

A REVIEW OF LITERATURE ON PANCHASHIRISHA AGAD: (ALBIZIALEBBECK BENTH)

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ABSTRACT

Ayurveda is a part of science of wholesome living. Majority of medicine mentioned in Ayurveda are plant based. Agad tantra (Toxicology) is specialized branch of Ayurveda that highlights the different mode of poisoning & its management. While treating different cases of poisoning different modality of treatment are used. Agada (Antidote) is one of the modalities which is prepared by the combination of different anti-poisonous herbs. One of the significant herbal remedies with broad-spectrum therapeutic benefits for Kita Visha (insect bite) mentioned in the Shushrut Samhita is Panchashirisha Agad. Fruit, root, skin, flower, and leaves are the five components of this plant. Many formulations of Shirisha in different modes of

administration have been mentioned in the management of various poisons in Bruhatrayee (Major treatises of Ayurveda). Shirisha yogas are mentioned for both internal administration and also for external applications as Lepa. This review is an attempt to explore the anti-toxic action of/role of Panchashirisha Agada.

KEYWORDS: Ayurveda, Panchashirisha, Visha, Agad, Anti-toxic, Herbal, Therapeutic.

INTRODUCTION

Agad is “antidote,” which counteracts the hazardous effects of poisons on living beings. According to ancient classical texts, certain Agada are broad acting and some others are target specific in action. Agada act as a specific antidote for various types of poisoning. Gada means Toxin. Toxin in short is poisonous chemical which alters the normal physiology and leads to deterioration of health. This toxicity can be treated only by using *Agadas* internally

and externally. I have chosen *Panchashirisha Agada* which is one of the potent formulation mentioned in Shushrut Samhita, which is indicated for Kita Visha (insect poison),^[1] where all five parts of this plant are used; i.e., fruit, root, skin, flower and leaves. It is considered as one of the best medicine in treating toxicity.

AIM AND OBJECTIVE

Present review is aimed to compile up the data to highlight the anti-toxic effect of Panchashirisha Agad (*Albizia lebbbeck Benth*) for the treatment of poisonous conditions.

RASA PANCHAKA OF SHIRISHA^[4]

Rasa	Kashay, Tikta, Madhur, Katu
Guna	Laghu, Ruksha, Tikshna
Vipaka	Katu
Virya	Ishat ushna
Karma	<i>Vishghna, Varnya, Raktasodhaka-sothahara, Kusthaghna</i>
Prabhav	Tridosha shamaka, Vishaghna

CLASSIFICATION^[5]

- Charaka Samhita: Vishaghna, Vedana Sthapana, Shirovirechana, Kashaya Skanda
- Sushruta Samhita : Salsaradi Gana
- Vagbhata : Asanadi Gana
- Amarkosh : Vanausadhi Varga
- Sausurat Nighantu : Slasaradi Gana
- Ashtanga Nighantu : Asandi Varga
- Dhanvantri Nighantu : Amaradi varga

CONTENTS OF PANCHSIRISHA AGAD

<i>Shirisha Mula</i>	<i>Shirisha Patra</i>	<i>Shirisha Twak</i>	<i>Shirisha Kanda</i>	<i>Shrisha Puspa</i>
(root)	(leaf)	(bark)	(Stem bark)	(Flower)

MATERIALS AND METHOD

This paper is based on various source of *Ayurveda* textbooks like Samhitas, Brihataryi, Laghutaryi, etc. along with Modern textbooks and various websites to collect information on the relevant topics.

Acharya Charak described *Vishghna mahakashaya* which includes ten *Vishghna* drugs. It includes *Haridra* (*Curcuma longa*), *Manjishtha* (*Rubia cordifolia*), *Suvahaa* (*Pluchea*

lanceolata), *Sookshama elaa* (*Elettaria cardamomum*), *Paalindee* (*Operculina turpethum*), *Chandan* (*Santalum album*), *Kataka* (*Strychnos potatorum*), *Shireesh* (*Albizia lebbbeck*), *Sinduvaara* (*Vitex negundo*), *Shleshmaataka* (*Cordia dichotoma*).

OTHER USES OF DIFFERENT PART OF SHIRISHA

Shirisha Beeja is used in Dantha kashta (tooth brush twigs), In Visha Chikitsa as Prathisarana.^[6] Shirisha Twak (bark), Phala (fruits) and Sara (heart wood) is used for Lepa (ointments), Paana (internal medication) and Anjana in different types of Mushika damsha (rat bites) like Putraka, Krishna and Kashaya danta.^[7] Similarly, Phala is used for Vamana (emesis) and Sara (heart wood) is used for Shirovirechana (Nasya).^[8]

In Keeta visha chikitsa (Insect poisoning), Shirisha Twak (bark) is used for Paana (internal medication) and Lepa chikitsa (ointments), Alepa (external application) and Seka.^[9] In Pitta Pradhana Luta Damsha (spider bites), Shirisha Twak (bark) is used for both Paana (internal medication) and Lepa (ointment).^[10]

As Prathisarana (rubbing), Shirisha Twak is used in Vishadagdha Vrana (wound caused by poisoned arrows or Weapons).^[11] White pepper triturated with the juice of flowers of Shirisha is considered to be best among all types of treatment for Sarpa dashta (snake bites).^[12]

In case of Vrishchika (scorpion bites) Chikitsa Shirisha Phala (fruit), Pushpa (flowers) and Beeja (seeds) are used in different forms like Paana (internal medication), Anjana (collyrium) and Lepa (ointment).^[13] Especially in Ratri (night), Vrishchika (scorpion bites) chikitsa-Pushpa (flowers) and Beeja (seeds) are considered to be best.^[14]

In Luta (spider bite) Chikitsa, Shirisha Twak and Phala is used for Lepa and Paana. Shirisha Sara and Phala (fruits) are utilised for Shirovirechana (Nasya) in Bhujanga (snake bites), Luta (spider bites), and Undhura (mice).^[14]

In Mushika (rat bites) Damsha Shirisha Beeja (seed) is considered to be the best.^[15]

ACCORDING TO MODERN POINT OF VIEW^[16]

- Botanical Name - *Albizia lebbbeck*.
- Classical Name - Shirisha
- English Name - lebbbeck
- Genus - *Albizia*

- Species - *A. lebbbeck*
- Family – Fabacea

CHEMICAL COMPOSITION

The Phytochemical constituents of this plant reveals the Bark contains 7-11% tannins; D-catechin D-leucocyanidin and it yield seven compounds. Including friedlan-3-one and γ -sitosterol. The leaves contain echinocystic acid and it yield flavon, vicenin II and β -sitosterol. Flowers yield triterpenoids, saponins, labbekanin D and 4 saponins glycosides lebbekannins D, F, G & H. Mature leaves of *Albizialebbbeck* contained keto acids including phosphoenolpyruvate, glyoxalate, oxalacetate and α -oxoglutarate; vicenin-2, reynoutrin, rutin, myricitrin and robinin from leaves. Leaves also have alkaloids, flavonoids, tanins, saponins. Oil obtained from seeds contains sterols, methyl sterols, triterpene alcohol, tocopherol, hydrocarbons and carotenoids, cycloeucalenol, 24-ethylphenol, cycloartenol. Compositional studies indicated carbohydrates as major components while saponin was found as a major antinutrient in both pods and seeds. Potassium was found in the highest amount and copper in the lowest.^[17,18]

DISCUSSION

The total number of Agada yogas detailed in Samhitas with regard to Shirisha in Visha Chikitsa is twenty-five. In certain contexts, the yogas (multidrug formulations) have not been named and have instead been described as Vishahara Aushadhi for the management of both Sthavara (vegetative poison) and Jangama (animal poison) Visha. Paana (internal medication) yogas are the most common among all because of their high effectiveness in the Visha chikitsa. The antitoxic effect of Shirisha may be more than other routes of administration. These are all among the Chaturmishathi upakarma.^[19]

In cases of bites, Lepa (ointment) yogas also act on local poisoning in addition to being the Bahirparimarjana Chikitsa. It is one among the Chaturvimshathi upakarmas (24 treatment procedure). In Visha Damsha conditions, Sthanika chikitsa (local external treatment) plays an important role to reduce the pain, itching and inflammation at the site.^[20]

Shirisha is best Vedanasthapaka (analgesic), Shothaghna (antiinflammatory), Vrana Ropaka, Vishaghna (anti- poisoning) and Tridosha shamaka.^[21] It helps in pacifying the Bhrajaka Pitta situated in the Twacha thus directly removes the Visha and stops spreading of Visha into the Rakta. All parts of the plant are used but mainly Twak.^[22] Nasya (nasal inhalation) is one of

theeliminating therapy which helps to remove the vitiated Doshas, toxins and poison from the nasal route. It is indicated in Sthavara Visha (5th Vega), Darveekar A Sarpadamsha (3rd and 7th Vega), Rajimanta Sarpadamsha (6th Vega), when the effect of poison is seen in the head; if obstruction occurs at nose, eye, ear, tongue and throat due to poisoning and if person is unconscious. In Luta poisoning, Nasya by Shyama, Yavaphal, Faninjaka, Shirisha are mentioned. These are grinded with Vartaka juice or with Sarpimanda. In Mushika (rat poisoning) Visha, Nasya (nasal inhalation) is done with Shirisha Phala Sara. Shirisha is one among the Shirovirechaniya Gana Dravyas (Nasya) mentioned in the Charaka Samhita.^[23] Amritaghrita, Tanduliya Agad, Ashtang Agad, Sarvakarmik Agad are some common preparation of Shirish which was used in different type of poisoning. While studying the properties of Shirish it was seen that it is Tridoshshamak & it possess qualities like Shothahara (Antiinflammatory), Vedanasthapa (analgesic), Varnya (complexion enhancer), Vishaghna (Antipoisonous), Shirovirechana, Raktashodhaka (blood purifier). Pharmacodynamics of Shirish shows that it possesses Kashay, Tikta Rasa. Tikta Rasa itself is antitoxic in nature & Kashay Rasa help in the healing procedure in bite cases.

In the cases of poisoning specifically in insect, snake, and rat bites symptoms are pain, inflammation & oedema. Phytochemical analysis of Albizzia lebbeck leaves extract reveals the presence of alkaloids, carbohydrates, tannin, flavonoids, and saponins. Main attraction of phytochemical screening is presence of tannins, saponin and flavonoids where absence of proteins and amino acids. After several experimental models and clinical trials, Shirisha's multifaceted activity—including its analgesic, anti-inflammatory, anti-allergic, anti-bacterial, anti-fungal, antiprotozoal, anticonvulsant, anti-anaphylactic, and antioxidant properties—was demonstrated.

Spider Poisoning: Application of the paste of Shirisa, Katabhi (Careya arborea), Arjun (Terminaliya Arjuna), Shlesmantak (Cordiya diachotoma).

Rat bite: Paste of Shirisa and Inguda (Balanites Aegyptiaca) should be taken with honey. In the management of rat bite application of paste of Shirisha, Rajani (Rubiaccordifoliya), Vakra (Pisticaintegrammiya), Kumkum (crocus sativus), Amruttavalli (Tinospora cordifoliya).

Scorpion bite: Flowers of Shirisha, Karanja (Pongamia pinnata), Kushtha (Saussurea lappa), Manshila (As2S2), Kashmira (Gmelina arborea) destroy the scorpion poison.

CONCLUSION

According to Ayurveda shirisha work due to its prabhava that is vishghna action. In modern As Shirish contain many alkaloids, flavonoids, tannin, saponin & many of its action proved on scientific basis it can concluded that it is a very promising plant in various activities, therefore ancient Aacharyas have mentioned it as Vishaghna plant. Acharya Charaka quoted Shirisha as a best anti poisonous drug and also mentioned in Vishaghana Gana Dravyas (antipoisonous drugs). Pharmacodynamics of Shirish shows that it possesses Kashay, Tikta Rasa. Tikta Rasa itself is antitoxic in nature & Kashay Rasa help in the healing procedure in bite cases. Many studies conducted by different branches by using different parts of the plant have proved antimicrobial, analgesic, anti-inflammatory, anti-diarrhoeal, immuno- modulatory, antiarthritic, anti-asthmatic, anticonvulsant, anti- allergic, hepatic protective and antioxidant activity of the drug. Thus, it seems to be a promising drug for various activities. In all Samhitas various Yoga have been mentioned for internal and external use containing Shirisha as an ingredient. All the Yoga are not in practice and hence there remains scope for further research on these Yoga.

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