



HEPATOPROTECTIVE ACTION OF ABHAYADI GHRITA: A LITERATURE REVIEW

Aparna.M¹, Shubha P.U², Ranjana.K³, Chaithra Hebbar⁴

¹PG Scholar, Department of PG studies in Agadatantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hospital and Research Centre, Kuthpady, Udupi, Karnataka, India

²Assistant Professor, Department of PG studies in Agadatantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hospital and Research Centre, Kuthpady, Udupi, Karnataka, India

³Assistant Professor, Department of PG studies in Agadatantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda, Hospital and Research Centre, Kuthpady, Udupi, Karnataka, India

⁴Professor and Head, Department of PG studies in Agadatantra, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital and Research Centre, Kuthpady, Udupi, Karnataka, India

Corresponding Author: aparnamgopi@gmail.com

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ABSTRACT

Introduction: *Agadatantra* is a branch of *Ayurveda* that deals with managing various types of *Visha*(poison). *Garavisha* is a type of artificial poisoning, which is slowly metabolised or digested in the body and leads to hepatotoxicity. *Abhayadi ghrita*, mentioned in *Bhasavarajeeyam* in *Vishaprakarana*, can cure all types of poisoning. All the drugs in this *Ghrita* show hepatoprotective activity. This article explains the hepatoprotective activity of *Abhayadi ghrita*. Materials and methods: Here is an attempt to review the hepatoprotective activity of *Abhayadi ghrita*.

Keywords: *Agadatantra*, *Garavisha*, Hepatotoxicity, *Abhayadi ghrita*

INTRODUCTION

Hepatotoxicity, the damage to the liver caused by exposure to harmful substances, medications or infections, is a critical concern due to the liver's central role in metabolism and detoxification. Due to its potential severity and prevalence, there is a high demand for effective treatments to address hepatotoxicity. Conventional or synthetic drugs which are used to treat liver diseases are unsatisfactory because they do not offer complete protection to the organ and can exert long-term severe side effects^[1,2,3,4]. Integrating Ayurvedic principles and remedies can provide valuable insights and alternative solutions for liver health and well-being. Therefore, it is crucial to understand the role of *Agada yogas* (anti toxic formulations) in curing liver damage. *Gara visha* is a concept in *Agadatantra* (Toxicology), which is prepared artificially by combining either poisonous or non-poisonous substances^[5]. They are slowly metabolised or digested in the body and show their effect after some time. Hence, they do not kill the person instantly. Through our daily lives, we are unknowingly exposed to one or more types of poison like medicines, preservatives, junk foods, cosmetics, etc. Continuous use of these leads to the accumulation of toxins in the body and causes hepatotoxicity, which may lead to liver damage.

While explaining the symptoms of *Garavisha*, *Acharya Vagbhata* mentioned *Yakrit roga* (Liver disease). *Abhayadi ghrita* (polyherbal medicated butter) is a formulation mentioned in the *Trayovimsat prakarana* of *Basavarajeeyam*^[6]. The ingredients are *Hareetaki*(*Terminalia chebula* Retz), *Vasa*(*Adhatoda vasica* Nees), *Patola*(*Trichosanthes dioica* Roxb),

Bhunimba (*Andrographis paniculate* Nees) and *Goghrita* (clarified butter prepared from cow's milk). *Abhayadi ghrita* subsides all kinds of poisons. The drugs are having properties like *Yakrituthejaka*(liver stimulant), *Vishaghna* (antitoxic) , *Kamalahara* (clear jaundice), *Rasayana* (rejuvenative), *Deepana* (enhancing digestion and metabolism) and *Pachana*(enhancing digestion). *Ghrita* is considered the best medium, assimilating the properties of other substances without losing or enhancing their attributes. The lipid-based polyherbal formulation has the potential to cross the blood-brain barrier and can result in desired effects on brain tissue. These properties of this formulation help to reduce the toxins accumulated in the liver due to *Garavisha* and prevent the further manifestation of other diseases.

MATERIALS AND METHODS: The study is a literary review; the data sources will be collected from all Ayurveda compendia and contemporary textbooks, relevant journals and websites.

ABHAYADI GHRITA

Ingredients of *Abhayadi ghrita* are *Haritaki*, *Vasa*, *Patola* and *Bhunimba*. The preparation method is one *pala*(48g) each of *Vasapatra*, *Bhoonimba patra* and *Patola patra* are taken and cooked well with eight parts (24 pala-1152 ml) of water. This is reduced to 1/4 and filtered. To this decoction, an equal part of ghee and 1/2 part of *Hareetaki swarasa/kashaya* is added and cooked well till it is reduced to the quantity of *Ghee (ghritapaka)*. This *Abhayadi ghrita* subsides all kinds of poisons^[6].

Table 1: DRUG LITERARY REVIEW

DRUG	KARMA	DOSHAKARMA
<i>Hareetaki</i>	<i>Deepana</i> , <i>Pachana</i> , <i>Yakrututhejaka</i> , <i>Anulomana</i> (carminative), <i>mruduvirechana</i> (laxative), <i>Sonithasthapana</i> (normalize blood), <i>Jwaraghna</i> (antipyretic), <i>Rasayana</i> .	<i>Tridosahara</i> ^[7] (pacifies vata, pitha and kapha)
<i>Vasa</i>	<i>Kamalahara</i> , <i>Rakthasodhaka</i> (blood purifier), <i>Jwaraghna</i>	<i>Kaphapithahara</i> ^[8] (pacifies kapha and pitha)

Bhunimba	Deepana, Yakrututhejaka, Rakthasaraka(clears obstruction of blood), Rechaka(purgative), Rakthasodhaka, Jwaraghna	Kaphapithahara ^[9]
Patola	Deepana, Pachana, Pithasaraka(increase flow of pitha), Anulomana, Rakthasodhaka, Vishaghna	Tridoshasamaka ^[10]

Table 2: CHEMICAL CONSTITUENTS AND ACTION

DRUG	CHEMICAL CONSTITUENTS	PHARMACOLOGICAL ACTION
Hareetaki	Chebulinic acid, Gallic acid, Chebulagic acid, Tannins, Phenolic acid	Hepatoprotective ^[11]
Vasa	Vasicine, Vasicinone, Vaicinol, Anthraquinone	Hepatoprotective ^[12]
Bhunimba	Andrographolid, Kalameghin	Hepatoprotective ^[13]
Patola	Meso-inositol, cucurbitacin	Hepatoprotective ^[14]

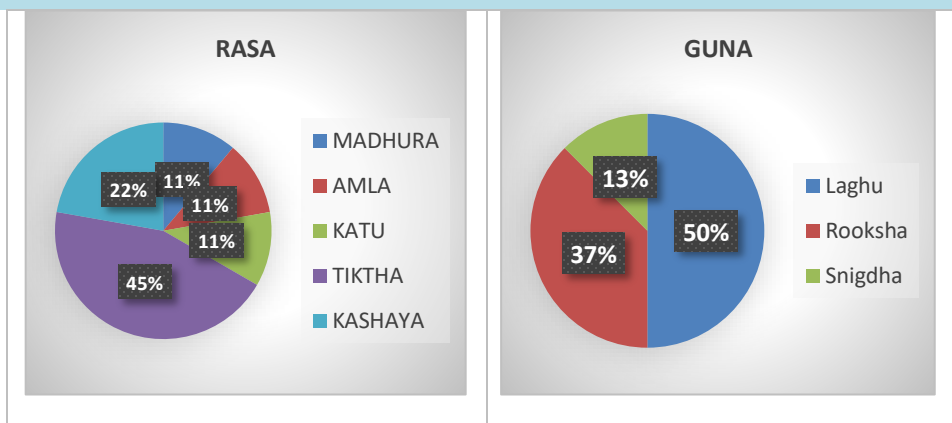
Table 3: DRUG PROFILE OF ABHAYADI GHRITA.

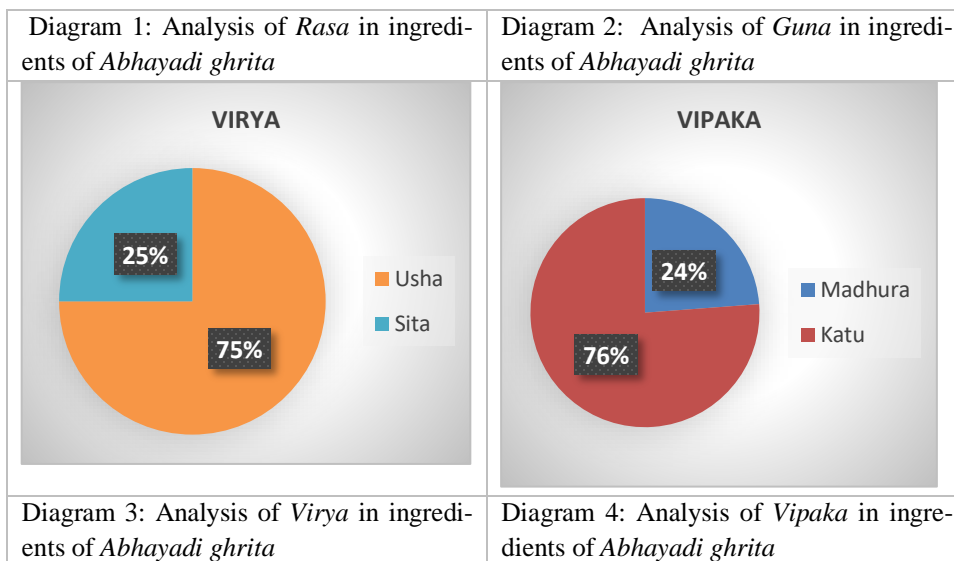
Sl.NO	Drugs	Botanical Name	Family	Part used
1	Hareetaki	Terminalia chebula	Combretaceae	Fruit
2	Vasa	Adhatoda vasica	Acanthaceae	Leaf
3	Bhuminba	Andrographis paniculata	Acanthaceae	Leaf
4	Patola	Trichosanthes dioica	Cucurbitaceae	Leaf

Table 4: RASA PANCHAKA OF DRUGS OF ABHAYADI GHRITA

Drugs	Rasa(taste)	Guna(Property)	Virya(potency)	Vipaka(bio transformed rasa)
Hareetaki	Kashayapradhana Pancharasa(5 tastes predominant of astringent)	Laghu(lightness), Rooksha(dryness)	Usha(hotness)	Madhura ^[15]
Vasa	Tiktha(bitter) kashaya	Laghu Rooksha	Sita(coldness)	Katu ^[8]
Bhunimba	Tiktha	Laghu,Rooksha	Ushna	Katu ^[17]
Patola	Tiktha	Laghu,Snigdha(unctuousness)	Ushna	Katu ^[18]

DISCUSSION





Yakrit (liver) is the *sthana* of *Pitha dosha*, *Raktha dhatu*, and *Agni*; treatment of liver disease in *Ayurveda* mainly concentrates on *Pithakaphasama* (pacifies kapha and pitha) and *Ag-nivardhana*^[19] (kindles digestive fire).

On analysis of *rasa* of *Abhayadi ghrita* (Fig.1) 45% of drugs are *Tiktha rasa*, 22% *Kashaya rasa*, 11% *Madhura*, *Amla* and *Katu rasa* each. *Tiktha rasa* and *Katurasa* possess *Vishahara karma*, according to *Acharya Charaka*. And they are *Agni vardhaka Kapha Pitha samaka*.

Acknowledging *Gunas* (Fig. 2), 50% of drugs possess *Laghu guna*, 37% *Rooksha guna* and 13% *Snigdha guna*. *Laghu guna* helps in increasing *Jadaragni* as they are easily digestible.

Considering *Virya* (Fig. 3), 75% of the drugs possess *ushna virya*. *Ushna virya* helps in enhancing the *Jadaragni and Dhatwagni*.

Scrutinising the *Vipaka* (Fig. 4) aspects, the majority of drugs possess *Katu vipaka*, which enhances the *Agni*.

CONCLUSION

Hepatotoxicity poses an alarming problem due to its potential to cause significant liver damage and adverse health outcomes, highlighting the urgent need for comprehensive preventive measures and effective therapeutic interventions. *Garavisha* is an artificial type of poison formed by the combination of nonpoi-

sonous substances. *Abhayadi ghrita*, mentioned in *Basavarajiyam*, can subside all types of *visha*. Through a comprehensive examination of its ingredients and *Rasapanchaka*, this review sheds light on the multifaced mechanisms through which *Abhayadi ghrita* exerts its hepatoprotective effects. From these points, *Abhayadi ghrita* is a promising formulation to offer health maintenance and support with special reference to liver damage.

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