient text Charaka, Acharaya Charaka quoted that "there is hardly any curable disease that cannot be cured with Shilajit." In Ayurvedic texts, Shilajatu is also regarded as a vitality enhancer, a remedy for diabetes etc. and is utilized in the Ayurvedic medicine system of India for various health conditions.

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