

SHILAJIT – THE DIVINE ELIXIR OF NATURE

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ABSTRACT**Introduction:**

Shilajit is a classical *Ayurvedic rasayana* described as a mineral–organic exudate from mountainous regions. Ancient texts describe its types, origin, and medicinal importance, with *Lauha Shilajatu* considered the most potent.

Materials and Methods: Key *Ayurvedic* texts were reviewed to compile information on the origin, types, purification (*Shodhana*), therapeutic uses, dosage, and safety of *Shilajit*.

Results: Classical sources describe specific *Shodhana* procedures, purity tests, and indications in *prameha*, *sthaulya*, *pandu*, *kushtha*, *rajyakshma*, urinary diseases, and general debility. *Shilajit* contains humic substances, fulvic acid, dibenzo- α -pyrones, minerals, and diverse bioactive compounds.

Discussion: Traditional evidence highlights *Shilajit's* rejuvenative and therapeutic potential, emphasizing proper purification and dosage. While widely used in *Ayurveda*, further scientific research is required to validate its pharmacological actions and standardize quality.

KEYWORDS: *Rasayana*; Fulvic acid; Humic substances; *Adrija*;

INTRODUCTION

Shilajit is considered one of *Ayurveda*'s miraculous medicines. Its earliest explanation found in the *Charaka Samhita*, one of the classical *Ayurvedic* texts, which states: "Metals such as gold and others are found within the mountains; when these mountains are exposed to heat, they exude a resin-like substance known as *Shilajit*."¹ The *Sushruta Samhita* also mentions that when mountains are heated, they exude a substance resembling gum, which is known as *Shilajit*.² During the summer, when temperatures rise intensely, a thick, dark brown, tar-like substance oozes out from the rocks of mountains in regions such as the Himalayas, Karakoram, Tibet, the Altai Mountains, and the ranges of Gilgit-Baltistan, Arunachal Pradesh, Kashmir, Afghanistan, Bhutan, and Nepal. The term *shilajit* is formed from the *Sanskrit* roots *shila* ("rock") and *jit* ("victor" or "one who has conquered"), thus meaning "conqueror of mountains" or "one who triumphs over the rock." Its fuller *Sanskrit* sense conveys "the conqueror of mountains and the destroyer of infirmity or weakness."³

There are four primary varieties of *Shilajit*⁴ — *Tamra* (copper), which appears blue; *Rajat* (silver), which is white; *Suvarna* (gold), which is red; and *Lauha* (iron), which is dark brown to black in color. Additionally, two other types, *Naag* (lead) and *Vanga* (tin), have also been described.

MATERIALS AND METHODS

For the purpose of this review, various classical texts of *Ayurveda* and *Rasashastra* were thoroughly examined and analyzed, including *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Sangraha*, *Ashtanga Hridaya*, *Chakradutta*, *Bhaishajya Ratnavali*, *Rasaratna Samuchchaya*, and *Rasatarangini*. In addition to classical literature, published research articles, review papers, and pharmacological studies related to *Shilajit* were collected from indexed journals and online academic resources like pubmed, research gate, google scholar etc.

RESULT AND DISCUSSION

Synonyms of *Shilajatu*

Shilajatu is known by various synonymous names such as *Shailey*, *Shilaj*, *Shailadhatuja*, *Shilamaya*, *Shilasweda*, *Shilaniryas*, *Ashmaj*, *Ashmajatuk*, *Girija*, *Adrija*, *Ashmotha*, *Ashmalaksha*, *Gaireya* etc⁵

Origin

During the *Samhita* period, references to *Shilajatu* can already be found Which explain its **origin** and formation.

1. *Charaka Samhita:*

In the *Chikitsa Sthana*, *Charaka* describes the origin of *Shilajatu* as a substance that oozes out when metals like gold, silver, copper, and iron are subjected to intense heat. The exudate resembles lac in appearance and has a soft, resin-like consistency.⁶

2. *Sushruta Samhita:*

According to *Sushruta*, in the *Chikitsa Sthana*, *Shilajatu* forms when, during the scorching heat of the months of *Jyeshtha* and *Ashadha*, a gelatinous material seeps out from the sides of mountains. This substance, known as *Shilajatu*, is believed to cure various ailments and restore balance in the body⁷

Types of *Shilajatu*⁸

Types	<i>Charak</i>	<i>Sushrut</i>	<i>Ashtang hridaya</i>	<i>Rastarangani</i>	<i>Brihad rasraj sunder</i>	<i>Rasjalnidhi</i>
<i>Swarna Shilajatu</i>	+	+	+	+	+	+
<i>Rajata Shilajatu</i>	+	+	+	+	+	+
<i>Tamra Shilajatu</i>	+	+	+	+	+	+
<i>Lauha Shilajatu</i>	+	+	+	+	+	+
<i>Naga Shilajatu</i>	-	+	+	-	+	+
<i>Vanga Shilajatu</i>	-	+	+	-	+	+

In the *Rasaratnasamucchaya*, *Acharya Vagbhatta* describes two main varieties of *Shilajatu*⁹

1. *Gomutra Gandhi Shilajatu* – distinguished by its **cow urine-like odor**, and further divided into two subtypes:

(a) *Sahsatva*

(b) *NihSATVA*

2. *Karpura Gandhi Shilajatu* .

Properties of *Shilajatu* according to *Charak Samhita*¹⁰

Types	Colour	<i>Rasa</i>	<i>Virya</i>	<i>Vipaka</i>
<i>Swarna Shilajatu</i>	like the flower of japa	Sweet,Bitter	<i>Sheeta</i>	<i>Katu</i>
<i>Rajata Shilajatu</i>	White	Pungent	<i>Sheeta</i>	<i>Madhur</i>
<i>Tamra Shilajatu</i>	peacock throat	Bitter	<i>Ushna</i>	<i>Katu</i>
<i>Lauha Shilajatu</i>	looks like gum of guggulu	Bitter ,salt	<i>Sheeta</i>	<i>Katu</i>

Chemical Constituents

Shilajit from various regions shows significant differences in its organic composition. Overall, about 80–85% of its organic content consists of humic substances, while the remaining 15–20% is made up of non-humic components.¹¹ In general, *shilajit* is composed of roughly 14–20% moisture, 18–20% mineral content, and 13–17% proteins that show notable α -amylase activity. It also includes about 4–4.5% lipids, 3.3–6.5% steroids, 18–20% nitrogen-free substances, 1.5–2% carbohydrates, and a small fraction (0.05–0.08%) of alkaloids, amino acids, and various other components.¹² In addition, *shilajit* contains a wide range of amino acids and around 65 different organic molecules. These include albumins, coumarins, free fatty acids, various organic acids such as adipic, succinic, citric, oxalic, and tartaric acids, along with waxes, resins, polyphenols, essential oils, and vitamins like B1 and B12.¹³ The primary bioactive components of *shilajit* are believed to include dibenzo- α -pyrones and their derivatives, tirucallane-type triterpenes, short peptides formed from non-protein amino acids, certain phenolic lipids, minor tannoids, and fulvic acid. These constituents likely arise through the humification process, during which organic materials are broken down and transformed, producing both simpler and more complex molecules than those originally present. Since humus is composed of decomposed organic matter that no longer retains its original structure, such transformations are expected.¹⁴ A variety of phenylpropanoid–acetate–derived aucuparins, oxygenated biphenylcarboxylates (identified in their permethylated forms), and oxygenated dibenzo- α -pyrones have been detected in all genuine samples of *shilajit*, although their concentrations vary across samples.¹⁵ Additionally, the compound 2-chloro-10-(3-dimethylaminopropyl)-phenothiazine was detected and separated from the organic fraction of *shilajit*. A subsequent chemical method was also established to obtain purified vitamin D₃ from mumiyo.¹⁶ Based on chemical analysis and reaction studies, six previously unknown compounds were identified—shilajityl acetate, shilajitol, shilacatechol, shilaxanthone, shilanthranil, and naphsilajitone—along with pyrocatechol, and their stereostructures were established.¹⁷

Shodhana methods

Charaka Samhita makes an indirect reference to the *Shodhana* (purification) process of *Shilajatu*. In this context, *Charaka* describes the *Bhavana* (trituration) method and recommends performing it seven times for therapeutic application. For this purpose, decoctions of herbs that help balance *Vata*, *Pitta*, and *Kapha* doshas are advised to be used in the *Bhavana* process.¹⁸

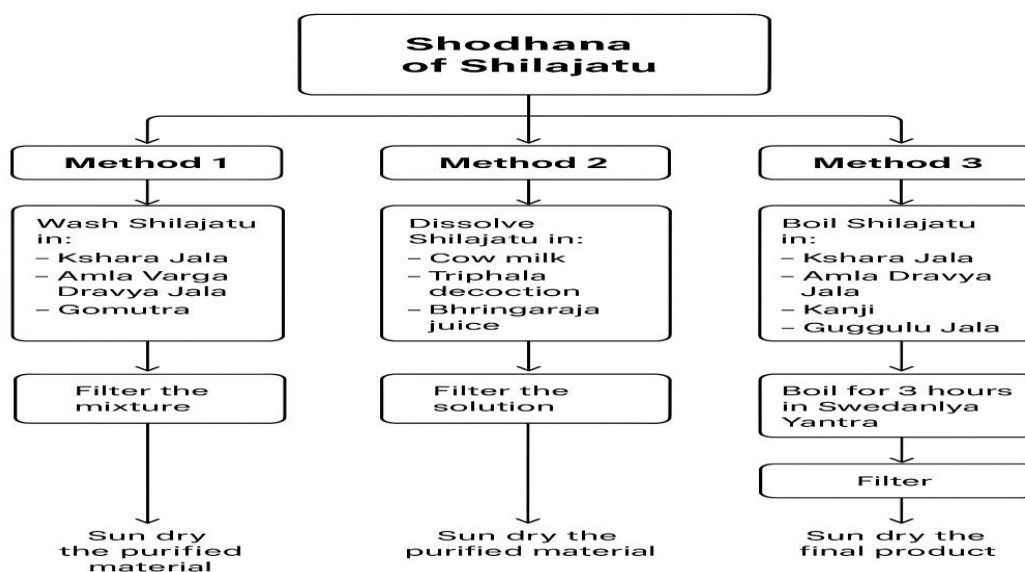
Sushruta Samhita recommends using the decoction of *Salsaradi Gana* for the *Bhavana* process. Additionally, it emphasizes selecting different *Bhavana* media based on the specific disease or disorder being treated.¹⁹

Ashtanga Sangraha provides the first detailed description of the *Shodhana* (purification) process of *Shilajatu*, including the quantity of the purifying medium and the duration of the procedure. *Vagbhata* explains that *Shilajatu* should be dissolved in water, filtered, and then dried under sunlight. For the first time, he also recommends specific herbal decoctions tailored to different *Doshas* for use in the purification process.²⁰ He recommended using eight times the quantity of water to prepare the decoction of the specified herbs, which should then be reduced to one-eighth of its original volume. This decoction, in equal proportion, is to be used for the *Shodhana* (purification) of *Shilajatu*. The mixture should be evaporated under sunlight, and the process repeated seven times. The same method is also described in the *Ashtanga Hridaya*²¹.

The *Rasaratna Samuccaya* describes three distinct methods for performing *Shodhana* (purification)²² In first method, *Shilajatu* should be washed in *Kshara Jala* or *Amla Varga Dravya Jala* or *Gomutra* and filtered followed by sun drying. In second method, *Shilajatu* should be dissolved in the cow milk or decoction of *Triphala* or juice of *Bhringaraja* and then it should be filtered followed by sun drying. In third method, *Shilajatu* should be boiled in *Kshara Jala*, *Amla Dravya Jala* or *Kanji* and *Guggulu Jala* for three hours in *Swedaniya Yantra*, followed by filter and sun drying.

Rasatarangini also describes the purification of *Shilajatu*. In this process, *Shilajatu* is dissolved in twice its quantity of hot water and half its quantity of *Triphala* decoction. In two alternate methods, the *Triphala* decoction is substituted with *Gomutra* or *Bhringaraja* juice.²³

Flow chart(shilajit shodhan)²²



Test of Purity *shilajatu*

According to *Rasaratna Samuccaya* following test are the markers of pure *shilajatu*²⁴

1. Becomes convex (Lingakar) when put on fire
2. Burns without producing smoke.
3. When added to water, it dissolves partially but doesn't blend into a uniform mixture.

Indications of *Shilajatu*: Various *Rasashastra* texts describe different formulations of *Shilajatu*, each prescribed for specific therapeutic uses.

S.N.	Formulations	Indication	References
1.	<i>Suddha Shilajatu</i>	<i>Sthaulya</i>	<i>Su.Su 15/37</i> ²⁵
2.	<i>Suddha Shilajatu</i>	<i>Kushtha</i>	<i>Su.Chi 9/6</i> ²⁶
3.	<i>Salsaradi Gana bhavita</i>	<i>Madhumeha</i>	<i>Su.Chi 13/10</i> ²⁷
4.	<i>Chandraprabha Vati</i>	<i>Premeha</i>	<i>Sh.M Kh.7/40-4928</i>
5.	<i>Mehabaddha Rasa</i>	<i>Premeha</i>	<i>Sh.M Kh.12/203-206</i> ²⁹
6.	<i>Loha rasayana</i>	<i>Sthaulya, pandu, kustha, prameha</i>	<i>Chakradutt-Sthaulya rogadhikara 35-18</i> ³⁰
7.	<i>Shiva Gutika</i>	<i>Rajyakshama</i>	<i>Y..R.Rajyakshama chikitsa</i> ³¹
8.	<i>Chandraprabha Gutika</i>	<i>Premeha</i>	<i>Y..R. Premeha chikitsa</i> ³²
9.	<i>Prabhakar vati</i>	<i>Hrida roga</i>	<i>B.R.Hrida rogadhikara (40-41)</i> ³³
10.	<i>Prameha kulanataka rasa</i>	<i>Prameha, kamala, pandu, Ashmari, mutraghata</i>	<i>B.R. Prameha chikitsa 37-80</i> ³⁴
11.	<i>Mehanathaka rasa</i>	<i>Premeha</i>	<i>B.R. Prameha chikitsa 37-146</i> ³⁵

Dose of pure *shilajatu*

According to *Charaka*³⁶

Types	Quantity	Duration
<i>Uttama</i>	4 tola	7 week
<i>Madhyama</i>	2 tola	3 week
<i>Madhyama</i>	1 tola	1 week

According to *Sushruta*³⁷

In the *Sushruta Samhita*, it is mentioned that the dose of *Shilajatu* is 100 pala for promoting strength (*bala*), enhancing complexion (*varna*), achieving nourishment (*puṣṭi*), curing *madhumeha* (diabetes mellitus), and attaining longevity up to 100 years. A higher dose — 1,000 pala — is said to help in achieving a lifespan of up to one thousand years.

According to *Rasatarangin*³⁸

The dose of *Shilajatu* is mentioned as 2 to 8 *Ratti* (approximately 250 mg to 1 g), depending upon the individual's strength (*bala*) and the time or condition (*kala*) of administration
Anupana- According to the *Charaka Samhita*, milk (*dugdha*), buttermilk (*takra*), meat soup (*mamsa rasa*), pulse soup (*yusha*), water (*jala*), cow's urine (*gomutra*), and various medicated decoctions (*kwatha*) prepared for specific diseases should be used as suitable media for administering *Shilajatu*³⁹

Adverse Effects of Impure *Shilajatu*- Improperly purified *Shilajatu* can cause adverse effects such as burning sensation, giddiness, fainting, bleeding, emaciation, loss of appetite, and constipation⁴⁰.

Antidote of *Shilajatu*- The disorders caused by the intake of impure *Shilajatu* can be treated by administering *Maricha* (black pepper) mixed with ghee, in a dose of ¼ tola per day, for a duration of seven days⁴¹

Contraindication-While taking *Shilajatu*, one should avoid fried, roasted (with or without oil), sour, fermented, and heavy-to-digest foods. The person consuming *Shilajatu* must strictly refrain from eating *kulattha* (horse gram), as it is known to corrode even stone and can therefore neutralize or destroy the beneficial effects of *Shilajatu* in the body. Additionally, such a person should avoid strenuous physical activity, exposure to sunlight and wind, mental stress, heavy or inflammatory foods, and any food items that are sour, pungent, oily, or cause a burning sensation in the digestive tract⁴²

CONCLUSION

Shilajit is a unique mineral–organic substance described in classical *Ayurvedic* texts as a potent *rasayana*. Its formation, varieties, and therapeutic value are well documented, with Lauha *Shilajatu* considered the most effective. Rich in fulvic acid, humic substances, minerals, and diverse bioactive compounds, *Shilajit* demonstrates broad medicinal potential. Classical literature emphasizes proper purification due to the risks associated with impure forms. Traditionally, *Shilajit* is used in managing metabolic disorders, urinary diseases, skin conditions, debility, and promoting overall vitality. Its complex chemistry and historical relevance highlight the need for continued scientific investigation to validate its traditional uses and expand its modern applications.

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