



ORIGINAL RESEARCH PAPER

Ayurveda

REVIEW ARTICLE ON CONTRIBUTION OF "ASTANGA SAMGRAHA" IN AGADANTRA

KEY WORDS: Astanga Ayurveda, Damstra, gadatantra(toxicology), Trisutra.

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ABSTRACT

The knowledge of 'Ayurveda' came from Lord 'Brahma'. The original form of Ayurveda was incorporated in 'Astanga Ayurveda'. The 'Astanga Samgraha' was written by Vagbhata, which gives clear evidence regarding existence of 'Damstra' 'Visha Vairodhikam' 'Agadatantra' is also an important branch among them which deals with the diseases and treatment due to poison. In Ayurveda, it has been mentioned vividly with the concept of various Antidotes and their use in the treatment of different types of poisoning. In 'Astanga Samgraha' the knowledge or concept regarding 'Damstra'/'Agada Tantra' is mentioned scattered. So that, it will be hard for someone to find the matters according to his needs. It is an era of super specialization and advanced techniques, so it is very necessary that 'Ayurveda' also be updated keeping similarity with, the changing time and need of the people. In my present work, I have collected all the concepts of 'Agadatantra' from all parts of 'Astanga samgraha' and arranged the matters in the form of Trisutra.

INTRODUCTION

Ayurveda developed from "Trisutra" (Hetu, Linga, Ausadha) to Astanga i.e., the eight speciality of Ayurveda, which are almost related with clinical aspect of Ayurveda, out of these Astanga Ayurveda, Agadatantra¹ or Damstra² or Visagara Vairodhikam³ deals with toxicology i.e., the treatment of various types of poisoning of plant and animal origin with the help of various antidotes which are abundantly described in Agadatantra related portion of Astanga Samgraha. This Agadatantra can be correlated with the Forensic Medicine, jurisprudence. In modern counterpart of Forensic and Medical Jurisprudence is described but about Toxicology is described very less, whereas in Ayurveda, we are rich in Toxicology part where treatment of plant and animal poisoning along with various anti dotes are described extensively, for an example, Snake bite and its treatment is described along with extensive use of antidotes. There for in this page all the scattered matters of toxicological aspect are highlighted and collected in a systematic manner.

AIMS AND OBJECTIVES

In this research paper my prime aim and objectives to collect all the concept about Agadatantra which is described in Astanga Samgraha. So that, we can have literally review consolidately in one place and develop this particular area more specifically and vividly and then compared to Toxicological part of modern science and when compared our Agada Tantra outstands as unique special branch in this field.

DISCUSSION

The word 'Visha' is derived from "Visannam". [4] According to Ayurveda, the word 'Visha' implies appearing like anger personified, black in colour, with fire like eyes, shining hairs standing on the head, terrifying teeth, frightful voice and countenance etc. which can destroy all the living creature. It is mainly of two types -1. Sthavar (Immobile or plant origin), 2. Jangama (Mobile or Animal origin).

Acharya Charaka says 'Gara' type of poison produces cumulative toxicity. Toxicity produced due to the combination of incompatible articles is known as 'Vairodhika'. [5]

Acharya Susruta says That which describes about the determination of signs and symptoms of poisoning due to the bite of snake, insects, spiders, rats, etc. and which also describes about the pacification of the Vikaras (morbidity) produced by Swabhavik, Kritrim, and Sanyog Visha is called Agadatantra. [6]

Hemadri says 'Damstra' means poisoning. [7] The word 'Toxicology' derived from the ancient Greek word 'Toxikos' [8] which means 'Poisonous'. Toxicology [9] means the study of the effects and detection of poisons (toxins) and the treatment of poisoning. Agadatantra or Visha Vairodhikam (Toxicology) is one of the important branch among eight branches of Ayurveda (Astanga Ayurveda). This branch of Ayurveda deals with treatment and protective measures of the diseases due to Visha or poison.

In Astanga Samgraha along with other branches Agadatantra or Damstra also mentioned but the matters of Agadatantra or Visha Vairodhika was in scattered form all throughout the text. Hence the reader has to face difficulty in finding out all the concept about Agadatantra in the entire text. This ramified form of Ayurveda shows some disadvantages in treatment related to the physicians as well as to the readers or scholars. But if we can arrange and collect all the data or concept in the form of Astanga Ayurveda in respect of each particular branch, it will be helpful to everyone to find out the matters according to their need. As an important and necessary branch among other eight branches of Ayurveda, Agadatantra or Damstra has been mentioned in different Sthanas chapters of Astanga Samgraha written by Acharya Vagbhata.

In Sutrasthan, the benefits of Sovanjan (Antimony sulphide) which is a poison in nature has been described in Dinachrya Adhaya (3rd Chapter). In Dravadravya Vijnaniya Adhaya (6th chapter), poisonous effect of insects and snakes on water, poisonous effect of honey, Antipoisonous effect of human urine [10], and in Anna Savarupa Adhaya (7th chapter) flesh of 'Godha' as Anti poisonous meat, Anti poisonous effect of Surasa and Sumukha, Kapitha and poisonous effect of Kakmachi has been mentioned. [11] In Anna Raksha Vidhi Adhaya (8th chapter) of Sutrasthan, procedures to detect poisonous food, Anti poisonous measures, characteristics of poisoned food, treatment of poisoned person, poisonous Dhuma (fume), Symptoms of poisoned food in Stomach, Intestines with treatment, Symptoms of poisoned tooth brush, poisoned collyrium, poisoned snuff and smoke, poisoned oil, poisoned flowers, poisoned soil, water and Air with their treatment, Symptoms of Visha Kanya (poisoned woman) and Anti poisonous recipes with their application has been mentioned. [12]

In Nidan Sthana of Astanga Samgraha, in Madataya Nidan

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Adhaya (6th chapter), Symptoms of Vishajanya Mada and in Pandu, Kamla, Sopha, Visarpa Nidan Adhaya (13th Chapter), Symptoms of Vishajanya Sopha has been described.[13] In Jirna Jvarachikitsa Adhaya (2nd chapter) of Chikitsa Sthana, treatment of Visha Janya and Madyajanya Jvara has been mentioned.[14]

In Ikshaku Kalpana Adhaya (1stchapter) and Saptala, Sankhini, Kalpana (2ndchapter) of Kalpanasthana treatment of Visha (poison)and GaraVisha has been mentioned.[15]

In Uttarthana, Symptoms of Visaja Unmada has been mentioned in Unmada Pratishedha Adhyaya (9th chapter),[16] In the Visha Pratishedha Namadhaya (40th chapter), origin of Visha, kinds of Visha, Vishavega, Dushivisha with symptoms, some Anti poisonous recipes, Symptoms and treatment of Garavisha and Anti poisonous preparations are menti oned.[17]

In Sarpavisha Vijnaniya Adhaya (41st chapter), types of Snake, Symptoms of poisonous and non-poisonous Snakes, features of poisonous bite and treatment has been mentioned.[18].In Sarpavishapratishedha Adhaya (42nd chapter), Different treatment procedures of different kinds of Snake bite has been mentioned.[19]. In Kita Vishapratishedha Ahdhaya (43rd

chapter), Origin and different types of Kita (Insect), Symptoms of bite, Treatment of Kita Visha and Scorpion bite with treatment is mentioned.[20] In Luta Pratishedha Namadhaya (44th chapter), Origin of Lutas (Spiders), types, Symptoms of bite, incubation period, Fatal bite and Treatment procedures are mentioned.[21] In Pratyak Luta Pratishedha Namadhay (45th chapter), Different types of Luta (Spiders), Symptoms of bite, Sadhya (Curable) and Asadhya (Incurable) treatments has been mentioned.[22] In Mushika- Alarkavisha Pratishedhaadhaya (46th chapter), Different type of Mushika (Rats) and Alarka (Rabid Dog) with Symptoms of bite and treatment procedures are mentioned.[23] In Vishaupadrava Pratishedha Namadhaya (47th chapter), Visha Upodrava (Secondary diseases of poisoning), Disease with their symptoms and Anti poisonous compositions are menti oned.[24] In Vishaupayogiya Namadhaya (48th chapter), Necessity of counter poison application, with doses, applied purpose of Sarpavisha (Snake poison), different recipes of counter poison has been mentioned in a wide range.[25]

In the entire Astanga Samgraha, we can get the concept of Agadatantra or Visha Vairodhikam or Damstra in 19 chapters of different Sthanas (Sutra, Nidan, Sharir, Chikitsa, Kalpa and Uttarthana) including 652 No's of Slokas.

SthavarVisha (Plant Origin) [26]	Lakshana (Symptoms)	Chikitsa (treatment)
	Twisting like pain in the body, Delirium, delusion, yawning, dyspnoea, vomiting, flatulence, burning sensation, swelling of the scrotum, bad smell in mouth, roughness, headache, fainting, diarrhoea, fever, hiccup, tingling of teeth, rigidity of lower jaw, throat pain etc. (A.S-Ut-40/8-9)	-Yavagu prepared with the decoction of Kosataki, Agnika, Patha, Suryavalli, Amrita, Abhaya, Selu, Sirisha, Kinhi, Haridra, Punarnava, Trikatu, Brihati, Bala, Sariva, with honey and ghee. -Yavagu prepared from Madhuka, Padmakeshara and Chandana. -Sanjivan Agada, Yapana Agada, Mritajivana Agad, Brahma Agada, Dasanga Agada, Sivakrita Agada (A.S-Ut-40/52-55,56-58,61,64,67)
Sauviranjan (Collyrium)		Protective against eye disease. (A.S-Sut-3/25)
Surasa/Tulasi (Ocimum tenuiflorum)		Anti poisonous. (A.S-sut-7/160)
Sumukha		Anti Poisonous. (A.S-Sut-7/160)
Kapittha		Anti Poisonous. (A.S-Sut-7/185)
Visa justa Anna (Poisoned food)[27]	In Amasaya (stomach)-perspiration, toxicity, fainting, vomiting, horripilations, burning sensation, loss of taste, rashes all over the body. (A.S-Sut-8/27) In Pakkasaya (Intestines)- Thirst, Burning Sensation, fainting, Diarrhoea, loss of strength, emaciation, pallor distension of abdomen. (A.S-Sut-8/32)	Vamana (Emesis), Oleation, purgation. Jivan Agada. (A.S-Sut-8/28-29) Purgation, Dusi Visari Agada with Dadhi. (A.S-Sut-8/33)
Visa Justa Dantakastha (Poisoned toothbrush)[28]	Emits smell of the poison, dryness and swelling of the palate, teeth, tongue and lips. (A.S-Sut-8/34)	Paste prepared with juice of Dadi Karamarda, Bhaviya, Amrataka, Kola, and Badara mixed with honey. (A.S-Sut-8/35-36)
Visajusta Anjana (Poisoned collyrium)[29]	Accumulation of dirt in the eyes, redness, pain, distortion of vision, blindness. (A.S-Sut-8/37)	Medicated Ghrita prepared with Pippali should be given for drink and this Ghrita should applied over affected eyes. (A.S-Sut-8/38)
Visa Justa Taila (Poisoned oil) [31]	Burning sensation in the skin, perspiration, ulcers, laceration etc. (A.S-Sut-8/41)	Cold water bath, paste of Chandana, Tagara, Usira, Kustha, Padma should be applied, juice of Kapittha with cow urine should be given. (A.S-Sut-8/42-43)
Visa Justa Bhumi (Poisoned soil)[32]	Appears as burnt in fire, grass and bush, will be found faded and dropping down, insect and crawling animals lying dead, people or animals may have vomiting, fainting and fever. (A.S-Sut-8/69-70)	-Roots of Sobhanjan, Somavalli, Usira, Juice of Matulanga, Hingu are to be made into a drink mixed with little amount of curd. -Urine, flesh and blood of goat, sheep and added with all fragrant drugs are to be boiled in water and that water should be sprinkled all over the poisoned land. (A.S-Sut-8/71-73)

<i>Visa Justa Jala</i> (Poisoned water)[33]	The water of the reservoirs which have been poisoned, will have bad taste, hard to digest, dead fish floating, causes swelling, irritation in mouth, and burning sensation. (A.S-Sut8/74-76)	- <i>Sigravadi Agada</i> should be given to drink - <i>Ajashingi, vishala, Guduchi, prativisha</i> all are burnt and made into ash, this ash is dissolved in water and filtered many times it is then boiled adding to it a paste prepared from <i>Sarala, Ela, Udichya, Manjistha, Sunanda,</i> and <i>Bakuchi</i> wherever drops of this water fall those parts become Poison free. (A.S-Sut-8/77-80)
<i>Visa Justa Vayu</i> (Poisoned air)[34]	Poisoned air will be cold during summer hot during winter, causes giddiness fainting and other symptoms. (A.S-Sut-8/81)	<i>Sigravadi agada</i> is to be made use of fine powder of <i>Devdaru, Nata, Arjuna, Gairika, Vajrakanda, Lata</i> and <i>Lodhra</i> is to be sprinkled over the top of the trees, flag posts and contact with this poisoned air becomes detoxicated. (A.S-Sut-8/82-83)

JANGAMA (ANIMAL ORIGIN)

<i>Darvikara Damsa</i> (Hooded Snakes) [35]	Site of bite is seen elevated like the tortoise back, dry, with small marks of teeth, associated with abnormal symptoms like, blue colour of the face, nails, urine, eye. Dryness and irrelevant speech, loss of movements, loss of consciousness, dry belching often and such other symptoms of <i>vata</i> aggravation. (A.S.Ut-41/39)	-Root of <i>Sinduvaraka</i> , macerated in its own juice, added with honey a consumed with the recipe for poison of hooded snakes. - <i>Pakala (Kustha)</i> and honey and made use of nasal drops. -Ghee added with honey and <i>Manjisth</i> and <i>Grahadhuma</i> (kitchen soot), should be drunk. - <i>Agada</i> (Antipoisnous) with <i>Tanduliyaka Kasmarya, Kanini, Girikarnika, Matulanga, Sita</i> and <i>selu</i> used for drinking, nasal medication and collyrium is beneficial. (A.S.Ut-42/21-26)
<i>Mandali Damsa</i> (Snake with patches)[36]	The site is dry, hot, yellowish-red discolouration; Muscle becomes thick with <i>Visarpa</i> (Herpes) like ulcer accompanied with burning sensation, fever, bleeding from channels and symptoms of <i>pitta</i> aggravation. (A.s.Ut-41/40)	-Equal parts of <i>sugandha, Svetakhaya, Gajakarnika</i> , half part of each of leaves of <i>Surasa, Kapitha, Bilva, Dadima</i> made into a paste mixed with honey is beneficial. - <i>Himavan Agada</i> - <i>Astanga Agada</i> (A.S.Ut-42/26-28)
<i>Rajimanta</i> (Snakes with stripes)[37]	The site is unctuous firm, slimy, swollen, blood is thick, cold, feeling of heaviness, anorexia, vomiting, loss of consciousness, Dyspnoea and other symptoms of <i>kapha</i> aggravation.	- <i>Katuka, Ativisa, Kustha, Grihadhuma, Harenuka Vyosa</i> and <i>Tagara</i> made into a Paste and consumed mixed with honey. - Incase of bite by a <i>Kaudachitra</i> snake the bitten part should be buried in the ground for two <i>Yama</i> (6 hours), then pulled up, the site of bite incised and covered with the mild adhering to the root of a corn plant the patient made to drink ghee boiled with powder of <i>Vara</i> , after this get digested and he had Purgation, he should per take barley along with processed soup. (A.S.Ut.42/30-31)
<i>Alarka Visa</i> (Rabid dog)[38]	-Sleepy unconscious black coloured blood comes out from the site of bite develops pain in the heart and head, fever, rigidity, thirst and fainting. -The person gets frightened by the sight, touch and sound of water even though not bitten by rabid dog etc. such a patient of the disease. <i>Jalasantrasa</i> (hydrophobia) should be rejected. (A.S.Ut.46/8-12)	- On site of bite juice of flowers of <i>Apamarga</i> should be squeezed. - Roots of <i>Nala</i> beneficial for drinking and external application. - Fruits of <i>Dhurdhuraka</i> , root of <i>kakoudumbarika</i> consumed with sidhu. -Use of virechan drug with arka milk -Use of panchangas of jalavetas.
<i>Vrischika Damsa</i> (Scorpion bite)[39]	Swelling of the tongue, rigidity, of the body parts, pain, vomit's blood, which is black in colour, loss of sensory perceptions, perspire, faint's, dryness of mouth, Anxiety, Muscles at the site of bite drop off. (A.S.Ut. 43/27)	-Bathing with <i>Cakra</i> or <i>vidarigraham taila</i> -Fomentation with <i>rajani, sandhava, vyosa</i> flowers and fruits of <i>shirish</i> -Seeds of <i>palash</i> pasted with arka milk applied to relive pain -Tooth of camel added with <i>saivala</i> destroys the scorpion poison.
<i>Luta Visa</i> (Spider bite)[40]	Appearance of a round rash, white black mild red yellow or blue in colour, soft, raised up, its centre is either black or blue. It has burning sensation, severe, pain, fever, quick ripening, exudation, sloughing, muscles falling out etc. (A.S.Ut. 44/12)	- <i>Agnikarma</i> with <i>jambavostha</i> . -Bloodletting should be done. -Paste of <i>bodhi, slesmantak</i> and <i>akasaka</i> should be applied. -Nasal drop with ghee. -Collyrium prepared with leaves of <i>surasa, vyosa, roots of bilva & haridra</i> macerated with goat's urine.

<p><i>Musika Visa</i> (Rat bite)[41]</p>	<p>The parts of the where the semen of rat falls or those parts which came in contact with cloth etc. contaminated by the semen, the blood becomes vitiated, becomes yellowish, white and give rise to tumours, swellings, Rashes, reddish patches on the skin. (A.S.Ut. 46/3)</p>	<p>-Rat bite site should be burnt with arrow shaft or mirror. -Paste of <i>agradhuma</i>, <i>manjishtha</i>, <i>rajani</i>, <i>saindhav</i> destroys the poison. -Vomiting with decoction of <i>jalini</i> or <i>ankola</i> or <i>madan phala</i>. -For purgation paste of <i>trivrit</i>, <i>nili</i>. -Medicated ghee of <i>tanduliyaka</i> or with two <i>rajani</i>.</p>
<p><i>Gara Visa</i> (Artificial Poisoning) [42]</p>	<p>Develops pallor, emaciation, poor digestive capacity, cough, dyspnoea, fever, sleepiness, worry, distension of abdomen liver and sleep, low voice debility, laziness, swelling of the body, flatulence, dryness of hands and feet etc. (A.S.Ut. 40/85)</p>	<p>-Confection prepared with sugar, honey, power of <i>tapy</i>. -<i>Amrita</i>, <i>nata</i>, <i>vasa</i>, <i>musta</i> mixed with butter milk. -Habitual use of milk and ghee considered best.</p>

CONCLUSION

In today's busy life, time is an important factor. So, the people has limited time to go through the entire treatise of any Samhita. Aim of this present study is to collect all concept regarding Agadatantra mentioned in Astanga Samgraha and make it short and easy, which will be helpful for the readers and researchers of future generation to find and understand the matter's in a easy and less time consuming way. This research work may be helpful to the physicians in the treatment of some common poisoning. With this work, we can go for further research in this field and develop the Ayurveda in Scientific way. Then only Ayurveda will get popularity and will be accepted by the modern world.

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