

AYURVEDIC AND CONTEMPORARY ASPECT OF VISHAGHNA ACTION OF  
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**ABSTRACT**

Description of *vishaghnamahakashaya* is found in the *shadvirechanshatashreeya* chapter of *sutra- sthana* of *Charaksamhita*, which is most common literature of Ayurveda. *Mahakashaya* is a group of ten functional drugs. Pharmacological properties of each drug of *vishaghnamahakashaya* are of broad spectrum in the field of Ayurvedic and contemporary science. Each drug of *vishaghnamahakashaya* is chief ingredient of many classical preparation and *agad* preparation (Anti-poisonous ayurvedic preparation) which has large area of therapeutic uses. The term *vishaghna* and detoxification are functionally same. *Vishaghna mahakashaya dravya* works both at macro and micro level, at micro level they not only denatures toxics but also neutralises them from cellular level and helps in excretion from the body. Drugs of this group are not only potent to combat *garvisha*, *dushivisha*, snake-scorpion sting bites but also effective for *vishas* (poisons) from plant kingdom.

**KEYWORDS:** *vishaghnamahakashaya*, Therapeutic Properties, Detoxification.**INTRODUCTION**

*Danshtra chikitsa*, *Agad tantra* and *Vishagarvairodhik prashaman* are synonym of each other. *Danshtra chikitsa* is the sixth branch of Ayurveda which mainly deals with *agada* i.e. the medicine with anti-poisonous effects.<sup>[1]</sup> *Visha* means the *dravya* which causes *vishaad* (sorrow or depression) is known as *visha*.<sup>[2]</sup> *Laghu*, *ruksha*, *aashu*, *vishad*, *vyavayi*, *tikshna*, *vikaashi*, *sookshma*, *ushna*, *anirdeshyarasa* are the ten properties of poisonous drugs.<sup>[3]</sup> Drugs which act against toxic effect of substances are called as *vishghna*.<sup>[4]</sup> Acharya Charak has described *vishaghna mahakashaya* which includes ten *vishghna drugs*.<sup>[5]</sup> It includes *haridra* (*Curcuma longa*), *manjishtha* (*Rubia cordifolia*), *Suvaha* (*Pluchea lanceolata*), *sukshama ela* (*Elettaria cardamomum*), *paalindi* (*Operculina turpethum*), *chandan* (*Santalum album*), *kataka* (*Strychnos potatorum*), *shirisha* (*Albizia lebbek*), *sinduvara* (*Vitex negundo*), *shleshmataka* (*Cordia dichotoma*).

**AIMS AND OBJECTIVES**

1. To study *ayurvedic* and contemporary view of *Vishaghna Mahakashaya*.

2. To study pharmacological and detoxifying properties of *Vishaghna Mahakashaya*.
3. To compile matter of *Vishaghna Mahakashaya* for as prescribing formulation.

**MATERIAL AND METHODS**

1. All aspects of *Vishaghna Mahakashaya* are studied in detail.
2. Indication and therapeutic use drug of *Vishaghna Mahakashaya* were studied which is described especially in *ayurvedic* text.
3. Logically useful all *ayurvedic* and contemporary references regarding *Vishaghna Mahakashaya* are collected from *ayurvedic* fundamental books and various textbooks, research article and through internet.
4. After collection of these articles, we tried our best to correlate them for best explanation regarding their *vishaghna* action.

Table 01: Ayurvedic Properties Of Vishaghna Mahakashaya.<sup>[6]</sup>

S. N.	VISHAGHNA DRUGS	BOTANICAL NAME & FAMILY	PROPERTIES (RAS PANCHAK)	PARTS USED
1.	Haridra (Turmeric)	<i>Curcuma longa</i> (Zingiberaceae)	Rasa-Tikta, Katu; Guna-Ruksha; Virya-ushna; Vipaka- Katu Kaphavatahara	Rhizome
2.	Manjishtha (Indian Madder)	<i>Rubia cordifolia</i> (Rubiaceae)	Rasa-Madhur, Tikta, Katu; Guna-Guru; Virya-ushna; Vipaka- Katu Kaphaghna	Root
3.	Suvaha (Rasna)	<i>Pluchea lanceolata</i> (Compositae)	Rasa-Tikta; Guna-Guru; Virya-ushna; Vipaka- Katu Vatakapha shamaka	Root, leaf whole plant
4.	Ela (Lesser Cardamom)	<i>Elettaria Cardamomum</i> (Zingiberaceae)	Rasa-katu, Madhura; Guna-Laghu, Snigdha, Sugandhi, Sukshma; Virya-Shita; Vipaka- Madhur Kaphavataghna	Fruit and Seed
5.	Palindi (Turpeth)	<i>Operculina terpehthum</i> (Convolvulaceae)	Rasa-Katu, Tikta, Madhura, Kashaya; Guna-Guru, Ruksha, Teekshna; Virya-ushna; Vipaka- Katu Pitta Kapha Sanshodhana	Root
6.	Chandan (Sandal wood)	<i>Santalum album</i> (Santalaceae)	Rasa-Tikta, Madhura; Guna-Laghu, Ruksha; Virya-Sheeta; Vipaka- Katu Kaphapittashamaka	Wood
7.	Katak (Clearing nut)	<i>Strychnos potatorum</i> (Loganiaceae)	Rasa-Madhura, Kashaya, Tikta; Guna-Laghu; Virya-Shita; Vipaka- Madhur Vatakaphashamaka	Seeds
8.	Shirisha (Shirisha)	<i>Albizia lebbek</i> (Leguminosae)	Rasa-Madhura, Tikta, Kashaya; Guna-Laghu; Virya-ushna; Vipaka- Katu Tridoshaghna	Bark
9.	Sindhuvaar (Five-leaved chaste)	<i>Vitex negundo</i> (Verbenaceae)	Rasa-Tikta Tikta; Guna-Laghu, Ruksha; Virya-ushna; Vipaka- Katu Kaphvatshamaka	Leaves, roots, seeds and flowers
10.	Shleshmatak (Sebestan)	<i>Cordia dichotoma</i> (Boraginaceae)	Rasa-Madhura; Guna-Snigdha, Guru, Pichchila; Virya-ushna; Vipaka- Katu Vaatapittashamaka, Kaphavardhaka	Fruit

Table 02: Chemical Composition Of Each Drug Of Vishaghna Mahakashaya.<sup>[7]</sup>

S. N.	Vishaghna drugs	Chemical composition
1.	Haridra	Curcumin, turmeric oil, an essential oil a lactone
2.	Manjishtha	Alizarin, Pseudoparapurins, Rubiadin along with its glucosides, lucidine, Asperuloside, purpurin and manjisthin
3.	Suvaha	Protein, quercetine, iso-rhamnetin and pluchine.
4.	Ela	Cineol, terpineol, terpinene, limonene, subinone and terpineol in the form of formic and acetic acids.
5.	Palindi	Turpethin
6.	Chandan	Santalol, sesquiterpenehydrocarbons-alpha-, beta-, epibeta-santalene and alpha-and betacurcumene and beta-farnesene
7.	Katak	brucine in little quantity
8.	Shirisha	Saponins and Tannins

9.	Sindhuvaar	Organic acid, malic acid, traces of an alkaloid, essential oil
10.	Shleshmatak	Tannin

S. N.	Vishaghna Drugs	Ayurvedic classification of uses. <sup>[8]</sup>	P. V. Sharma	Contemporary USES (Medicinal USES) <sup>[9]</sup>
		<b>CHARAK</b>		
1.	Haridra	<i>Kusthaghana Lekhaniya Kanduaghana, Vishaghana, Shirovirechana</i>	kushthaghna	Anti-inflammatory, Anti-oxidant, Antidiabetic, Cardio-Hepatoprotective, Antihistaminic, blood purifier, phytonutrient, Immunomodulator. <sup>[10]</sup>
2.	Manjishtha	<i>Vishaghna Jvarahara Varnya</i>	<i>Raktaprasadana</i>	Antimicrobial, blood purifier, Anti-inflammatory, Anti-oxidant, Astringent. <sup>[11]</sup>
3.	Suvaha	<i>Vayasthapana</i>	<i>Vedanasthapana</i>	Anti-inflammatory, Anodyne, Antipsoriatic. <sup>[12]</sup>
4.	Ela	<i>Shwasahara Angamrdaprashamana Shirovirechan</i>	<i>Dahaprashamana</i>	Antimicrobial, Antiseptic, Carminative, Antispasmodic, neutralize the insect bite and mild poisons, Antitoxic. <sup>[13]</sup>
5.	Palindi	<i>Bhedaniya</i>	Sukha Virechana	Anti-inflammatory, Antihelminthic, Purgative, Carminative Antihistaminic, Antisnake bite and scorpion sting. <sup>[14]</sup>
6.	Chandan	<i>Dahaprashamana Trishnanigrahana Varnya Kandughna Vishaghna</i>	<i>Dahaprashamana</i>	Diuretic, Antiseptic, Cooling, Bacteriostatic, Antitoxic, Deodorant, Tonic. <sup>[15]</sup>
7.	Katak	<i>Vishaghna</i>	<i>Chakshusya</i>	Antidiabetic, Anti-oxidant, Antimicrobial, Anti-inflammatory, Antiarthritic. <sup>[16]</sup>
8.	Shirisha	<i>Vishaghna, Vednasthapana, Shirovirechana</i>	<i>Vishaghna</i>	Antiseptic, Antibacterial, Antiallergic, wound healer, Antisnake venom. <sup>[17]</sup>
9.	Sindhuvaar	<i>Vishaghna, Krimighna</i>	<i>Vedanasthapana</i>	Anti-inflammatory, Anti-oxidant, Astringent, Antidiarrhoeal, Insecticidal, Antiseptic. <sup>[18]</sup>
10.	Shleshmatak	<i>Vishagna</i>	<i>Snehopaga</i>	Diuretic, Antihelminthic, Antimicrobial, Anti-inflammatory, Demulscient. <sup>[19]</sup>

**Table 04: Some Agad Preparations And Therapeutic Uses Of Vishaghna Mahakashaya Drugs.**

S. N.	DRUGS	AGAD PREPARATIONS	INDICATION
1.	Haridra	Mahaagad	All Types of poisoning
		Sanjivani agad	All Types of poisoning. <sup>[20]</sup>
		Rajanyadi agad	Keet visha
		Kumkumadi agad	Shatapadi visha. <sup>[21]</sup>
		Shireeshadi agad	Insect bite. <sup>[22]</sup>
		Padamakadiagad	Keet visha
		Champakad agad	Spider bite. <sup>[23]</sup>
2.	Manjishtha	Mahaagada	Sarpadamsha
		Rushabha agad	Keet visha. <sup>[24]</sup>
		Kahara agad	All Types of poisoning
		Kalyanak ghrita	All Types of poisoning. <sup>[25]</sup>
		Champaka agad	Spider bite. <sup>[26]</sup>
3.	Ela	Ajeya Ghrita	All Types of poisoning
		Dushivishari agad	Dushi visha. <sup>[27]</sup>
		Tarkshya agad	Snake bite
		Rushabh agad	Insect bite. <sup>[28]</sup>
		Mahasugandhiagad	Scorpion and spider bite. <sup>[29]</sup>

4.	Palindi	Rushabh agad	Insect bite
5.	Chandan	Mahasugandhiagad	Scorpion and spider bite
		Kalyanak ghrita	All Types of poisoning
		Tarkshya agad	Snake bite
		Rushabh agad	Insect bite
		Ajeya ghrita	All Types of poisoning. <sup>[30]</sup>
6.	Shirisha	Vanshtwadi agad	Snake-Spider-rat- Insect bite
		Kshara agada	All Types of poisoning
		Himwan agad	Snake bite. <sup>[31]</sup>
7.	Sindhuvaar	Mahasugandhiagad	Scorpion and spider bite
		Tarkshya agad	Snake bite
8.	Shleshmatak	Kshara agada	All Types of poisoning

### ***Curcuma longa***

It is locally used in Rat bite.<sup>[32]</sup> In case of leech poisoning, turmeric powder is indicating orally mixed with sariva tuber (*Hemidesmes indica*) and cow's ghee. Local application of turmeric, ankola root (*alanguium salvifolium*) and nirgundi root (*vitex negundo*) are applied locally as a paste over dog bite site.<sup>[33]</sup> Comparison between Water washed sample and *Haridra-jal* washed sample shows 58.23% of change, means reduction of concentration of pesticide residues was more in *Haridra-jal* washed sample.<sup>[34]</sup>

### ***Rubiacordifolia***

*Rubia cordifolia* show potent antioxidant activity against lead nitrate and radiation induced toxicity.<sup>[35,36]</sup> According to Bhava Prakash, *rubia cordifolia* is able to bind itself with amavisha (free radicals) and garavisha toxins which cause inflammation, skin disease, and ulcers and others problems.<sup>[37]</sup> Alizarin Biomarker of *rubia cordifolia* is responsible for Antigenotoxic activities.<sup>[38]</sup> A balanced combination of *Soma* (cooling) and *Agni* (heat) found in *Rubia cordifolia*. *Agni* allows the herb to penetrate into the cellular level of tissue and *Soma* helps to soak up toxins and neutralize them.<sup>[39]</sup>

### ***Pluchea lanceolata***

It is useful in the treatment of spider bite.<sup>[40]</sup> *Pluchea lanceolata* having properties to protect against Benzo(a) pyrene induced renal toxicity and loss of DNA integrity.<sup>[41]</sup>

### ***Elettaria Cardamomum***

Cardamom, it is known as "Queen of Spices". The aqueous cardamom suspension can enhance detoxifying enzyme (GST activity) and decrease peroxidation of lipid.<sup>[42]</sup>

### ***Operculina terpehthum***

hydroalcoholic extract of *Operculina turpehthum*, is highly significant for management of hepatotoxicity and diminishes extension of liver injury.<sup>[43]</sup>

### ***Santalumalbum***

The DNA damaging activity of sandalwood oil in *Bacillus subtilis* was studied and was found to be non-genotoxic.<sup>[44]</sup> Similarly, sandalwood oil-induced inhibition of *B. subtilis* showed it to be non-genotoxic.<sup>[45]</sup>

### ***Strychnopotatorium***

*Strychnos potatorium* is also known as Clearing nut Tree. Seeds of *Strychnos potatorium* are used in *ayurvedic* medicine as well as water purifying agent.

### ***Albizzialebeck***

*Shirisha* is the best drug / drug of choice of poisoning (*ch.su. 25/40*). Ethanolic Extract of leaves of *Albizzia lebeck* show remarkable effect against paracetamol induced hepatotoxicity in rat (Devendra et al. 2008) and Ethanolic Extract of bark of *Albizzia lebeck* show significant result in carbon tetra chloride induced hepatotoxicity in rat (tushar et al.2010).

### ***Vitexnegundo***

Leaf extract of *Vitexnegundo* Linn. Shows significant result in Adriamycin induced toxicity in embryo. It reduces adverse effect of Adriamycin.<sup>[46]</sup>

## **DISCUSSION**

Most drug of *Vishaghna mahakashaya* having property of *vishaghna*. Eg *Haridra* (*Dhanwantari Nighantu*), *Manjishtha* (*Bhav prakash Nighantu*, *Dhanwantari Nighantu*, *Kaideva Nighantu*, *Raj Nighantu*), *Suvaha* (*Bhava praksh Nighantu*), *Chandan* (*Bhava praksh Nighantu*), *Katak* (*Dhanwantari Nighantu-Kaideva Nighantu*), *Shirisha* (*Charak Samhita-Bhava praksh Nighantu*, *Shirisha Kaideva Nighantu*), *Shleshmatak* (*Bhava praksh Nighantu*). *Vishaghna mahakashaya dravya* shows the antitoxic effect by neutralizing toxin, denaturizing toxin and helps to release toxin outside from the body at the cellular level.

## **CONCLUSION**

By this compiled critical review work, it is concluded that *vishaghnamahakashya* is easy available multiherbal potent preparation for prescribing drug as well as various research ways e.g. To treat of all types of poisoning, *Gara visha*, *Dushi visha*, Snake bite, Scorpion bite, rat bite, Sting, Chronic cumulative biochemical toxicity, drug toxicity (ADRS/ Side effect) and substance abuse toxicity. Now we are able to justify the claims of Ayurveda science in the field of toxicological studies on the contemporary scenario.

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