

PHARMACOLOGICAL AND PHARMACEUTICAL ANALYSIS OF “MAHA
TRIPHALADYA GHRITA – A POLY HERBAL AYURVEDIC FORMULATION”

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Article Received on 18/12/2016

Article Revised on 08/01/2017

Article Accepted on 28/01/2017

INTRODUCTION

WHO defines drug as “A substance or product that is used or intended to be used to modify or explore physiological system or pathological status for the benefit of the recipient”. *Ayurveda* is the first to give an elaborate description of various therapeutic measures not merely of radical removal of the causative factors but also at the restoration of *Doshika* equilibrium. A drug may be defined as any chemical substance, synthetic or of plant or animal origin and of known or unknown composition, which is used as a medicament to prevent or cure. The drug (*Dravya*) comes second in the order of the four fundamental components of treatment.^[1]

Our *Acharya* has given equal importance to systemic and local administration of the drug indicating that the *Acharya* of that time were well aware of the importance of the topical route and oral route in treating the ocular ailments. Drug combinations are envisaged to serve synergistic action, combined action, toxicity neutralizing action and specific action. *Ayurvedic* literature speaks about the importance of the drug “Nothing in the world exists, which does not have therapeutic utility”. Taking this fact into consideration, *Ayurvedic* physicians have formulated single as well as compound drugs for the cure and prevention of various ailments.

COMPOSITION AND PROPERTIES OF
MAHATRIPHALADYA GHRITA^[2]

Ingredients: *Murchhita* Cow *Ghritam*, *Triphala*, *Bhringaraja*, *Adusa* leaves, *Satavari*, Goat's Milk, *Guduchi*, *Amalaki*, also take *Pippali*, raw sugar, *Draksha*, *Triphala*, *Nilkamal*, *Madhuka*, *Kshirkakoli*, *Madhuparni*, and *Nidigdihika*.

Process of Drug Preparation

Take 750 ml each of the following: *Murchhita* Cow *Ghrita*, Decoction of *Triphala*, Juice of *Bhringaraja*, Juice of *Adusa* leaves, Decoction or Juice of *Satavari*, Goat's Milk, *Guduchi*, Decoction or Juice of *Amalaki*.

Also take *Kalka* out of the following in equal parts (i.e. 17 gm each): *Pippali*, raw sugar, *Draksha*, *Triphala*, *Nilakamal*, *Madhuka*, *Kshirakakoli*, *Madhuparni* and *Nidigdihika*.

Taking all the ingredients cook them as per method & thus obtain the medicated *Ghritam*.

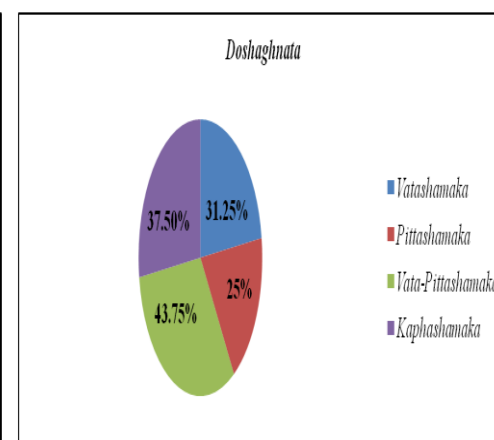
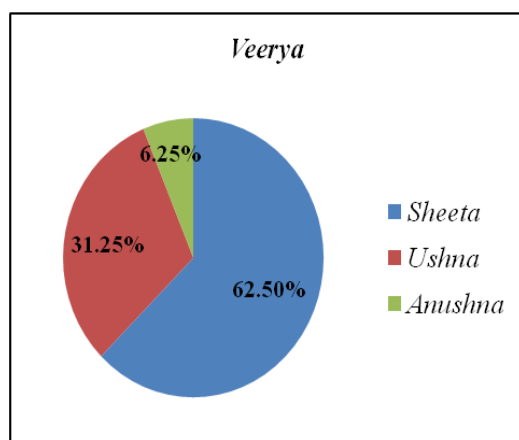
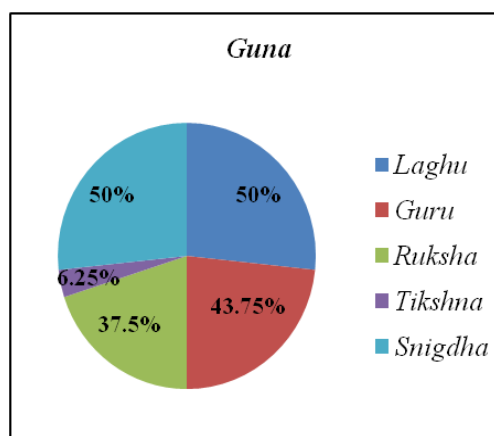
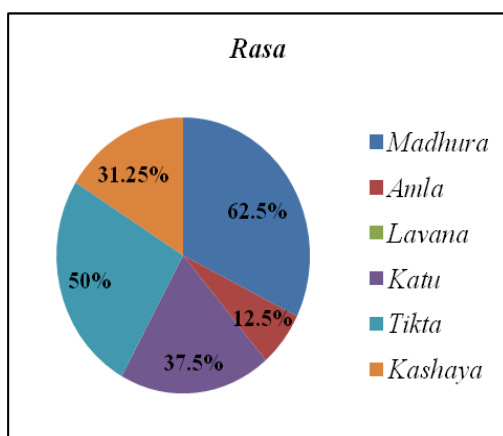
METHOD OF PREPARATION^[3-4]

All ingredients were taken in above said quantity. *Ghrita* was taken in a stainless steel vessel and heated mildly to remove any moisture. Then ingredients of *Kalka* were added. It was then thoroughly stirred while adding *Kwatha*. Then it was heated. The temperature maintained was in between 50°C to 90°C during the first hour of heating. Heating was continued for three hours and then stopped & allowed to stand overnight. Heating was again started on next day while keeping a watch over the subsidence of froth (*Phena Shanti*) and the *Kalka* was constantly checked for formation of *Varti* (*Madhyama Paka Lakshana*). Heating was stopped when *Varti* was formed and froth subsided. *Varti* was tested for absence of crackling sound. *Ghrita* was filtered while still hot (approx. 80°) through a muslin cloth and allowed to cool. After that, the *Ghrita* was packed tightly in glass containers to protect from light and moisture.

THE PHARAMACO-DYNAMICS OF
MAHATRIPHALADYA GHRITA

The physiological effects of the drugs and mechanism of their action are best understood by the properties of its basic physiochemical factors i.e. *Rasa*, *Guna*, *Veerya*, *Vipaka*, *Karma* and *Prabhava* of the drugs. These primarily affect the *Doshas* and determine their *Doshakarma* activity, which in turn corrects the vitiated *Doshas* and maintain the *Doshika* equilibrium of the body. The Pharmacodynamics of the selected recipe of the present study can be explained as follows:

Sr. No.	Ingredients	Rasa	Guna	Veerya	Vipaka	Doshaghata
01	Haritaki ^[5]	Kashaya, Tikta, Madhura, Katu, Amla	Laghu, Ruksha	Ushna	Madhura	Tridoshashamaka, especially Vatashamaka
02	Bibhitaki ^[6]	Kashaya	Ruksha, Laghu	Ushna	Madhura	Tridoshashamaka, especially Kaphashamaka
03	Amalaki ^[7]	Amla, Madhura, Kashaya, Tikata, Katu	Guru, Ruksha, Sheeta	Sheeta	Madhura	Tridoshashamaka, especially Pittashamaka
04	Shatavari ^[8]	Madhura, Tikta	Guru, Snigdha	Sheeta	Madhura	Vata-Pittashamaka
05	Nilotpala ^[9]	Madhura, Katu, Tikta	Laghu, Snigdha, Picchila	Sheeta	Madhura	Tridoshashamaka, especially Vata-Pittashamaka
06	Pippali ^[10]	Katu	Laghu, Snigdha, Tikshna	Anushna	Madhura	Vata-Kaphashamaka
07	Madhuka	Madhura	Guru	Sheeta	Madhura	Vata-Pittashamaka
08	Go-ghrita ^[11]	Madhura	Guru, Snigdha	Sheeta	Madhura	Vata-Pittashamaka
09	Kshirakakoli ^[12]	Madhura	Guru, Snigdha	Sheeta	Madhura	Vata-Pittashamaka
10	Bhringaraja ^[13]	Katu, Tikta	Ruksha, Laghu	Ushna	Katu	Kapha-Vatashamaka
11	Vasa	Tikta, Kashaya	Ruksha, Laghu	Sheeta	Katu	Kapha-Pittashamaka
12	Guduchi	Tikta, Kashaya	Guru, Snigdha	Ushna	Madhura	Tridoshashamaka
13	Ajadugdha ^[14]	Madhura	Laghu	Sheeta	Madhura	Rakta-Pitta prashamana
14	Sheeta	Madhura	Sheeta, Snigdha	Sheeta	Madhura	Vata-Pittashamaka
15	Draksha	Madhura	Guru, Snigdha, Madhu	Sheeta	Madhura	Vata-Pittashamaka
16	Kantakari	Katu, Tikta	Ladhu, Ruksha, Sara	Ushna	Katu	Kapha-Vatashamaka



According to Charaka, Ghrita is effective in subsiding Pittaja and Vataja disorders; it improves Dhatus and is overall booster for improving Ojas. Mahatriphladya

Ghrita has predominance of Madhura Rasa (62.5%), Tikta Rasa (50%), Katu Rasa (37.5%), Kashaya Rasa (31.25%), Amla Rasa (12.5%), Laghu Guna (50%),

Snigdha Guna (50%), *Guru Guna* (43.75%), *Ruksha Guna* (37.5%), and *Tikshna Guna* (6.25%), *Sheeta Veerya* (62.5%), *Ushna Veerya* (31.25%) & *Anushna Veerya* (6.25%), *Madhura Vipaka* (81.25%) & *Katu Vipaka* (18.75%). Considering the *Doshakarma*, the trial drug is *Vata-Pittashamaka* (43.75%), *Vatashamaka* (31.25%), *Pittashamaka* (25%) and *Kaphashamaka* (37.5%) by virtue of its *Rasa*, *Guna*, *Veerya* and *Vipaka*. Thus, the overall effect of the compound drug is *Vata-Pittashamaka* and hence it disintegrates the pathology of the eye diseases, which is *Vata-Pittaja* in its manifestation.

Description of Prepared Ghrita

A yellow colored, soft, low melting medicated fat was unctuous for touch with a characteristic odour and slight bitter taste.

Physicochemical parameters

Analytical Parameter	Maha Triphaladya Ghrita
Purity test	+ve
Rancidity	-ve
Refractive Index	1.4620 at 40°C
Specific Gravity	0.9111 at 40°C
Loss on Drying	0.20 %
Acid Value	5.1482
Iodine Value	37.0797
Saponification Value	230.15748
Unsaponifiable matter	0.36%
Ester value	203.87

Method of Use/Administration

It should be taken in doses of 6-12 gm before meals along with Luke warm milk.

It should be taken during meals when one is taking breads or cooked rice, If one is taking liquid meals the medicine shall be taken after that.

Therapeutic benefits

Ghrita is said to be one of the best *Yogavahi*, *Vatapittasamaka*, and *Rasayana*^[15], So *Mahatriphaladya Ghrita*^[16] is best of choice to cure various eye diseases. *Triphala* is best *Chakshusya* and is use frequently in ophthalmic practice.

Taken as per instructions, this medicine checks all types of eye diseases particularly, Night blindness, Cataract, *Kacha*, *Nilika*, *Patala*, *Arbuda*, Conjunctivitis, *Adhimantha*, *Pakshmakopa*, Eye diseases caused by *Vata*, *Pitta*, *Sleshma* & *Sannipataja* problems, lost vision or diminished vision & the like. *Sushruta* indicated *Ghritapaana* & *Tarpana* as line of treatment in *Shushkakshipaka*^[17] It also checks indispositions like excessive tearing, itching in the eyes and problems of long vision or short vision. The medicine makes the user's looking power as powerful as that of a vulture while his body becomes very charming and his digestive power is also developed. This medicine is very effective in checking all types of eye diseases.

REFERENCE

1. Agnivesha, Charaka Samhita, Chakrapanidatta, edited by Vaidya Jadavaja Trikamji Acharya, edition 2008, Chaukhamba Surabharati Prakashan Varanasi, Sutra Sthana chapter 19 / 5 & Sutra Sthana 9/11 pg.110.
2. Bhaishajya Ratnavali, Vidyotini Hindi commentary by Ambika Dutt Shastri, 1987, Chaukhamba Orientalia, Varanasi; Vol. III 64.
3. Sharnghadhara, Sharnghadhara Samhita with 'Jivanprada' hindi commentary edited by Dr. Shailaja srivastava, Reprint, Chaukhamba Surbharati Prakashan, Varanasi, 2004 Madhyama Khanda 9/1.
4. Ayurvedic Formulary of India by Government of India.
5. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Haritkyadi Varga 19-22.
6. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Haritkyadi Varga 35-37.
7. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Haritkyadi Varga 38-41.
8. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Guduchyadi Varga 184-188.
9. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Puspa Varga 15.
10. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Haritkyadi Varga 53-58.
11. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Ghrita Varga 1-4.
12. THE AYURVEDIC PHARMACOPOEIA OF INDIA Part – I, Volume – V.
13. Database on Medicinal Plant Used in Ayurveda, Vol. 2, 1st Edi., CCRAS, New Delhi.] 2001.
14. Bhavamishra, Bhavaprakasha Nighantu with commentary by Dr. K. C. Chunekar, edited by Dr. G. S. Pandey, Ed. Reprint, Chaukhambha Bharati Academy, Varanasi, 2006; Dugdha Varga 14/16-17.
15. Astanga hridaya; Sutrastana chapter-5/73 by L.C Vaidya 2nd edition.
16. Astanga hridaya; Uttara tantra chapter- 13/13 by L.C Vaidya, 2nd edition/ (A.P.I- Part II; Vol II; pg 102-104).
17. Sushruta, Sushruta Samhita with the 'Ayurveda-tatva-sandipika' hindi commentary of kaviraja

ambikadutta shastri Ed. Reprint, Chaukhambha
Sanskrit Sansthan, Varanasi, 2007. Uttarsthana 9/21.