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### REVIEW ARTICLE

#### A DRUG REVIEW ON *HEMAGARBHA POTTALI RASA*

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#### ABSTRACT

**Introduction:** *Hemagarbha Pottali Rasa* is popular for its action in emergency conditions. *Hemagarbha Pottali Rasa* were used in different diseases i.e., one medicine can treat many diseases by changing the vehicle according to the diseases. *Hemagarbha Pottali Rasa* is a milestone in history of *Ayurvedic* formulation emergency & critical care. Thus, drug reviewing on *Hemagarbha Pottali Rasa* is the main objective of this article. **Material and Methods:** Ayurvedic texts, as well as the data bases Google scholar, PubMed, Medline, AYUSH Research Portal, and Digital Helpline for Ayurveda Research Articles (DHARA), Research Gate web-based search engines, journal, were used to search for relevant literature and information. **Results:** *Hemagarbha Pottali Rasa* containing *Parada*, *Gandhaka*, *Swarna Bhasma*, *Tamra Bhasma*, *Kumari Swarasa* processed with *Mridvagni* and having properties predominant of *Madhura*, *Tikta* and *Kashaya Rasa*; *Guru*, *Snigdha*, *Sara* and *Pichila* as *Guna*; *Ushna Virya*; *Madhura Vipaka*; *Tridosahara*; having *Karma* as *Deepana*, *Pachana*, *Balya*, *Rasayana*, etc., mainly used in *Kshaya*, *Sosha*, and *Atisara*. **Conclusion:** The classical formulation *Hemagarbha Pottali Rasa* is a very unique and finds its great utility in management of *Kshaya*, *Sosha*.

**Keywords:** Pottali appearance, Pottali kalpana, Pottali methods

## 1. INTRODUCTION

*Hemagarbha Pottali Rasa* is metalo-mineral compound formulation first introduced by *Yogaratanakar*<sup>1</sup>, mainly indicated for *Shwasa, Kasa, Kshaya, Vatavyadhi, Sannipataja Jwara & Sannipatajaavashtha, Rasayana*, is popular for its action in emergency conditions. The reference of “*Rasamritam*” suggest its action in *Sannipataja* condition, may be correlated with emergency conditions. *Hemagarbha Pottali Rasa* were used in different diseases i.e., one medicine can treat many diseases by changing the vehicle according to the diseases. *Hemagarbha Pottali Rasa* is a milestone in history of *Ayurvedic* formulation emergency & critical care<sup>3</sup>.

## 2. MATERIALS AND METHODS

### 2.1. Method of review

All the relevant Ayurvedic texts, as well as the data bases Google scholar, PubMed, Medline, AYUSH Research Portal, and Digital Helpline for Ayurveda Research Articles (DHARA), dissertation works from Ayurveda colleges, studies available on Research Gate web-based search engines, journal, were used to search for relevant literature and presented in systematic manner.

### 2.2. Procurement of Trial Drugs

All the trial drugs i.e. *Hemagarbha Pottali Rasa* was identified. The pharmacognostical, pharmaceutical and microbiological studies of all drugs were carried out in the Pharmacognosy Laboratory, Modern Pharmaceutical Chemistry Laboratory and Microbiology Laboratory for authenticity of raw drugs and shelf lives of finished products.

### 2.3. Preparation of Drugs

All the drugs were prepared as per the method of preparation as mentioned in *Rasamruta*.<sup>1</sup>

### 2.4. Materials for *Hemagarbha Pottali Rasa*

Description of Ingredients of *Hemagarbha Pottali Rasa*, English / Latin name, and its quantities are as given in Table 1:

**Table 1:** Composition of *Hemagarbha Pottali Rasa*

Sr. No	Ingredients	Latin name/ English name	Part
1.	<i>Shuddha Parada</i>	Processed Mercury	4
2.	<i>Shuddha Gandhaka</i>	Processed Sulphur	2
3.	<i>Swarna Bhasma</i>	Incinerated Gold	1
4.	<i>Tamra Bhasma</i>	Incinerated copper	3
5.	<i>Ghritkumari Swarasa</i>	<i>Aloe barbadensis</i> Mill. (Aloevera)	Q.S.

## 3. RESULT

The pharmacological properties of the formulation can be explained on the basis of the individual drug properties as mentioned below:

## 1. Pharmacological and therapeutic properties of *Parada*:<sup>2</sup>

<b>Rasapanchaka</b>	<ul style="list-style-type: none"> <li>● <b>Rasa:</b> <i>Shadarasa</i></li> <li>● <b>Guna:</b> <i>Snigdha, Sara and Guru</i></li> <li>● <b>Virya:</b> <i>Ushna</i></li> <li>● <b>Vipaka:</b> <i>Madhura</i></li> </ul>
<b>Karma</b>	● <i>Yogavahi, Rasayana, Vrishya, Balya, Vayastambhana, Pustikarak, Deepana, Agnivardhaka, Deha and Loha Siddhikara, Ropana, Krimighna</i>
<b>Indication</b>	● <i>Tridoshagna Vyadhi, Vata roga, Vali, Palithya, Jara roga, Sarva Akshi roga, Krimi, Kusta, Sarva roga.</i>
<b>Therapeutic Uses<sup>3</sup>:</b>	● Used as antiseptics, preservatives, parasiticides, fungicides, diuretics inorganic salts. Externally as antiseptics, mercury salts are used. Its solution is used for disinfecting surgical and obstetric practice. Blue ointment and calomel ointment are used to reduce itching in prurigo, pruritis, psoriasis, lichen pityriasis of scalp and eczema. As a stimulant and promoter of absorption liniment and various ointments such as oleate, red precipitate, scollts and red iodide are used for promoting the absorption of inflammatory products as in chronic joint disease and periostitis. Mercury is used in certain eye diseases like conjunctivitis, blepharitis and keratitis.

## 2. Pharmaco-therapeutic properties of *Gandhaka*<sup>4</sup>

<b>Rasapanchaka</b>	<ul style="list-style-type: none"> <li>● <b>Rasa:</b> <i>Katu, Tikta, Kashaya.</i></li> <li>● <b>Guna:</b> <i>Sara.</i></li> <li>● <b>Virya:</b> <i>Ushna.</i></li> <li>● <b>Vipaka:</b> <i>Madhura<sup>5</sup></i></li> </ul>
<b>Karma</b>	● <i>Tridoshahara, Deepana, Pachana, Shoshana, Vishaghna, Bala-veerya vardhaka, Krimihara, Rasayana, Sootendra veerya prada.</i>
<b>Indication</b>	● <i>Kandu, Kushta, Twakdosha, Aamadasha, Krimidosha, Pleeharoga, Kshaya, Jwara, Netraroga etc.</i>
<b>Pharmaceutical use<sup>6</sup></b>	● Sulphur is used in pharmaceutical skin preparations for the treatment of acne other conditions. It acts as a keratolytic and agent and kills bacteria, fungi, scabies mites and other parasites. Precipitated sulphur and colloidal sulphur are used, in form of lotions, creams, powders, soaps, and bath additives, for the treatment of acne

	vulgaris, acne rosacea, and seborrhoeic dermatitis.
<b>Internal effects<sup>7</sup>:</b>	<ul style="list-style-type: none"> <li>● Sulphur being insoluble in oral liquid shows no change in the stomach. In alkaline medium it is converted into alkaline sulphide and suppurate hydrogen, which irritates the intestine and thus causes purgation. Hydrogen sulphide is excreted in faeces and some may also be absorbed again to be excreted in breath. . During its excretion in the breath, it may exercise an antiseptic and stimulant action in chronic bronchitis and asthma.</li> </ul>

### 3. Pharmaco-Therapeutic Properties of *Tamra*:

<b>Rasapanchaka</b>	<ul style="list-style-type: none"> <li>● <b>Rasa:</b> Kashaya, Tikta, Madhura, Amla</li> <li>● <b>Guna:</b> Sara, Laghu.</li> <li>● <b>Virya:</b> Ushna</li> <li>● <b>Vipaka:</b> Madhura</li> </ul>
<b>Karma-</b>	<ul style="list-style-type: none"> <li>● Tridoshahara, Ayushyam, Alpa Brimhanam, Urdhavadha parishodhana, Kshutkarakam, Netryam, Rasayana, Ruchya, Ropanam, Lekhanam, Saram, Sarakam, Deepana</li> </ul>
<b>Indication</b>	<ul style="list-style-type: none"> <li>● Aadhmana, Aruchi, Ayuraghnam, Balapahatva, Bhrama, Bhranti, Chittasantap, Chittatapa, Daha, Dhatushosha, Gatratapa, Kantighnatva, Kledanam, Krimi, Kushtham, Madah, Moha, Murchcha, Shoola, Shosha, Sweda, Udara, Utkleda, Utklesha, Vami, Vireka, Viryapahatva</li> </ul>

### 4. Pharmaco-Therapeutic Properties of *Swarna*:<sup>8</sup>

<b>Rasapanchaka</b>	<ul style="list-style-type: none"> <li>● <b>Rasa:</b> Madhura and Kashaya</li> <li>● <b>Guna:</b> Sheeta, Guru, Snigdha and Picchila.</li> <li>● <b>Virya:</b> Sheeta</li> <li>● <b>Vipaka:</b> Madhura</li> </ul>
<b>Karma</b> <sup>9,10,11</sup>	<ul style="list-style-type: none"> <li>● Hrdya, Bruhmaniya, Rasayana, Chakshushya, Vishahara, Ayu, Lakshkmi, Pavitra, Kanti, Buddhi and Smruti Vardhaka, Sukha janaka, Mehanashaka, Garavishahara.</li> </ul>
<b>Indication</b> <sup>12</sup>	<ul style="list-style-type: none"> <li>● Tridoshahara. Vyadhiprabhava<sup>13</sup> - Granti, Visarpa, Vishagarodbhava roga.</li> </ul>

## 5. Pharmaco-Therapeutic Properties of *Kumari*

<b>Latin Name</b>	<i>Aloevera Tourn.ex.Linn.</i>
<b>Family</b>	Liliaceae
<b>Synonyms</b>	<i>Sthooldala, Ghritkumari, Vipulsrava</i>
<b>Vernacular Name</b>	<ul style="list-style-type: none"> <li>● <b>English Name:</b> Indian aloe</li> <li>● <b>Hindi Name:</b> Gheekuvar</li> </ul>
<b>Part Used</b>	Leaves, Pulp
<b>Rasapanchaka<sup>14</sup></b>	<ul style="list-style-type: none"> <li>● <b>Rasa:</b> Tikta, Madhura</li> <li>● <b>Guna:</b> Snigdha, Picchila</li> <li>● <b>Virya:</b> Sheeta</li> <li>● <b>Vipaka:</b> Madhura</li> <li>● <b>Doshakarma:</b> Kaphapittashamaka</li> </ul>
<b>Karma<sup>15</sup></b>	<ul style="list-style-type: none"> <li>● <i>Bhedana, Rasayana, Netrya, Brahmana, Balya, Vrasya, Vishahara, Jwarahara, Kusthaghna</i></li> </ul>
<b>Therapeutic uses<sup>16</sup></b>	<ul style="list-style-type: none"> <li>● <i>Yakrutvikara, Gulma, Pleeharoga, Granthi, Agnidagdha, Visphota, Pittavikara, Raktavikara, Twakvikara, Jwara, Netraroga, Visha</i></li> </ul>
<b>Chemical constituents</b>	<ul style="list-style-type: none"> <li>● Aloin (crystalline glycoside), Anthraquinone (Aloe emodin or trihydroxy methyl), Resin, Volatile oil, Gallic acid<sup>i</sup>.</li> </ul>
<b>Pharmacological actions</b>	<ul style="list-style-type: none"> <li>● <i>Laghu, Rusksha, Ushna, Teekshna, Bhedana, Artavajanana, Krimighna, Deepana, Pachana, Balya.</i></li> </ul>

**Table 2: Average of Pharmacodynamics of *Hemagarbha Pottali Rasa***

Properties	Observations in <i>Hemagarbha Pottali Rasa</i>	
	Total No. of Drugs	Percentage%
<b><i>Rasa</i></b>		
<i>Madhura</i>	4	80
<i>Amla</i>	2	40
<i>Katu</i>	2	40
<i>Lavana</i>	1	20
<i>Tikta</i>	4	80
<i>Kashaya</i>	4	80
<b><i>Guna</i></b>		
<i>Guru</i>	2	40
<i>Laghu</i>	1	20

<i>Snigdha</i>	3	60
<i>Sheeta</i>	1	20
<i>Sara</i>	3	60
<i>Picchila</i>	2	40
<b><i>Vipaka</i></b>		
<i>Madhura</i>	5	100
<b><i>Virya</i></b>		
<i>Ushna</i>	3	60
<i>Sheeta</i>	2	40
<b><i>Doshaghnata</i></b>		
<i>Vata</i>	4	80
<i>Pitta</i>	5	100
<i>Kapha</i>	5	100
<b><i>Karma</i></b>		
<i>Rasayana</i>	2	40
<i>Balya</i>	2	40
<i>Deepana</i>	4	80
<i>Krimighna</i>	2	40
<i>Pachana</i>	3	60
<i>Lekhana</i>	1	20
<i>Ropana</i>	1	20

#### 4. DISCUSSION

*Hemagarbha Pottali Rasa* is a metal-based medicine that are mentioned in several *Rasasastra* literature and has the properties to cure various illnesses. *Hemagarbha Pottali Rasa* containing *Parada*, *Gandhaka*, *Swarna Bhasma*, *Tamra Bhasma*, *Kumari Swarasa* processed with *Mridvagni* and having properties predominant of *Madhura*, *Tikta* and *Kashaya Rasa*; *Guru*, *Snigdha*, *Sara* and *Pichila* as *Guna*; *Ushna Virya*; *Madhura Vipaka*; *Tridosahara*; having *Karma* as *Deepana*, *Pachana*, *Balya*, *Rasayana*, etc., mainly used in *Kshaya*, *Sosha*, and *Atisara* and also known as *Balya*, *Rasayana*, *Vayastambhana*, *Pustikarak*, *Yogavahi*, *Vrishya*, and *Sarv Vyadhi Nashak*. *Acharya Yadavji Trikamji* in *Rasamritham*<sup>18</sup> can be used in *Kasa*, *Shwasa*, *Kshaya*, *Vatakapha*, *Grahani*, *Sarvaroga*. In *Kushtha Roga* and *Kasa*, *Shwasa*, *Gandhaka* are used. *Swarna Bhasma* is effective in *Visama Jwara* and used as *Vrushya*, *Medhya*, and *Rasayana*. *Tamra Bhasma* has qualities of *Lekhana* and *Pittasaraka*, and is effective in *Kapha*- and *Pitta* dominance-related disorder<sup>19</sup>.

## 5. CONCLUSION:

*Hemagarbha Pottali Rasa* mainly having properties like *Madhura, Tikta and Kashaya Rasa; Guru, Snigdha, Sara and Pichila as Guna; Ushna Virya; Madhura Vipaka; Tridosahara*; having *Karma as Deepana, Pachana, Balya, Rasayana*, etc., mainly used in *Kshaya, Sosha*, and *Atisara*.

## COMPETING INTEREST

No competing interest exist.

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