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 CONCEPTUAL STUDY ON SHILAJIT: A GREAT VALUED RASA - MINERAL IN THE MAANGEMENT OF PRAMEHA

#### DR PRABAL DIXIT<sup>1</sup>, DR ARUN KUMAR<sup>2</sup>

- Assist Professor, Department of Rasa Shastra and Bhaishajya Kalpana, Shri Babu Singh Jay Singh Ayurvedic Medical College and hospital Bhaupur Fatehgarh Farrukhabad
- Assist Professor, Department of Dravyaguna, Shri Babu Singh Jay Singh Ayurvedic Medical College and hospital Bhaupur Fatehgarh Farrukhabad

Corresponding Author- Dr Prabal Dixit, Assist Professor, Department of Rasa Shastra and Bhaishajya Kalpana, Shri Babu Singh Jay Singh Ayurvedic Medical College and hospital Bhaupur Fatehgarh

Farrukhabad

#### ABSTRACT

The key clinical symptom of the illness known as "Prameha" according to Ayurvedic medicine is frequent urination. Both eating food and leading a sedentary lifestyle significantly raise the Kapha dosha. The patient is stated to generate urine that resembles honey in Madhumeha, a more severe type of Prameha, similar to diabetes. Numerous experts have linked the two diseases because of their similar clinical histories. Compared to the use of simple natural ingredients. Effectiveness, palatability, and simplicity of administration of the drug are all constrained. The name "Shilajit" refers to a variety of medications. The scriptures include certain Shilajit that are beneficial in Madhumeha and Prameha. . Most of them are not utilized by Ayurvedic practitioners, while some of them are often used. This study focuses on these medications, which are not frequently used in clinical practice but may have a lot of promise for treating the illness.

Keywords: Madhumeha, Diabetes Mellitus, Shilajit, etc.

#### INTRODUCTION

While some of them are often used, most of them are not by Ayurvedic practitioners. This study focuses on these drugs, which are rarely used in clinical practice yet may be quite effective in curing the disease. The Sanskrit term "Mih- sechane," which means "to flow," and the prefix "pra," which means "extreme," are combined to make the word "Prameha." The term "Prabhuta Avila Mutrata" (excessive micturition with

turbidity) identifies a key aspect of the sickness as a result. The word Prameha, which loosely translates as "honey like urine," is a more severe variant of Madhumeha (Prayo Madhuriva Mehati).<sup>1</sup>

According to ancient Ayurvedic literature, the person with this illness excretes urine that resembles honey and attracts ants, which shows that the urine includes glucose. Madhumeha and diabetes mellitus, two metabolic diseases that share similar characteristics, have been compared in several studies. The number of individuals who suffer from diabetes, one of the oldest diseases known to man, is staggeringly rising each year. An estimated 422 million people have diabetes as of 2016, with Type 2 diabetes accounting for 90% of occurrences. Adult prevalence increased significantly from 4.7% in 1980 to 8.5% in 2016.<sup>2</sup>

The increase in the number of people with the illness can be attributed to urban lifestyle choices. Poor nutrition and a shift in lifestyle have wreaked havoc on emerging nations in Asia and Africa. According to reports, India has the highest proportion of diabetic patients. In this dangerous environment, disease prevention and mitigation must be attainable. Shilajit, according to Ayurveda, are Kalpas or formulations that contain mercury as one of the ingredients. Shilajit are Kalpas that include several Parad subgroups, such as Parad yogis or Hingool or rasa Sindoor. Shilajit doses that are less are more efficient. Parada is mixed with other medications, such as bhasmas and herbal cures, in Shilajit. Bhasmas are drugs that help the eradication of illness and are nanoparticle-sized for rapid absorption.<sup>3</sup>

#### METHODOLOGY

All available information about Shilajit was compiled from reputable papers, manuscripts, websites, textbooks, and reliable sources like Rasashatra's classic.

#### REVIEW LITERATURE

The Rasashastra discusses the use of bhasmas (metallic compounds in nanoparticle form) in the treatment of various diseases. Ayurvedic medicine has a special place for shilajit (metallic medicines), which have a little dose, quick effect, no taste, and a long shelf life. The Rasashastra, an ancient literature, has several Prameha treatment formulations. We discovered that the majority of the equations in the Rasashastra volumes share components with Naga, Vanga, Yashada, Swarna Makashika, and Abhrak Bhasma. Shilajit is regarded as a miraculous medication in Ayurveda. "Metals like gold and others are discovered in the rocks that create heat and exude the exudate, which is termed Shilajit," states the Charaka Samhita, the first piece of traditional Ayurvedic literature to explain Shilajit.<sup>4</sup>

According to the Sushruta Samhita, Shilajit, a substance like gum, is formed when the mountains get heated. Shilajit oozes from the rocks of mountain ranges in the Himalayas, Karkuram, Tibetan plateau, Caucasus, and Atlai ranges in Gulgit Baltistan, Arunachal Pradesh, Kashmir, Afghanistan, and Nepal all through the summer. It is extremely viscous and resembles tar. Sandstones are composed of layers of rock that include crushed plant and animal remains. When the compounds are subjected to intense heat and pressure, Shilajit can be produced. Granite from the sun-heated mountain erupts with Shilajit substance. Shilajit can be found in a number of forms, including Asphaltum, Momiya, and Shilajatu. Shilajit also goes by a number of other names.<sup>5</sup>

Four different kinds of Shilajit are available: Tamra (blue copper), Rajat (white silver), Suvarna (red gold), and Lauha (black iron). There have also been suggestions for the variations Naag (lead) and Vanga (tin). Shilajit was divided into two groups by Sushruta based on his odor: Both Gomutra-gandhi and Karpura-gandhi smell like cow poop (smell like camphor). The Himalayan highlands are dominated by the Lauha type from a medical perspective.<sup>6</sup>

#### **Historical Background**

The history of the remedy, which was a substance extracted from Dhatu's exudate, was described in ancient books by Lord Shiva. Many Hindus claim to have seen Sadhus and Yogis on the high Himalayan peaks because they believe in them. 3 They are able to survive chilly temperatures without the need for additional layers of clothing because to compounds that resemble Shilajit.<sup>7</sup>

Lord Shiva gave humanity this "Amrit" in return for youth and health for all time. According to Charaka and Sushruta, Gods and Demons sweated heavily during the Samudra Manthan (churning ocean), which created heat as a result of friction. The perspiration was mixed with nectar, which the gods believed to be heavenly. This holy medicine was sent in little quantities to the highlands, where it was melted by the sun and transformed into things like Lac or Jatu, earning the name Shilajit. Shilajit was supposedly formed by the sun's strong heat in Ayurveda.<sup>8</sup>

#### **Traditional Uses**

Shilajit and other medications can be used to treat a wide range of illnesses and problems. In prehistoric times, it was a narcotic. Shilajit's effects are enhanced when combined with other drugs. According to the ancient Indian discipline of Ayurveda, Shilajit stimulates regeneration and slows down the aging process, which are two of the most crucial elements of an Ayurvedic Rasayan. It is used to treat eczema, anemia, osteoarthritis, spondylosis, bronchitis, neurological conditions, and epilepsy in addition to eczema and menorrhagia. It is also said to have aphrodisiac properties.<sup>9</sup>

Among the disorders this medication can treat include anorexia and obesity. People from Nepal and northern India typically consume shilajit with milk for breakfast. Shilajit is a major food in the Sherpa diet, and the Sherpas are said to be robust men who live long lives. Hemorrhoids, an enlarged spleen, epilepsy, and genitourinary diseases are some of its traditional uses.<sup>10</sup>

#### **Physical Properties**

Shilajit samples generally have comparable physical characteristics and chemical compositions, although the relative proportions of the elements vary greatly. Physical characteristics like solubility and pH are essential for standardization. Depending on the quality of the Shilajit, between 30 and 50 percent of its weight dissolves into the liquid supernatant, leaving behind varying amounts of mineral and plant remnants. There's something about Shilajit's bright, polished surface that makes it so sticky and tenacious in water, alcohol, and acetone! Shilajit samples remained brittle and hard at room temperature, making it challenging to make tiny incisions.<sup>11</sup>

Shilajit stated that the pH of an aqueous solution at a concentration of one percent varied from 6.2 in India (Kumoan) to 7.5 in Nepal (Dolpa), 6.8 in Pakistan (Peshawar), and 8.2 in Russia (Tien-Shan). Shilajit samples underwent many heating cycles while undergoing thermal analysis; this suggests that the samples are not homogenous and are batch dependent. The signal and intensity shifts were more pronounced at higher temperatures. Except in the dehydration zone up to 150° C, all reactions in an oxidizing atmosphere are exothermic (about 7 percent water). Shilajit's mass loss in the air is 67.6%, suggesting that it is mostly made up of biological components. The behavior is quite different in an inert environment. 12

#### **Purification of Shilajit**

A nauseating exudate is produced when rock fragments ooze pollutants such heavy metal ions, plant chemicals, reactive free radicals, poisons, and soil particles (shilajit). Shilajit must first be washed before it can be used medicinally. Shilajit is cleansed by using Triphala (a powder made from the fruits of three medicinal plants: Embelica officinalis, Terminalia chebula, and Terminalia belerica) and Bhringraja (Eclipta Alba) expressed juice, each for a day in an iron container. Shilajit can be cleaned by combining it with water or cow's milk.<sup>13</sup>

#### **Chemical Properties**

Humic acid (80–85%) and non-humic chemicals (15–20%) are among the chemical components of Shilajit that come from various geographical locations. Shilajit contains between 14 and 20 percent moisture. Minerals make around 18–20 percent of Shilajit. There are 4.5% fats and 13.7% proteins. There are 3.3–6.5% of steroids. 18 to 20 percent of the chemicals are nitrogen-free. Shilajit is a Phyto complex in terms of his chemical composition. Humins, humic acids, and fulvic acids are found in shilajit, along with dilbenzo-pyrones, which function as chemical transporters. 14

Humaric compounds are byproducts of the breakdown of organic material produced by microorganisms (mostly vegetable matter). According to reports, the active ingredients of Shilajit contain significant amounts of benzoic acid, benzoates, hippuric acid, and its salts. Six substances were found when Ali and his associates conducted a chemical analysis of Shilajit: shilajityl acetate, shilajitol, silacatechol, silaxanthone, and shilaanthranil. Shilajit's chemical composition is diverse, containing lipids, steroid hormones, carbohydrates, alkaloids, amino acids, free fatty acids, carotenoids, indigoids, coumarins, and organic acids like adipic, succinic. 15

#### **Discussion**

Rajavarta has been employed by several Prameha Shilajit Kalpas. The rasayana qualities of Rajavarta are referred to as Pramehaghna in Ayurvedic literature. The Yoga Ratnakara has distinct bhasma rasa prayogas for the Nagas, Vangas, Gandhak, Suwarnamakshik, and Shilajits. Many formulas combine lead and tin with parad in Naga and Vanga (Mercury). According to Ayurveda Prakash, Naga and Vanga are both puti lohas (a type of metal) and have sarva Prameha-hara, which means they are advantageous for all Prameha traits. Their antidiabetic properties have been demonstrated in clinical and animal research.<sup>16</sup>

Shilajit traditional medicine uses a wide range of biological processes that may be used to treat a variety of diseases. For thousands of years, it has been utilized as an adaptogen and a rejuvenator. Numerous medicinal

qualities have been verified by scientists. There is a lot of fulvic acid in Shilajit. Shilajit has several fulvic acids, which is likely why it has medical benefits. In addition to its possible systemic effects as a complement activator, fulvic acid is well known for its exceptional antioxidant capabilities.<sup>17</sup>

Shilajit's fulvic acid works as a catalyst and a transporter for nutrients and other substances in people. These processes cause the movement of extra crucial minerals, such as calcium, phosphorus, and magnesium, into the muscles and bones. In addition to having anti-diabetic, analgesic, immunomodulatory, neotropic, anti-anxiety, anti-ulcer, and spermatogenic/ovogenic properties, this plant also has memory-improving and anxiolytic benefits. Shilajit has seen success as an Alzheimer's disease therapy. Conditions designed to avoid viral, aging, and cognitive issues.<sup>18</sup>

Shilajit treats dyslipidemia, atherosclerosis, breathing issues, chronic constipation, arthritic conditions, chronic dysmenorrhea or pelvic pain, frequent urination, high blood pressure from alcoholism, tachycardia, oligospermia, piles, antilithiatic (prevents kidney stone formation), carminative, mild laxation, blood detoxifier, antiseptic, and epilepsy. Due to the high mineral content in Shilajit, which includes humic acid, iron, and fulvic and humic acids, it may be able to treat chronic tiredness and iron deficiency anemia.<sup>19</sup>

It is believed that Shilajit's broad range can help in the treatment of liver cancer. Researchers have discovered that this plant can help remove malignant liver cells. Additional potential advantages of Shilajit include heart protection and strengthening. Shilajit may eventually result in reduced tiredness and more strength. It was formerly employed to raise testosterone levels. Shilajit can also be used topically to treat inflammatory arthritis, sprains, and bruises. With addition to lessening itching and leakage, it also aids in skin issues.<sup>20</sup>

#### Conclusion

Shilajit, a multi-component, humus-rich blackish brown material, is used in indigenous medicine to treat a number of illnesses and hasten the regeneration process. It is mentioned as a cure-all in ancient literature. The term can also refer to a multipurpose medication that can be used to treat a range of conditions. Hill people discovered Shilajit as exudates in hilly regions. Powerful tonic. Shilajit contains more than 85 ionic minerals, fulvic acid, humic acid, and a variety of phytochemicals. This is one of the greatest Rasayans, according to Ayurvedic literature. The present communication gives an overview of Shilajit. In addition to the different claims made on its medicinal potential, desperately requires more study using contemporary scientific techniques Before Shilajit is used to treat Prameha or Diabetes, it must undergo effectiveness and toxicity testing.

Conflict of interest- None

Finance Support - Nil

#### References

- 1. Dr. Indradev Tripathi, Rasa Ratna Samucchay- Rasaprabha Hindi Vyakhya, Edition 2012, Chaukhambha Prakashan, Chapter 17, Pg.no.196-211.
- 2. Vaidya Shri Laxmanpati Shastri, Yog Ratnakar- Vidyotini Hindi Vyakhya Tikasahit, Edition 2012, Chaukhabha Prakashan, Uttarardha, Prameha Chikitsa, Pg.no 82-96.
- 3. Achrya SB, Frotan MH, Goel RK, Tripathi SK, Das PK, Pharmacological actions of Shilajit. Indian Experimental Biology 26, 1988, 775-777.
- 4. Acharya Madhava, Madhava Nidana with Madhukosha Vyakhya, ed by Upadhyaya Yadhunandana, Varanasi, chaukhamba prakashana, reprint 2009; Pg.10.
- 5. Acharya Vagbhata, Astanga Hridaya with Aruna Datta and Hemadri commentary, Nidana sthana 10/20, ed by Vaidya Harishastri Paradaakara, Varanasi: Chaukhamba Prakashana, reprint 2005, Pg. no. 504.
- 6. Ghosal S, Shilajit: its origin and vital significance. Intraditional medicine, Mukherjee B(EDn) Oxford-JBH, New Delhi, 1993, 308-319.
- 7. Ghosal S, The aroma principles of gomutra and Karpurgandha Shilajit. Indian Journal of Indigenous Medicine 11, 1994, 11-14.
- 8. Choudhary SP, Singh AK, Dwivedi KN, Medicinal properties of Shilajit A review. Indian Journal of Agriculture and Allied Sciences, 2, 2016, 103-106.
- 9. Ghosal S, Lal J, Singh SK, Goel RK, Jaiswal AK, Bhattacharya SK, The need for formation of Shilajit by its isolated active constituents, Phytotherapy Research, 5, 1991, 211-216.
- 10. Ghosal S, Chemistry of Shilajit, an immunomodulatory Ayurvedic rasayan, Pure and Applied Chemistry, 62, 1990, 1285-1288.
- 11. Thiyagarajan R, Gunapadam Thattu Jeeva Vaguppa, Third Edition. Translated from Tamil, 1991, pp 408-413.
- 12. Assegid G, Fiest M, Schmolz E, Lamprecht I, Thermal analysis of mumiyo, the legendary folk remedy from the Himalaya region, Thermochimica Acta, 417, 2004, 301-309.
- 13. Agrawal SP, Khanna R, Karmarkar R, Anwar MK, Khar RK, Shilajit: A Review, Phytotherapy Research, 21, 2007, 401-405.
- 14. Kanonjiya SK, Choudhary SP, Kumar N, Physicochemial study of Shilajit with Arjuna Kwath Bhavita and Khadir Kwath Bhavita, World Journal of Pharmaceutical Research, 5, 2016, 1271-1280.
- 15. Ghosal S, Lata S, Kumar Y, Free radicals of Shilajit humus, Indian Journal of Chemistry 34 B, 1996, 591-595.
- 16. Pradhan N, Gavati J, Weghmare N, Shilajit an unique drug of Ayurveda. International Ayurvedic Medical Journal, 3, 2015, 1427-1430.
- 17. Ali M, Saharawat I, Singh O, Phytochemical investigation of Shilajit, Indian Journal of Chemistry, 43B, 2004, 2217-2222.
- 18. Ghosal S, Shilajit in perspective, Ist Edn, Alpha Science International Ltd, Oxford, United Kingdom, 2006.
- 19. Frolova LN, Kiseleva TL, Chemical composition of mumijo and methods for determining its authenticity and quality (a review), Pharmaceutical Chemistry Journal, 1996, 30543-547.
- 20. Prem shankar pandey, shilajit a wonder drug of Ayurveda: an overview, department of rasa shastra and bhaishajya kalpna, faculty of Ayurveda, institute of medical sciences, Banaras Hindu university, int. J. Pharm. Sci. Rev. Res., 59(1), november december 2019; article no. 23, pages: 140-143 issn 0976 044x.