



ISSN (E): 2277- 7695
 ISSN (P): 2349-8242
 NAAS Rating 2017: 5.03
 TPI 2017; 6(11): 643-645
 © 2017 TPI
 www.thepharmajournal.com
 Received: 29-09-2017
 Accepted: 30-10-2017

Dr. Athulya CM

Year PG Scholars, Dept. of post graduate studies in Agadatantra; MVR Ayurveda College, Parassinikkadav, Kannur, Kerala, India

Dr. Vijitha Vijayan

Year PG Scholars, Dept. of post graduate studies in Agadatantra; MVR Ayurveda College, Parassinikkadav, Kannur, Kerala, India

Dr. Neethu P

Year PG Scholars, Dept. of post graduate studies in Agadatantra; MVR Ayurveda College, Parassinikkadav, Kannur, Kerala, India

Dr Ittoop J Ancheril

Assistant Professor, Dept. of post graduate studies in Agadatantra; MVR Ayurveda College, Parassinikkadav, Kannur, Kerala, India

Correspondence**Dr. Athulya CM**

Year PG Scholars, Dept. of post graduate studies in Agadatantra; MVR Ayurveda College, Parassinikkadav, Kannur, Kerala, India

A conceptual study on the anti-toxic action of Garudanjana

Dr. Athulya CM, Dr. Vijitha Vijayan, Dr. Neethu P, Dr Ittoop J Ancheril

Abstract

Agada tantra is a branch of Ayurveda which deals with identification, prevention, diagnosis and treatment of various toxic conditions. Snake bite is a significant health concern, especially in rural populations of tropical and subtropical countries. Many toxicological treatises are available in Kerala which contains medications which can be used in emergency conditions. This article deals with Garudanjanam; a herbo mineral combination drug which is used as a collyrium in emergency conditions of poisoning by practitioners in Kerala.

Keywords: *Agada tantra*, ayurveda, snake bite, garudanjanam, collyrium

1. Introduction

Agada tantra is one of the eight branches into which *Ayurvedic* medicine is traditionally divided. Literally 'Gada' means 'a disease' and 'Agada' means 'any agent which makes the body free from diseases'. However the term '*Agada tantra*' is specifically used for the branch of the medicine dealing with toxicology which includes the description of different types of poisons and their antidotes [1].

Snake bite is a common medical emergency where timely treatment can reduce morbidity and mortality and save precious human lives. In regions like Kerala conditions are favourable for the flourishing of poisonous animals and plants. And hence *Visha chikitsa* (treatment of poisoning) is very essential in these areas. Many great visha vaidyas (toxicologists) has keenly studied about this subject and has done many researches and developed new medicines and treatment protocols in the management of poisoning. Many Vishavaidya grandas (toxicological texts) are available; dealing with the concerned subject. Some of them are Kriyakoumudi, Visha Vaidya Jyotsnika, Kodashery margam, Prayoga samuchayam etc. *Visha chikitsa* mainly includes two customs.

1. Visha vaidyam – Treatment using medicines
2. Visha vidya - Treatment using mantra [2].

Anjana (collyrium) and *Nasya* (nasal drops) are some of the measures which are mostly used in the emergency management of poisoning when the patient is in unconscious state. *Garudanjanam* is one of the *anjana* yoga which is used in practise in such conditions. Four *yogas* (formulations) of *Garudanjanam* are mentioned in *Kriya koumudi*. Among them one is commonly used; which is discussed here.

About *Garudanjana* [3].

Garudanjanam is a herbomineral preparation.

Consists of 7 mineral drugs and 7 herbal medicines

Ingredients

Table 1: Mineral Drugs

Sanskrit Name	Chemical Name	Formula
<i>Anjanam</i>	Stybnite	Sb ₂ S ₃
<i>Saindava</i>	Rock salt	NaCl
<i>Tuttha</i>	Copper sulphate (Blue vitriol)	CuSO ₄ .7H ₂ O
<i>Tankana</i>	Borax	Na ₂ B ₄ O ₇ .10H ₂ O
<i>Parada</i>	Mercury	Hg
<i>Tamra</i>	Copper	Cu
<i>Shanka</i>	Calcium Carbonate	CaCO ₃

Table 2: Herbal Drugs ^[16].

S. No	Sanskrit Name	Family	Latin name
1.	<i>Shunti</i>	Zingiberaceae	Zingiber officinale
2.	<i>Maricha</i>	Piperaceae	Piper nigrum
3.	<i>Pippali</i>	Piperaceae	Piper longum
4.	<i>Nagadanti</i>	Euphorbiaceae	Baliospermum montanum
5.	<i>Shigru</i>	Moringaceae	Moringa oleifera
6.	<i>Neeli</i>	Euphorbiaceae	Indigofera tinctoria
7.	<i>Jambeera</i>	Rutaceae	Citrus lemon

Table 3: Properties

Drug	Rasa	Veerya	Vipaka	Guna	
1. Anjana ^[4]	-	Sheeta	-	Vishahara	Vrana shodana ropana
2. Saindava ^[6]	Madhura, lavana	Anushna sheeta	-	Snigda, teekshna sukshma	Tridoshagna Rochana, deepana Chakshushya Avidahi
3. Tuttha ^[14]	Kashaya, madhura	-	-	Laghu	Kaphapittahara Lekhana, bhedi Rasayanam Nadi balakrit Twak – doshashamana Krumigna
4. Tankana ^[15]	Katu	Ushna	-	Rukshna teekshna sara, hridya	Kaphagna, Vatapittakrit Sthavaradi-Vishapaha
5. Shunti ^[7]	Katu	Ushna	Madhura	Laghu snigda	Kaphavata Shamaka Ruchya Amavatagna Vibandahara
6. Maricha ^[8]	Katu	Ushna	Katu	Laghu, teekshna	Kaphavata Shamana
7. Pippali ^[9]	Katu	Ushna	Madhura	Laghu snigda teekshna	Kaphavata Shamana
8. Parada	Shadrasa	Ushna	Madhura	Snigda, sara, guru	Tridoshahara Rasayana, vrushya
9. Neeli ^[10]	Tikta	Ushna	Katu	Laghu ruksha	Kaphavata shaman Madahara vishashamana
10. Tamra ^[5]	Tikta Kashaya	Ushna	Madhura	-	Kaphapitta Shaman Lekhana, Vishahara Yakrit Doshahara
11. Shanka ^[15]	Katu (Kshara)	Sheeta	-	-	Kaphahara, Visha Doshahara
12. Nagadanti ^[11]	Katu	Ushna	Katu	Guru tikshna	Kaphapittahara
13. Shigru ^[12]	Katu, tikta	Ushna	Katu	Laghu, Ruksha, Teekshna	Kaphavatagna Visha nashana
14. Jambeera ^[6]	Amla	Ushna	Amla	Guru, teekshna	Kaphavata Shaman

Method of Preparation

All the ingredients are taken in prescribed amount. *Shodhana* (purification) of drugs are done Grinding medium as *Jambeera swarasa* (Citrus limon)

Duration - for 3 days

Made in the form of *Gutika* (tablet) and dried in shade.

Discussion

Garudanjanam is a herbo mineral preparation which consists of seven mineral drugs and seven herbal medicines. It is applied in both eyes in emergency conditions when the patient is in altered state of consciousness. Once the consciousness is regained other necessary treatments should be carried out. *Anjana (collyrium)* is one of the twenty four treatment measures of *visha* (poison) which is mentioned in Charaka samhita.

This yoga is indicated in 18 types of *Visha (poison)*, different eye diseases (*Timira, Patala, Kacha*), different *sannipata* (where 3 doshas are vitiated), different psychosomatic diseases or psychiatric ailments. It is a most *hrudya* (pleasant) yoga. Dose is *tila pramana* (measure of one sesame seed).

In mythology, the *Garuda* (Eagle- considered as the vehicle

of lord *Vishnu*) is the enemy of the serpents, who are associated with poisons. Also *Garuda* possess very sharp eyesight. Eagles eyes have an eyesight estimated at 4-8 times stronger than that of the average human. Colour vision with resolution and clarity are the most prominent features ^[16].

Anjana is indicated in conditions of *shoonakshikuta* (swelling in the orbital region), *nidarta* (excessive sleep), *vivarna avila lochana* (discoloured and turbid eyes), *vivarnam pashyati* (perception of various colours) ^[17].

Regarding the probable mode of action, most of the drugs in this yoga possess *katu rasa* (pungent taste); *ushna veerya* (hot in potency); *laghu teekshna guna* (light, penetrating property); *kapha vata hara* (reduces kaphavata) and *vibandahara* (removes obstruction) property. All these drugs have penetrating and *vishahara* (antitoxic) property which helps the unconscious person to regain their consciousness caused due to infliction of *visha* (poison).

Conclusion

Snake bite is a common medical emergency, where timely treatment can reduce morbidity and mortality and save precious human lives. The time elapsed after the bite is of

vital importance because with the passage of time more venom gets bound to the tissues and is thus not manageable with the neutralisation by ASV. Further, use of ASV may be avoided due to inexperience and fear of anaphylaxis or it may be administered irrationally when not indicated at all, resulting in wastage of resources and exposing the patient to toxicity risk of high doses. To overcome the hurdles of non-availability of ASV in remote areas and sometimes its ineffectiveness because of species specificity, herbal medicines are preferred^[18].

Earlier the cases of snake bite were solely managed by prominent efficient *Visha vaidyas* (ancient toxicologists). Many of the formulations were used in the emergency management; which is now limited to only some *Visha vaidyas*. So there is a need to explore more in these areas which could be beneficial to the mankind and for the Ayurveda community. Here an attempt is made to look into the conceptual study of one of such formulations which were used earlier. Furthermore studies and researches have to be conducted in these areas.

Acknowledgement

We acknowledge the contributions and are thankful to Dr Arathi Rajesh, Dr. Ashish Paul Thomas; faculties of Post graduate department of *Agada tantra*, MVR Ayurveda medical college for the successful completion of this work.

Reference

1. Vaidya Bagavan Dash; Lalitesh Kashyap; Basic principles of Ayurveda; 1994 Concept publishing company. 2010; 584, 46, 55. ISBN 978-81-7022-257-6. Retrieved.
2. Avanapparamb Maheshwaran Nambudiripadu. Keraleeya Visha Chikitsa; 1st edition; Kottakal Ayurveda series, 2015, 136, 27. ISBN: 978-93-84050-04-07.
3. Kuttikrishna Menon VM, Kriya Koumudi, Uragavisha samanya chikitsa prakaranam; Kottayam; Sahitya pravartaka sahakarana sangam; Ed. 1986; 329, 1571-1578. Sloka no.
4. Indradev Tripathi, Kapidev Giri, Rasaratna samuchayam, Varanasi, Choukamba Sanskrit Samsthan. Adyaya; Sloka, 2009, 102.
5. Indradev Tripathi, Kapidev Giri, Rasaratna samuchayam, Varanasi, Choukamba Sanskrit Samsthan. Adyaya; Sloka, 2009, 46.
6. Dr. Ramkaran Sharma, Vaidya Bagavan Dash, Charaka Samhita. Varanasi; Choukamba Krishnadas academy, 2009, 300, 552. ISBN:81-7080-012-9; Sutrasthana; 27 th chapter; Sloka no.
7. Sri Bhavamisra, Edited by Dr. GS Pandey, Bhavapraksha Nigantu, Varanasi, Chaukamba Bharati, academy, Sloka, 2006, 45.
8. Sri Bhavamisra. Edited by Dr. GS Pandey; Bhavapraksha nigantu; Varanasi, Chaukamba Bharati academy, Sloka, 2006, 60.
9. Sri Bhavamisra. Edited by Dr GS Pandey; Bhavapraksha nigantu; Varanasi, Chaukamba Bharati academy, Sloka, 2006, 55.
10. Sri Bhavamisra. Edited by Dr. GS Pandey; Bhavapraksha nigantu; Varanasi, Chaukamba Bharati academy, Sloka, 2006, 209.
11. Sri Bhavamisra. Edited by Dr. GS Pandey; Bhavapraksha nigantu; Varanasi, Chaukamba Bharati academy, Sloka, 2006, 200.

12. Sri Bhavamisra. Edited by Dr. GS Pandey; Bhavapraksha nigantu; Varanasi, Chaukamba Bharati academy, Sloka, 2006, 135.
13. Pandit Kashinath Shastri. Rasa tarangini; 11th edition; Delhi; Motilal banarasidas publication, 11th edition, 2012; ISBN:978-81-208-2542-0;SI.no.21/129.
14. Pandit Kashinath Shastri. Rasa tarangini; 11th edition; Delhi; Motilal banarasidas publication, 2012, ISBN:978-81-208-2542-0;SI.no.13/81.
15. Dr. Sidhinandan Mishra, Ayurvediya Rasashastra. Choukamba Orientalia. 2009, ISBN: 978-81-7637-114-8, 575.
16. https://en.m.wikipedia.org/wiki/Eagle_eye
17. Acharya JT. Sushruta samhita of Sushruta nibanda sangraha, reprint edition, 2014; Varanasi, Choukamba Sanskrit Samhita Sansthan, Kalpasthana, 576.
18. Gupta YK, Peshin SS. Snake bite in India: Current scenario of an old problem; Journal of Clinical Toxicology, 2014; 4:182. doi:10.4172/2161-0495.1000182
19. Prof. PV Sharma, Dravyaguna Vijnana. Varanasi; Choukamba Bharati Academy, 2005, 2.