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# A REVIEW ON AYURVEDIC CLASSIFICATIONS OF ANTITOXIC FORMULATIONS ON SHIRISHA ((Albizia lebbeck L.)

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#### **ABSTRACT**

Ayurveda is a traditional healthcare system of Indian medicine since ancient times. Majority of medicine mentioned in Ayurveda are plant based. Herbal medicine is based on the premise that plants and plants extracts contain natural phytochemicals with biological activity that can promote health or alleviate illness. Shirisha (Albizia lebbeck) is one of the important herbs having broad spectrum therapeutic effects. In classical textbook it is mentioned as the best among the Vishaghna (anti poisonous) drug. In Ayurveda it is used in allergic skin conditions, allergic cough and seasonal cold to get relief. Agadtantra (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. Shirisha (Albizia Lebbeck) is one of the important herbs having a broad spectrum of therapeutic effect.

Keywords: Ayurveda, Agadtantra, etc



#### INTRODUCTION

Acharya Charaka quoted Shirisha as a anti poisonous drug and also in Vishaghana mentioned Gana Dravyas (antipoisonous drugs). Many studies conducted by different branches by using different parts the plant have proved antimicrobial. analgesic, antianti-diarrhoeal, immunoinflammatory, antiarthritic. modulatory, asthmatic, anticonvulsant, anti- allergic, protective and antioxidant activity of the drug<sup>1</sup>. It may concluded that Albizia is a important various therapeutic plant with properties mainly as Vishaghna drug. Panchangas of Shirisha are used as Paana (internal medication), Nasva (Nasal inhalation), Anjana (collyrium), Varti, Seka, Lepa (ointment) in many Vishaghna formulations showing property. Shirisha is used as Paana (internal medication) in many with formulations different Anupanas(adjuvants) like Ghrita (ghee) and Madhu which plays a major role in counteracting the and stops the Visha from spreading all over the body. toxins and poison from the nasal route when the effect of poison is seen in the head due to which obstruction occurs at nose, ear, eye, tongue and throat and if person unconscious Anjana is used when symptoms related to eyes appear like swelling in the eye ball, drowsiness. of Shirisha shows Pharmacodynamics that it possesses Kashaya, Tikta Rasa Tikta Rasa itself is antitoxic in nature & Kashaya Rasa help in the healing procedure in bite cases(2). Apart from Raspanchaka, Toxic antitoxic and

druas act on the basis Prabhav, which is the known special potency and power the drug. In the cases of poisoning specially in insect bite, snake bite, rat bite symptoms are inflammation & pain, oedema. Phytochemical screening of successive extracts of Albizzia lebbeck leaves shows presence of carbohydrates, alkaloids, tannin, flavonoids and saponins. After several experimental model & clinical trial multi dimensional activity of Shirisha like analgesic, antiinflammatory, anti-allergic, antiantifungal, bacterial, antiprotozoal, anticonvulsant, anti-anaphylactic, is proved. This piece of antioxidative report would promote these species for extensive research, to fetch optimistic utility of its phytoconstituents for therapeutic applications(3,4). Herbal medicine are now in great demand in developing world for primary health care because better cultural acceptability, better compatibility with human body and minimal side effects. Most herbal products on the market today have not been subjected to drug approval process to demonstrate their safety and effectiveness(5). So, to make it accepted as viable alternative modern medicine, the method of scientific, experimental clinical validation must and be applied to prove the safety effectiveness of therapeutic plants. In the present review attempt is being made to describe the traditional as contemporary, scientific and experimental researches which are done to reveal the antitoxic effect of Shirisha plant(6,7). It helps in pacifying the Bhraiaka 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 . Nasya (nasal inhalation) is one of the eliminating 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(6,7). 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(8). Shirisha is one Shirovirechaniya the among mentioned the Dravyas (Nasva) in Charaka Samhita.

Raktamokshana. the blood letting procedure is a kind of para surgery used especially for the treatment of Rakta dusti (blood-borne disorders). The synonyms of Raktamokshana are asra visruti, sonita mokshana. rakta nirharana. sravana, rakta harana. It is one amona the five purification therapy described by Acharya Sushruta. It is derived from the two words, 'Rakta' which means blood and 'Mokshana' which means to leave. Thus, Raktamokshana means to let the blood out. The vitiated blood should be expelled out from the body to reduce the quantity of toxic substances or else it leads to several blood borne disorders. Jalauka (leech) should be used in avagaada rakta, Pracchanna (scarification) should be done in pindita rakta, Sira vyadhana should be done in angavyapaka rakta and Sringa (horn) &

Alabu (gourd) should be used in tvacha sthita Rakta. [3] Ву undergoing Raktamokshana, several diseases like skin diseases, blood borne disorders, oedema, lymph node enlargement etc., can be prevented. [12] Rakta is considered as one among the Dasha praanaayatana Charaka. [11,14] According Astanga hridaya it is one among the ten Jeevitadhama. According to Astanga samgraha it is one among the Dasha praanaayatana. Blood is one of the major component of the body. It is formed from the Rasa which traverses through the Yakrut & Pleeha and aets coloured by the Tejo Mahabhuta. The rakta which possess characters indragopaka prateekaasam (colour of cochineal), neither be too thick nor discoloured is considered as Suddha rakta lakshanas. It is responsible for strength, complexion, happiness and longevity of life. Blood plays an important role in regulating various systems of the body Sira are the channels where the function of sarana (continuous motion) takes place. They carry dosa, dhatu, ojas etc. from one part to other part of the body. Their branches are large at the root and become small at the tip just like the veins of a leaf. [23] As a garden or a field is irrigated by the water carrying channels, similarly the body also receives nutrition by the sira through contraction and relaxation movement. Nabhi (umbilicus) is the moola sthana of sira. Nabhi is surrounded by sira from all sides as the centre of wheel is surrounded by the spokes from all sides. [Charaka and Vaabhata mentioned Hridaya as moola sthana of sira.

Sira vyadhana is one of the types of Raktamoksana that comes under the Panchakarma. It is the process of blood

letting by puncturing the appropriate vein for the therapeutic purpose of removing the morbid dosha from the body. Acharya Sushruta has given much importance to Rakta and considered it as the fourth dosha. As in present society, people are much prone to life style disorders due to the increase of intake of junk food, irregular dietary habit, late night sleep, lack of physical activity etc., the blood becomes toxicated. This leads to the cause of several diseases. So proper Sira vyadhana not only cure the ailments, it also prevents several diseases and also it helps to maintain the health of the healthy people. Sira vyadhana is considered as one of the important procedure in Pancha karma. As the diseases which cannot be relieved by procedures like snehana, swedana. nasya, kriya kalpa etc., can be cured by proper Sira vyadhana. [3] In Shalya tantra, Sira vyadhana is considered as half of the treatment just like Basti is considered as half of the treatment in Kava Chikitsa. One should have thorough knowledge about the sira because they are slippery in nature and moves to & fro like a fish. Sira vyadhana is a popular para surgical procedure of Ayurveda since ancient time. Several diseases can be cured by proper Sira vyadhana procedure. It also prevents number of skin disorders, blood borne diseases etc. As Sira vyadhana can be done in emergency condition also, one should be thorough with all the sira in the body if not it leads to severe complications or Death of the patient 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 (9,10). Tikta Rasa itself is antitoxic in nature & Kashay Rasa help in the healing procedure in bite cases. In the cases of poisoning specially in insect bite, snake bite, rat bite symptoms are inflammation & oedema. Phytochemical screening of successive extracts Albizzia lebbeck leaves shows presence carbohydrates, alkaloids, 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 model & clinical trial multidimensional activity of Shirisha like analgesic, antiinflammatory, anti-allergic, anti-bacterial, antifungal, antiprotozoal, anticonvulsant, anaphylactic, antioxidative is proved. 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. management of application of paste of Shirisha, Rajani (Rubiacordifoliya), Vakra (Pisticaintegrammiya), Kumkum (crocus sativus), Amruttavalli (Tinospora cordifoliya). Scorpion bite: Flowers of Shirisha, Karanja (Pongamia pinnata), (Saussurea lappa), Kushtha Manshila (As2S2), Kashmira (Gmelina arborea) destroy the scorpion poison. Some examples of different Formulations &

Agadas of Shirisha for Internal/ External Use are as follows, (11). Shirisharishta-Shirish, Priyangu (Callicarpa macrophylla), Kushtha, Ela (Nagkesha ferrea), Haridra (Mesuea (Curcuma longa), Daruharidra (Berberis Asiatica), Sunthi. It is useful in all cases of poisoning . 2. Shirishabejadi lepa - Ark, Shirish, Pimpali(12,13). It is effective in Insect, snake, spider, Scorpion Bite Shirishadya anjana - Shirish, Pimpali, Marich, Saindhav lavan, Lahsun (Allium stiva), Manshil, Vacha. It is used in unconscious patient . 4. Kandarpsara taila - Giloy, Nimb, Haridra, Shirish, Ark, Dhat ura, Snuhi, Kumari, Bramhi, Patol, Pimp ali, Chira-yata. All types of Kushtha (skin diseases) can be cured by its use [60] . 5. Dashanga lepa Shirish, Mulethi, Lalchandan, Chhoti Tagar, ilayachi Jatamansi, Haridra, Daruhardra, Kushtha, Netrabala. It is indicated in Visarpa. kushtha, Jwar, Shotha . 6. Panchashirisa Agada - Shirish Panchana, Trikatu, applied in Insect bite (14,15] . 7. Amrut shirish, - Apamara, Mahshweta, Kakmachi, Cow's urine, useful in Comatose patient 17 [16,17] . 8. Tanduliyak Agad-Tanduliyak, Kashmarya, Kinihi, Girikar nika, Matulungi, Sita, Shelu. it is used in Rajiman snake bite [18] . 9. Ashtang Agada- Vansh, Katuka, Patali, Nagar, Shirishbeej, Govedhuk, Vacha, used in Ghonus Bite19 [19,20] . 10. Sarvkarmik Agad - Vansh, Amalki, Kapithha, Trikatu, Haimvati, Kushtha, Karanjabeej, Tagar, Shirisha, Cow's bile. It is indicated in Spider Bite . 11. Rishabh Agad-Twak, Ela, Jatamansi, Kinihi, Patol, Patha, Padmak, Ashok, Bharanai, Vidang, Chandan, Yashtimadhu. Useful in Snake poison, insect poison . 12. Insect Bite: Shirisha seeds mixed with Pippali (Piper longum) powder are impregnated

thrice with Arka latex(21,22). This formulation destroys poisons of insects. 13. Vishaghna lepa C.su.3/ 30th Shirisha and Sindhuvaaar lepa for external use in the snake poisoning cases. 14. Vishagna Mahakashaaya c.su.4/16th Mahakashaya for internal use in the form of decoction, Shirish, Sindhuwar etc. Many more are the examples to explain the use of Shirisha therapeutically as antitoxic(23,24). **Apart** from Raspanchaka, Toxic and antitoxic drugs act on the basis of their Prabhav, which is the known special potency and power the drug. Effect of Prabhava, only be guessed but not logically justified. But there huge results keep the experts mum about the efficiency of drug on a particular system or poison(25). It is just like that plants possesses poison to protect themselves from the enemies. But the same poison can be utilized by the physician to heal the patients provided physician should be knowledgeable and well equipped enough to handle the emergency if happened any (26).

## CONCLUSION

Acharya Charaka quoted Shirisha as a best anti poisonous drug and also mentioned in Vishaghana Gana Dravyas (antipoisonous drugs) (27). Many studies conducted by different branches by using different parts of the plant have proved antimicrobial, analgesic, antiinflammatory, anti-diarrhoeal, immunomodulatory, antiarthritic, anti-asthmatic, anticonvulsant, anti- allergic, hepatic protective and antioxidant activity of the drug (28,29). 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 (30).

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