

AN AYURVEDIC REVIEW ON THERAPEUTIC POTENTIALS OF MANAHSHILA (REALGAR):
A LITERATURE REVIEW

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ABSTRACT

Manahshila (Realgar) is used only in purified and detoxified condition for the therapeutic purposes as internal as well as external medicine. *Manahshila* has significant therapeutic values which have been mentioned in *Brihatrayi* and *Bhaishajya Ratnavali*. The most of the formulation of *Manahshila* is used for external application, whereas fine powders of these processed minerals are used for both in external and internal applications. Certain *Dhuma Yoga* also contain *Manahshila* are advised in respiratory tract diseases. *Shuddha Manahshila* has been described in various *Rasa Yoga* preparations such as *Shvasakuthara Rasa*, *Rajamriganka Rasa*, *Trailokyachintamani Rasa*, *Shilasindura*, and *Samirapannaga Rasa*. Moreover, there are references for the use of *Manahshila* in *Kustha*, *Swasa*, *Kasa Roga*, but this arsenical drug has not been used so far independently as a single drug.

Keywords: *Manahshila*, *Brihatrayi*, *Bhaishajya Ratnavali*, *Dhuma Yoga*, *Swasa*, *Kasa*.

INTRODUCTION

Ayurveda is the most ancient traditional system of medicine about 5000 years BC, practiced in India and neighboring country in Southeast Asia. It contains utilization of Ayurvedic drugs initiated from natural resources as well as metals and minerals to prevent or cure dissimilar diseases [1]. *Manahshila* is a mineral drug of *Uparasa* group which occurs as bright red incrustations and coatings on other substances. Color is Aurelian red to orange yellow; transparent to translucent or opaque. It contains 71.1% arsenic and 29.9% sulfur. It catches fire when heated on charcoal and burns with a light blue flame giving out dense clouds of arsenic fumes and odor of SO₂. Its bright red color and its reaction for sulfur distinguish it from other minerals and its softness, low specific gravity and the arsenic fumes distinguish it from cinnabar. On exposure to air and light *Manahshila* (Realgar) gets oxidized yielding orpiment (As₂S₃) and arsenolite (As₂O₃). *Manahshila* is one of the arsenic compounds, which has been advised in therapeutics in ancient texts of Ayurveda [2]. The present review paper is an uncomplicated compilation focusing on the uses of *Manahshila* mentioned in *Bhaishajya Ratnavali*, *Brihatrayi* (*Charaka Samhita*, *Sushruta Samhita* and *Ashtanga Hridaya*). This review is expected to give an insight to presume the regularity of usage of minerals during the period of *Bhaishajya Ratnavali* and *Brihatrayi*.

HISTORY

In *Rasa-Shastra* *Manahshila* has been illustrated under *Uprasa Varga*. *Charaka* [3], *Sushruta* [4], and *Vagabatta* [5] have been explained *Manahshila* under *Parthiva Dravya Varga*, whereas *Sharangadhara* [6] placed it under *Upadhatu* as well as *Uparasa Varga*. *Manahshila* has been well-known to mankind and its therapeutic and psychological uses were distinguished since Vedic period. It has been described in *Rigveda* [7], as *Rakshoghna* (disinfectant/biocidal) drug in mental and physical diseases, and also it was used for purification of environment.

In *Yajurveda* and *Atharvaveda* [8], usage of *Manahshila* has been mentioned in *Agni Vayu Havana Chikitsa*, *Bhutanmada Chikitsa* (healing of idiopathic psychotic syndrome), and *Karmaja Vyadhi Nirodha* (diseases that originate due to bad deeds of the past lives). In *Buddha Sahitya* and *Vinaya Pitaka*, *Manahshila* has been mentioned as *Anjana* (ophthalmic medication) and *Dhuma Varti*

(medicated smoke), in *Agni Purana* as *Kusthaghna Lepa* (anti dermal/anti-leprotic ointment for local application); and in *Kautilya Arthashastra*, it has been mentioned as *Agni Churna* for fireworks. Externo-internal practices of *Manahshila* were mentioned in *Samhitas* (*Charaka*, *Sushruta*, *Yagbhau*, *Harita*, *Bhela*, and *Kashyapa*) [9] for the treatment of various diseases such as *Swasa* (dyspnea), *Kasa* (cough/bronchitis), *Chardi* (emesis), *Hikka* (hiccough), *Kustha* (leprosy and other dermatoses), etc. In *Rasa Shastra* treatise, *Manahshila* was used in the preparations of *Taila* (medicated oil), *Dhuma Varti* (medicated smoke), *Ghrta* (medicated clarified butter/fat based formulations), *Anjana* (ophthalmic medication), *Lepa* (paste for local application/ointment), and *Churna Nasya* (powdered nasal insufflation) and in different *Rasa Karma* (processing of organomineral/mineral preparation), *Rasa Yoga* (organo-mineral/mineral preparation), and *Dhatu Ranjana* (coloring agent for metals) [10-13].

SHODHANA (DETOXIFICATION)

Shodhana of *Ashuddha Manahshila* is generally carried out by trituration with *Agastya* (*Sesbania grandiflora* Poir.), *Ardraka* (*Zingiber officinale* Rosc.), *Bijaura Nimbu* (*Citrus medica* Linn.), *Jayanti* (*Sesbania sesban* Merr.), and *Bhringaraja* (*Eclipta alba* Hassk.) juice.

Moreover, detoxification was done by boiling it in same plant juice sequentially, each for 12 hrs in *Dolayantra* and then washed with *Kanji* [14].

About [13]

Class	<i>Uparasa</i>
Chemical	Arsenic disulfide
Chemical formula	As ₂ S ₂
Sanskrit	<i>Manahshila</i>
Hindi	<i>Mainsila</i>
English	Realgar
Hardness	1.5-2.0
Specific gravity	3.5
Synonyms	<i>Manahshila</i> , <i>Rogashila</i> , <i>Shila</i> , <i>Naipalika</i> , <i>Manogupta</i> , <i>Manohva</i> , <i>Manogya</i> , <i>Nagjihvika</i> , <i>Kunati</i> , <i>Kulati</i> , <i>Gola</i> , <i>Nagmata</i> , <i>Kalyanika</i> , <i>Rasanetrika</i>

Vernacular name [13]

Hindi, Gujarati, Marathi, Kannada	Mansil
Bengali	Manganch
Telugu	Manushila
Tamil	Kudire-Palpashanam
Malayalam	Warangan
English	Realgar, Red orpiment

Ayurvedic properties [13]

Guna (quality)	Snigdha, Guru, Sara
Rasa (taste)	Madhura, Tikta
Virya (energy)	Ushna
Vipaka (post-digestive effect)	Madhura

Therapeutic utilization of Manahshila in Charaka [3]

References	Formulation	Therapeutic uses
Utilization in therapeutics:		
Internal administration		
Sutra 5/26	Dhooma Yoga	Shiro Virechana
Chikitsa 17/77	Dhooma Yoga	Hikka, Swasa
Chikitsa 17/145	Manahshiladi Ghrita	Hikka, Swasa
Chikitsa 18/52	Leha Yoga	Kasa, Hikka, Swasa
Chikitsa 18/69	Dhooma Yoga	Vataja Kasa
Chikitsa 18/71	Dhooma Yoga	Vataja Kasa
Chikitsa 18/73	Dhooma Yoga	Vataja Kasa
Chikitsa 18/74	Dhooma Yoga	Vataja Kasa
Chikitsa 18/75	Dhooma Yoga	Vataja Kasa
Chikitsa 18/130	Dhooma Yoga	Vataja Kasa
Chikitsa 18/146	Dhooma Yoga	Ksataja Kasa
Chikitsa 18/147	Dhooma Yoga	Ksataja Kasa
Chikitsa 18/169	Haritaki Leha	Swasa, Kasa
Chikitsa 20/39	Leha Yoga	Chardi
Chikitsa 23/55	Mrita Sanjivani Agada	Visha
Chikitsa 23/78	Maha Gandha Hasti	Visha
Chikitsa 26/152	Pradhama Nasya Yoga	Pinasa
Utilization in therapeutics:		
External application		
Sutra 3/5	Pradeha Yoga	Kushtha
Sutra 3/10	Avacurna Yoga	Kushtha
Sutra 3/12	Pradeha Yoga	Kushtha
Sutra 3/12	Pradeha Yoga	Kushtha
Sutra 3/15	Lepa Yoga	Kushtha
Chikitsa 3/306	Anjana Yoga	Vishama Jwara
Chikitsa 7/117	Lepa Yoga	Sidhma
Chikitsa 7/167	Shamana Lepa	Switra
Chikitsa 7/170	Lepa Yoga	Kilasa
Chikitsa 23/78	Agadahara Lepa Yoga	Visha, Timira
Chikitsa 23/190	Lepa Yoga	Sarva Shotha, Visha
Chikitsa 23/192	Lepa Yoga	Sarva Visha
Chikitsa 23/213	Pancha Shirisha Agada	Vishahara
Chikitsa 25/114	Lepa Yoga	Twak Janana
Chikitsa 26/196	Peetaka Churna	Mukha Roga
Chikitsa 26/235	Varti Yoga	Netra Roga
Chikitsa 26/250	Anjana Yoga	Netra Roga
Chikitsa 26/252	Sukhavati Varti	Netra Roga
Other references		
Sutra 1/70	Classified under Parthiva Dravya	

Therapeutic utilization of Manahshila in Sushruta Samhita [4]

References	Formulation	Therapeutic uses
Utilization in therapeutics:		
Internal administration		
Chikitsa 40/4	Dhooma varti	Kasa
Uttara 51/50	Dhooma varti	Hikka, Shwasa
Utilization in therapeutics:		
External application		
Chikitsa 2/69	Ropana Taila	Vrana Chikitsa
Chikitsa 20/24	Lepa	Indralupta
Chikitsa 20/54	Ropana Taila	Valmika
Uttara 11/16	Anjana	Kandu
Uttara 12/16	Anjana	Sirotpata
Uttara 12/29	Anjana	Shukra nashaka
Uttara 13/7	Application	Lekhyaroga
Uttara 14/4	Application	Bhedhyaroga (Bisgranthi) Bhedhyaroga (Anjananamika)
Uttara 14/7	Application	Drushtigata roga
Uttara 17/7	Anjana	Ratryandha
Uttara 17/18	Varti	Pittaja Timira
Uttara 17/39	Rasakriya	Kaphaja Timira
Uttara 17/43	Rasakriya	Netraroga
Uttara 18/98	Anjana	Timira
Uttara 18/100	Anjana	Nayana Abhigata
Uttara 19/14	Anjana	Karna Roga
Uttara 21/48	Taila	Shiroroga
Uttara 26/34	Nasya	Mukhamandika
Uttara 35/7	Bali in Goshala	Jwara Pratishedha
Uttara 39/263	Nasya	Hikka
Uttara 50/18	Swedana	
Other references		
Sutra 1/32	Parthiva Drug	Classification

Therapeutic utilization of Manahshila in Ashtanga Hridaya [5]

References	Formulation	Therapeutic uses
Utilization in therapeutics:		
Internal application		
Chikitsa 3/168	Haritaki Avaleha	Swasa, Kasa
Chikitsa 6/20	Licking with honey	Chardi, Trishna, Hridroga
Utilization in therapeutics:		
External application		
Chikitsa 1/162	Anjana	Vishamajwara
Chikitsa 13/38	Tailanirmanana	Medoja Vriddhi
Chikitsa 19/73	Lepa	Sidhma and Switra
Uttara 9/23	Pratisarana	Kaphotklishtharoga
Uttara 11/24	Anjana	Timira, Arma
Uttara 13/25	Anjana	Timira
Uttara 13/29	Bhaskaranjana	Timira
Uttara 13/70	Vimala Varti	Timira
Uttara 16/5	Lepa	Kaphaja Abhishyanda
Uttara 16/5	Pottali	Netraroga
Uttara 16/52	Anjana	Kandu
Uttara 24/28	Lepa	Indralupta
Uttara 36/82	Vajragada	Snake poison
Uttara 37/44	Antidote	Scorpion poison

Ethnomedicinal use of Manahshila in Charaka Samhita [15]

1. Manahshila (Realgar), Saindhava lavana (rock salt), Pippali (*Piper longum*) triturated with sesame oil and make a paste this paste is given by Nasya (snuffing) for the treatment of cough (Charaka Chikitsa 3/306).
2. Manahshila, Kasisa (green vitriol), Kushtha (*Saussurea lappa*), Tamalpatra (*Cinnamomum tamala*), and Maricha (*Piper nigrum*), these are mixed with sesame oil and applied as a paste for 1-month to curing of leucoderma (Charaka Chikitsa 7/117).

3. *Manahshila*, *Vidanga* (*Embelia ribes*), *Kasisa*, *Rocana* (*Bambusa arundinaceae*), and *Kanakpushpi* (*Argemone mexicana*) along with rock salt are applied as a paste for alleviation of leucoderma (Charaka Chikitsa 7/167).
4. *Manahshila*, Orpiment, *Haridra* (*Curcuma longa*), *Patra*, *Eranda* (*Ricinus communis*), *Laksha*, *Devdaru* (*Cedrus deodara*), and *Mamsi* (*Nardostachys jatamansi*) should be powdered together and made in to sticks such stick smeared with ghee should be smoked for the curing of hiccup and dyspnea (Charaka Chikitsa 17/77).
5. *Ghee* should be cooked with *Manahshila*, *Sarjarasa* (*Shorea robusta*), *Laksha* (*Rosa centifolia*), *Haridra*, *Padmaka* (*Prunus cerasoides*), *Manjistha* (*Rubia cordifolia*), and *Ela* (*Elettaria cardamomum*) for the treatment of hiccup and dyspnea (Charaka Chikitsa 17/145).
6. The intake as linctus of *vidanga* (*E. ribes*), rock salt, *Kustha*, *Trikatu churna* (*P. longum*, *P. nigrum*, *Z. officinale* in equal ratio), *Hingu* (*Ferula assa-foetida*), and *Manahshila* mixed with honey and ghee subdues cough, hiccup and dyspnea (Charaka Chikitsa 18/52).
7. *Manahshila*, *Ela*, *Maricha* (*P. nigrum*), *Yavakshara* (ash of *Hordeum vulgare*), *Anjana*, *Kutannata* (*Oroxylum indicum*), *Vamslocana* (*B. arundinacea*), *Saivala* (*Blyxa saivala*), linseed cloth piece, and *rohisa* (*Cymbopogon martinii*) are used as smoking to cure cough, hiccup and dyspnea (Charaka Chikitsa 18/73).
8. *Realgar* and Orpiment mixed with *pippali* and *sunthi* (*Z. officinale*) are used for smoking to cure cough, hiccup and dyspnea (Charaka Chikitsa 18/74).
9. *Prapaundrika* (*Nymphaea lotus*), *Madhuka* (*Madhuca longifolia*), *Sarngesta* (*Abrus precatorius*), *Realgar*, *Maricha*, *Pippali*, *Draksa* (*Vitis vinifera*), *Ela*, flower stalk of *Surasa* (*Ocimum sanctum*). All power together is made into smoking sticks rolled with the pieces of linseed cloth. This smeared with ghee should be smoked followed by intake of milk or water added with jaggery (Charaka Chikitsa 18/71).
10. *Bark of Ingudi* (*Balanites aegyptiaca*), two types of *Brihati* (*Solanum indicum*), *Talmuli* (*Curculigo orchoides*), *Realgar*, *Karpasa* (*Gossypium herbaceum*) seeds and *Ashwagandha* (*Withania somnifera*), the smoking of these alleviates cough (Charaka Chikitsa 18/75).
11. The *Kostaki* fruit pulp is mixed with *Manahshila* should be smoked to cure *Vatika* cough (Charaka Chikitsa 18/130).
12. Linseed cloth piece impregnated with *Realgar*, *Palasa* (*Butea monosperma*), *Ajagandhi*, *Twakkshiri* and *Sunthi* (*Z. officinale*) should be made into stick and smoked followed by intake of sugarcane juice or jaggery water (Charaka Chikitsa 18/146).
13. Pounding *Realgar* with equal fresh leaves of *Vata* (*Ficus benghalensis*) and mixing it with ghee one should smoke it followed by the diet of patridge meat (Charaka Chikitsa 18/147).
14. *Fruit of Haritaki* (*Terminalia chebula*) should be boiled in barley decoction when cooked well they should be kneaded and thereafter added with old jaggery, *Manahshila*, *Rasanjana* (*berberis aristata* mixed with goat milk) and *Pippali*. This linctus alleviates dyspnea and cough (Charaka Chikitsa 18/169).
15. *Brihati*, *Sirisa* flowers (*Albizia lebbek*), *Srivestaka* (exudates of *Pinus roxburghii Sarg*), *Padmacarati*, *Visala* (*Citrullus colocynthis*), *Devdaru*, *Padmkesara*, *Sabarka*, *Realgar*, *Kaunti* pounded together for curing of dyspnea and cough (Charaka Chikitsa 23/55).
16. In *Maha Gandhahasti* comprises 60 ingredients viz. *Patra* (*C. tamala* nees and *Eberum*), *Musta* (*Cyperus rotundus*), *Ela* (*E. cardamomum* *Maton*), 5 types of exudates *Chandana* (*Santalum album*) *Sprka* *Tvak* (*Cinnamomum zeylanica*), *Nalada* *Utapala* (*Nymphaea alba*), *Balaka*, *Harenuka*, *Ushira* (*Vetiveria zizanioides*), *Vanyanakha* (*Sen's* edition reads *Vayahra-Nakha*), *Devadaru* (*C. deodara*), *Kanaka* (*Datura metel*), *Kunkuma* (*Crocus sativus*), *Dhyanakha* (*Coriandrum sativum*), *Kustha* (*S. lappa*), *Priyangu* (*Callicarpa macrophylla*), *Tagara* (*Valerian wallichii*), different parts of *Sirisha* (*Albizia lebeck* *Benth.*) (viz., root, bark leaf, flower and fruit), *Sunthi* (*Z. officinale*), *Pippali* (*P. longum*), *Maricha* (*P. nigrum*), *Haritala*, *Manashila*, *Svetajiraka* (*Cuminum cyminum*), *Sveta* *aparajita* (*Clitoria ternatea*), *Katabhi* (*C. ternatea*), *Karanja* (*Pongamia pinnata*), *Lata* *Karanja* (*P. pinnata*), *Raksoghni* (*Acorus calamus*), *Sindhu* (*varika*), *Rajani* (*C. longa*), *Surasa* (*C. zeylanica*), *Anjana*, *Gairika*, *Manjistha* (*R. cordifolia*), *Resin of nimbi* (*Azadirachta indica*), *Vamsa tvak*, root of *Ashwagandh* (*W. somnifera*), *Hingu* (*A. foetida*), *Dadhitha*, *Amlavetasa* (*Garcinia pedunculata*), *Laksa*, *Madhu*, *Madhuka* (*M. longifolia*), *Somaraji* (*Psoralea corylifolia*), *Vacha* (*A. calamus*), *Ruha* and *Rochana* (*B. arundinaceae*), *Tagara* (*Valerian wallichii*). These ingredients are to ground by adding cow's bile, and piles are made out of his past. This recipe can be taken internally in the form of a drink (by diluting with liquids) or applied in the form of a collyrium in the eyes or applied externally in the form of a paste to achieve success in all therapeutics. If used constantly (regularly) along with wholesome diet of useful ingredients in appropriate quantity. It alleviates eye diseases such as *Timira*, *Pilla*, *Ratryandha*, *Kandi*, *Kaca*, *Patala* and *Arbuda* and also alleviates *Vishama Jvara* (irregular fever), *Dadru* (ring worm), *Avipaka* (indigestion), *Kandu* (pruritus), *Atisara* (diarrhea) and *Pama* (scabies) (Charaka Chikitsa 23/78).
17. *Mamsi* (*N. jatamansi*), *Kunkuma* (*C. sativus*), *Patra*, *twaka* (*Cinnamomum verum*), *Haridra*, *Tagar*, *Candana* (*S. album*), *Manahshila*, *Vyaghranakhi* (*Capparis sepiaria*), and *Tulasi* pounded with water destroys all poisons as *indra's thunder bolt* kill demons (Charaka Chikitsa 23/190).
18. *Vaca*, *Vamsa* bark, *Patha* (*Cissampelos pariera*), *Tagara* (*V. wallichii*), flower stalk of *Tulasi*, *Bala* (*Sida cordifolia*), *Atibala* (*Abutilon indicum*), *Nakuli* (*Rauwolfia serpentina*), *Kustha*, *Sirisa*, *Haridra*, *Daruharidra*, *Prisnaparni* (*Uraria picta*), *Salaparni* (*Desmodium gangeticum*), *Sveta* (*C. ternatea*), *Ajagandha* (*Cleome gynandra*), *Silajatu*, *Katrnna*, *Katabhi*, *Yavakshara* (alkali preparation), *Soot* (*Griha Dhuma*), and *Manahshila* are pounded with bile of *Rohitaka* fish. Excellent anti-poison effecatiuous in bite of insect like *Viswambhara*, etc., used as snuff collyrium and paste (Charaka Chikitsa 23/213).
19. *Realgar*, orpiment, *Manjistha*, *Laksha*, *Haridra* and *Daruharidra* used as paste with ghee and honey are an excellent cleanser of skin (Charaka Chikitsa 25/114). *Manahshila*, *yavakshara*, *Hartala*, *Rock salt* and *Daruharidra* bark powder mixed with honey and suspended in ghee and should be kept in mouth in disease of throat and mouth. This *Pitaka churna* is regarded as excellent one (Charaka Chikitsa 26/189).
20. In *Kaphaja* type *Gairika* (red ochre), *Saindhva*, *Musta* (*C. rotundus*) and *Rocana* (*B. arundinaceae*) are applied as *Rasakriya* (semisolid) also similarly honey, *Priyangu* (*C. macrophylla*) and *Realgar* applied (Charaka Chikitsa 26/228).
21. The *Rasa-Kriya* (sticky paste) of *Gairika*, *Saindhava*, *Musta* (*C. rotundus*) and *Gorocana*, or the *Paste of Priyangu* (*C. macrophylla*), *Manashila* (*Realgar*), and honey is used as *Bidalaka* in *Kaphaja* type of eye disorders (Charaka Chikitsa 26/235).
22. *Sauviranjana*, *Tutha* (blue vitriol), *Swarna makshika* (chalcopyrite), *Realgar*, *Chaksusya*, *Madhuka*, *Loha Bhasma* (iron), precious stones, *Pushpanjana*, *Rocksalt*, *boars tusk* and *Kataka* (*Bryophyllum pinnatum*) powder collyrium or stick prepared of this drug is excellent application in blurred vision (Charaka Chikitsa 26/244).
23. *Kataka* (*Strychnos potatorum*) fruit, *Sankha* (conch), *Rocksalt*, *Trikatu*, *Sugar*, *Samudraphena*, *Rasanjana* (Aqueous extract of *Berberis aristata*), honey, *Vidanga*, *Realgar*, crust of hen's egg. Stick prepared of these is *Sukhavati* which alleviates blurred vision (Charaka Chikitsa 26/246).
24. In *Kaphaja Pinasa*, in condition of *Apinasa*, foetid nose, running nose and itching smoking and expressed juice of pungent drugs should be applied. The powder of *Manahshila*, *Vaca* (*A. calamus*), *Trikatu*, *Vidanga*, *Hingu* and *Guggulu* (*Commiphora mukul*) should be inhaled and nostrils should be blown with powder of pungent fruits (Charaka Chikitsa 26/145) [3].

Manahshila in Bhaishajya Ratnavali [16]

Formulation	Therapeutic uses	Reference
Shirishadyanjanam	Murchha	Jwara Chikitsa: 236
Gadamurari Rasa	Aamjvara	Jwara Chikitsa: 559
Kulavadhurash (Nasya)	Sannipata Jvara	Jwara Chikitsa: 597
Mritothapano Rasa	Unconscious	Jwara Chikitsa: 627-631
Mritasanjivani Rasa	Unconscious	Jwara Chikitsa: 632-637
Aghornrisingho Rasa	Visuchi, Diarrhea	Jwara Chikitsa: 711-717
Trailokyachintamani Rasa	Chronic Fever	Jwara Chikitsa: 780-786
Kalaganibhairavo Rasa	Tridoso Jvara	Jwara Chikitsa: 772-779
Badavaānalo Rasa (Brihat)	Sannipata Jvara	Jwara Chikitsa: 795-797
Tridoshadavanal Kalmegha	Sannipata Murchha	Jwara Chikitsa: 833-834
Shreepatrankesh Rasa	Sannipata	Jwara Chikitsa: 839-857
Shleshmakalanalo Rasa	Jirna Jvara, Shotha, Mandagni	Jwara Chikitsa: 864-868
Kalanalo Rasa	Sannipata Jvara, Vata-Kapha Vicar	Jwara Chikitsa: 869-874
Rasaraj	Astavidhajvara	Jwara Chikitsa: 913-917
Parnakhandeshvara	Fever	Jwara Chikitsa: 925
Jvarankush (Brihat)	Sarva Jvara	Jwara Chikitsa: 949-955
Mahajvarankush	Vishama Jvara	Jwara Chikitsa: 956-959
Ratnagiri Rasa	Aantrik Jvara	Jwara Chikitsa: 962-964
Chintamani Rasa (Brihat Dvitiya)	Sannipata Jvara, Vishama Jvara, Sirah Sula	Jwara Chikitsa: 1015-1019
Jvarakalketu Rasa	Ashta Jvara	Jwara Chikitsa: 1031-1032
Chaturthkari Rasa	Chaturthika Jvara	Jwara Chikitsa: 1022-1025
Shitari Rasa	Visama Jvara	Jwara Chikitsa: 1040-1043
Jvarakunjaraparindro Rasa	Sarva Jvara	Jwara Chikitsa: 1070-1076
Vidyaballabho Rasa	Visama Jvara	Jwara Chikitsa: 1077-1079
Vishamajvarantak Lauham (Prathmam)	Sarva Jvara, Shotha, Agnimandya	Jwara Chikitsa: 1146-1150
Mahabhavati	Rasayan	Grahani Roga Chikitsa: 321-333
Kasisadyatailam (Brihad)	Kshara Karma	Arsharoga Chikitsa: 204-206
Shilagandhaka Vatika	Arsha	Arsharoga Chikitsa: 250-251
Bhaktivipak Vati	Udara Roga	Agnimandya Chikitsa: 158-163
Bhaktivipak Vati (Brihati)	Trodosaja Sula	Agnimandya Chikitsa: 164-166
Krimikasthanalo Rasa	Kriminasak (Vataj, Pittaj, Kaphaj)	Krimiroga Chikitsa: 26-29
Kitari Rasa	Udar Krimi Round Worm	Krimiroga Chikitsa: 34-35
Krimihar Rasa	Kriminasak	Krimiroga Chikitsa: 44-45
Krimivinasano Rasa	Tridosaja Krimi Roga	Krimiroga Chikitsa: 40-43
Vidanga Tailam	Kriminasak	Krimiroga Chikitsa: 76
Rajmriganko Rasa	Tridosaja Kshaya	Rajyakshma Chikitsa: 148-161
Kanakasundaro Rasa	Rajyakshma, Rasayan	Rajyakshma Chikitsa: 188-194
Manahshiladi Dhuma	Sarva Dosaja Kasa	Kasa Chikitsa: 44-45
Manahshila Lipta Badari Patra Dhuma	Mahakasa Roga	Kasa Chikitsa: 46
Marichadi Dhuma	Sarva Dosaja Kasa	Kasa Chikitsa: 49
Arkadi Dhuma	Pancha Viddha Kasa	Kasa Chikitsa: 47-48
Vrihadsendra Gutika	Rasayana	Kasa Chikitsa: 91-97
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Shwasakuthar Rasa	Swasa, Kasa	Hikka-Shwasa: 44-45 Chikitsa
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Unmandagajakeshari Rasa	Apsmara, Unmada	Unmad Chikitsa: 35-37
Unmandagajankusha	Unmada, Bhutounmada (Tridoso)	Unmad Chikitsa: 38-40
Bhutankusha Rasa	Bhutounmada	Unmad Chikitsa: 46-51
Chaturbhuj Rasa	Apsmara, Jvara	Unmad Chikitsa: 52-57
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Bhutabhairava Rasa	Apsmara	Apsmara Chikitsa: 23-25
Vatakulantaka	Apsmara	Apsmara Chikitsa: 26-30
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Vataraktantako Rasa	Vata Rakta	Vatarakta Chikitsa: 43-47
Vijayabhairava Taila	Vata Vyadhi	Aamvata Chikitsa: 209-213
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Nageshwara Rasa	Pandu Roga, Shotha	Gulma Roga Chikitsa: 88-90
Mehavajra Rasa	Mutrakrichha	Prameha Chikitsa: 94-97
Meghanado Rasa	Sarva Prameha	Prameha Chikitsa: 146-147
Jalodarari Rasa Dvitiyah	Udar Roga	Udara Roga Chikitsa: 79-81
Mahavahi Rasa	Udar Roga	Udara Roga Chikitsa: 82-86
Varishoshana Rasa	Agnivardhaka	Udara Roga Chikitsa: 100-114
Vidyadharo Rasa	Gulma, Pleehavridhi	Pleehaykridroga Chikitsa: 74-75
Pleehasardulo Rasa	Udara Roga, Sarva Jvara	Pleehaykridroga Chikitsa: 99-104
Yakritapleehari Lauham	Udara Roga, Sarva Jvara, Shotha	Pleehaykridroga Chikitsa: 123-128
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(Contd...)

Formulation	Therapeutic uses	Reference
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Varnarakshasa Tailam	Sarva Varna Hara	Varnashotha Chikitsa: 71-73
Brihada Varnarakshasa Tailam	Kushtha, Vata Rakta	Varnashotha Chikitsa: 74-78
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Mahataleshvara Rasa	Kushtha	Kushtharoga Chikitsa: 111-114
Kachchhu Rakshasa Taila	Rakta Vikara	Kushtharoga Chikitsa: 267-271
Aaragvadha Taila	Shwitra	Kushtharoga Chikitsa: 275
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Kushtha Rakshasa Taila	Sarva Kushtha Hara	Kushtharoga Chikitsa: 294-298
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Kunkumadya Taila	Nilkadi Roga	Kshudraroga Chikitsa: 121-124
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Shankhadyanjana	Timir	Netraroga Chikitsa: 78-79
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Sukhavati Varti	Netra Roga	Netraroga Chikitsa: 187
Chandrodaya Varti	Netra Roga	Netraroga Chikitsa: 189-191
Tryayushan Varti	Kaphaja Netra Roga	Netraroga Chikitsa: 201
Muktadi Mahanjana	Netra Roga	Netraroga Chikitsa: 213-215
Nayanshonanjan	Timir	Netraroga Chikitsa: 216-217
Rasasardul	Sutika, Shotha, Aruchi	Sutikaroga Chikitsa: 80-85
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Mahabhra Vati (Dwitiya)	Sutika	Sutikaroga Chikitsa: 91-92
Sutikabharan Rasa	Sutika Roga	Sutikaroga Chikitsa: 112-116
Hingwadi Dravya Siddha Sneha	Unmada, Apsmara	Sutikaroga Chikitsa: 174-180
Bhimarudra Rasa	Visha Hara	Visharoga Chikitsa: 53-56
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Kamagrisandipana	Rasayana	Vajikarana: 143-145
Pitantaka Rasa	Pandu, Arsha	Pitta Roga Chikitsa: 13-16
Mahasleshma Kalana Rasa	Sannipataj Roga	Kapha Roga Chikitsa: 14-18
Pamari Lepa	Pama	Athanubhutayoga Chikitsa: 203-206
Rasadi Lepa	Pama	Athanubhutayoga Chikitsa: 207-209

CONCLUSION

Literature review of classical text like *Bhaishajya Ratnavali* and *Brihatrayi* revealed that *Manahshila* were used to treat many pathological manifestations since very long ago. Although the utilization of metals and minerals in therapeutics was amplified after the development of *Rasashastra*, roots of this science can be traced back to *Brihatrayi*. *Charaka* advocated formulations of *Manahshila* in certain pathological lesions concerning skin, whereas *Brihatrayi* categorized *Manahshila* under the group of *Parthiva Dravya*. *Manahshila* are used in different forms such as *Lepa*, *Anjana*, *Dhooma*, and *Churna* and *Taila*. The formulations of *Manahshila* are suggested in the treatment of many diseases like eye, skin, respiratory tract and oral cavity, etc. This information available in classics makes clear that *Manahshila* have special role in different medical conditions. In Ayurvedic pharmacopoeia, they have made their exclusive place and became essential part of Ayurvedic therapeutics. The formulations of arsenicals are safely used in Ayurvedic therapeutics. Various published reports revealed that when these minerals are transformed into medicines sternly adhering to the classical guidelines specified in ancient texts, they are devoid of any toxicity. Present research work evidently reflects that *Manahshila* are safely used in Ayurveda in different dosage form to treat different disease condition. These classical confirmations are ultimate evidence for their efficacy and safety as they are clinically tested since ages without any perceptible side effects. So that mere occurrence of heavy metals in Ayurvedic drug is not adequate to say that Ayurvedic formulations are toxic. Being used for over a long period, these medicines are recognized as safe, which is the ultimate

proof for their non-toxic advantageous effects. But precautions should be taken to avoid any harmful effects resulting from their use in therapeutics. To evaluate actual safety and therapeutic efficacies in respective conditions well intended pre-clinical and clinical studies also can be designed. This work is expected to be suitable for referring the utilization of arsenicals emphasized in *Brihatrayi* and reduces the strenuous efforts of researchers to gather information. This also emphasizes the frequency of arsenicals used in diverse conditions since ancient days of civilization.

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