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Efficacy of *Rasaushadhis* in *Shalaky-Tantra*

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ABSTRACT

Shalaky-tantra deals with the treatment, diagnosis and prevention of diseases occurring above the *jatru* i.e. clavicle. It includes detailed description of diseases of *netra*, *nasa*, *karna*, *mukha* and *shiras*. Broadly modern science classifies *shalaky-tantra* as 2 different branches, ophthalmology and otorhinolaryngology. For all types of diseases in body, *shodhana* and *shamana chikitsa* are the two approaches. Among *shamana chikitsa*, *rasaushadhis* are considered to be the best. Different types of medicinal sources have been identified and mentioned in classical texts like plants, animals, marine, minerals and metals. These texts state that there was usage of herbo-mineral preparations in therapeutics including *urdhwajatrugata rogas*. The purpose of this study is to re-establish the use of *rasaushadhis* in *shalaky-tantra*. A critical review is made throughout various ayurvedic literature, articles and journals. It is found that various herbo-mineral preparations are mentioned in various texts showing their safe and effective use in treatment of *urdhwajatrugata rogas*. Information and knowledge with special reference to *rasa dravyas* i.e. *rasa*, *maharasa*, *uprasa*, *dhatu*, *ratna*, *Sudha varga* etc. and different yogas containing them are compiled in this study. *Rasaushadhis* are given more importance because they offer potent immunization and rejuvenation. They have low dose, swift action, long shelf-life, palatability and high efficacy. It is concluded that *rasaushadhis* can play a significant role in the management of many chronic and challenging ophthalmic-otorhinolaryngological disorders in current scenario which are occurring at high rates and are less curable. This paper attempts to encourage the use of *rasaushadhis* in the treatment of *urdhwajatrugata rogas*.

Key words

Ayurveda, *Shalaky-tantra*, *Rasaushadhis*, *Urdhwajatrugata rogas*, Herbo-mineral.

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INTRODUCTION

According to *Acharya Sushruta*, *shalaky-tantra* is defined as the branch of ayurveda which deals with the treatment of diseases of ear, eyes, oral cavity, throat, and nose. It also includes mostly the use of 'shalaka' i.e. probe like instrument in the treatment of these diseases¹. This branch of ayurveda too follows the rich heritage and

tradition of descent from the *devloka* in the ancient era. It holds the time-tested testimonies of *acharyas* and *rishis*. It is also mentioned in the four *vedas* and other hindu texts. *Charak Samhita*, *Sushruta Samhita*, *Ashtanga Sangraha*, *Ashtanga Hridayam*, *Sharangdhara Samhita*, *Yoga Ratnakara*, *Madhava Nidana*, *Rasa Tarangini*, *Rasa Ratna Samucchya*, *Gada Nigraha* and many

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other texts consist of description and treatment of various diseases enlisted under *shalakya-tantra*. The treatment protocols include herbal medications, herbo-mineral formulations, surgical and para-surgical procedures.

Rasaushadhis are the drugs which are of herbo-mineral or pure mineral origin. The term '*rasa*' denotes the *rasa (parada)*, *maharasa*, *uprasa*, *sadharana rasa*, *dhatu*, *ratna*, *sudha varga* etc. There are various texts describing different procedures for these *rasas*, so that they can be made suitable for human consumption like *shodhana*, *marana*, *amritikarana*, *pishhti* formation, *bhavna* etc. These procedures are called *sanskaras*. They enhance the properties of the drug and reduce and destroy the embedded impurities.

Rasaushadhis are more effective than the plain herbal formulations in the *urdhawajatrugata rogas*. Acharya Sushruta in *uttar-tantra* has described 76 *netragata rogas*, 31 *nasagata rogas*, 28 *karnagata rogas*, 11 *shiro-rogas* and treatment procedures for these diseases. The 65 *mukhagata rogas* are mentioned in *nidana-sthana* of *Sushruta Samhita* and their treatment is given in the *chikitsa-sthana* of the same². Other texts with minor changes state almost same description of *shalakya-tantra*. The treatment is of two types - *shodhana* and *shamana*. *Rasaushadhis* are considered under *shamana* treatment.

Now-a-days due to hectic schedule, unbalanced lifestyle and unhealthy diet, the diseases are enraging but the treatment approach is limited. Diseases like cataract, retinopathies, refractive

errors, macular degeneration, allergic conditions of eye, ear, nose, CSOM, hearing loss, rhinosinusitis oral disorders, throat problems etc. lead to decreased quality of sense organs. All these problems can be assessed and analysed accordingly and should be treated with *rasaushadhis*.

AIM AND OBJECTIVES

- To study the role and efficacy of *rasaushadhis* in the management of *Urdhwajatrugata rogas*.
- To review the usage of *rasaushadhis* in *shalakya-tantra* mentioned in various texts.
- To re-establish and restore the faith and use of *ayurveda* for active management of diseases.

MATERIAL AND METHODS

Various texts and literature were gone through and read between the lines. Knowledge of formulations containing different *rasaushadhis* has been collected and compiled in this article.

PROS OF RASAUSHADHIS³

- ▶ They are palatable and the taste is almost neutral.
- ▶ They require lower doses as compared to the herbal formulations.
- ▶ They have a swift and fast action.
- ▶ They are very much effective in emergency treatment.
- ▶ They can be given at times irrespective of *dosha kalas*. In *Bhaisajya Ratnavali*, it is quoted

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that *dosha*, gender of patient, the place and time considered in the context of *rasaushadhis*.
of treatment, the place of drug origin are not to be

Table 1 *Rasaushadhis* that are beneficial for *netra rogas*

S.no.	Yoga	Indication	Reference
1.	Heerak Bhasma	Chakshushya	Ra. Ta. 23/25-27
2.	Mukta Bhasma	Chakshushya	Ra. Ta. 23/72-74
3.	Pravala Bhasma	Timira, chakshushya	Ra. Ta. 23/139
		Netraroganuta	Ra. Ra. Sa. 4/20
4.	Kansya Bhasma	Netra prasadana	Ra. Ta. 22/32
		Drika prasadanam	Ra. Ra. Sa. 5/207
		Chakshushya	Yo. Ra.
5.	Stroto-anjana	Netra roga	Ra. Ta. 22/43-44
			Ra. Ra. Sa. 3/54
	Sauveeranjana	Netra roga	Ra. Ta. 22/45-46
	Pushpanjana	Abhishyanda	Ra. Ta. 22/51
		Sarvakshiroganuta	Ra. Ra. Sa. 3/105
6.	Shudh gairika	Lochana hitkara	Ra. Ta. 22/117
7.	Swarna makshika bhasma	Chakshushya	Ra. Ta. 21/26
8.	Nirmalikrita tutha	Pothaki, klisha vartama	Ra. Ta. 21/76-77
		Chakshushya	Yo. Ra.
9.	Tuthakodya vati	Pothaki	Ra. Ta. 21/86-87
	Tuthakodya varti		
10.	Shikhigreevadi varti	Pilla roga, lagana	Ra. Ta. 21/94-96
11.	Sumrita tutha	Chakshushya	Ra. Ta. 21/127-129
12.	Sindoor + ghrita	Netrakandu, anjananamika	Ra. Ta. 21/154
13.	Shudha kaseesa	Netrayam	Ra. Ta. 21/231
	Pushpa kaseesa		Ra. Ra. Sa. 3/54
14.	Loha bhasma	Netrayam	Ra. Ta. 20/83
		Chakshushyam	Yo. Ra.
	Varta loha	Netrayam	Ra. Ra. Sa. 5/213
15.	Yashada Bhasma	Nayanamayanashkaram	Ra. Ta. 19/120
	Yashada Bhasma + purana ghrita	Drishti dourbalya	Ra. Ta. 19/128
	Gandhakamliya yashada drava	Abhishyanda	Ra. Ta. 19/159
16.	Vanga Bhasma	Chakshushya	Ra. Ta. 18/39-40
	Swarna vanga	Netrayam	
17.	Sorakamliyarajata and its drava	Netrabhishyanda, pothaki	Ra. Ta. 16/110
18.	Swarna Bhasma	Netrayam	Ra. Ta. 15/69
		Netrapathyam	Yo. Ra.
19.	Shudha navsacara	Netraya (kaphaja netra roga)	Ra. Ta. 14/7
20.	Trirekha-vartika Anjana	Timira, arjuna	Ra. Ta. 12/12-16
	Arjunahara shankha churna Anjana	Arjuna	
	Shankha varti	Shukra roga	
	Shankha Bhasma Anjana	Netra pushpa	Yo. Ra.
21.	Shudha samudrafena + sita / shankha churna / pippali + saindhava (anjana)	Avrana shukra	Ra. Ta. 12/115-119
	Samudrafena	Chakshushya	Yo. Ra.
22.	Saindhava + maricha + manah-shila + shankha Bhasma (anjana)	Netra roga	Ra. Ta. 11/121
23.	Sphatika	Netra roga	Ra. Ta. 11/182-183
	Gulab arka (laal) + sphatika (netra bindu)	Abhishyanda	Ra. Ta. 11/196
	Sphatika (tuvari)	Netra hita	Ra. Ra. Sa. 3/66
24.	Khatika	Netra roga	Ra. Ta. 11/212
25.	Abhraka Bhasma	Netraya	Ra. Ta. 10/72
		Netra pushtikara	Yo. Ra.
	Abhraka Bhasma + triphala + madhu	Chakshushya	Ra. Ta. 10/75

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26.	<i>Shudha hingula</i>	<i>Lochanamayahara</i>	<i>Ra. Ta. 9/18</i>
27.	<i>Shudha gandhak</i> (prolonged use) <i>Gandha kalpa</i>	<i>Divya-drishti-kara</i>	<i>Ra. Ta. 8/56</i>
28.	<i>Girisindura</i>	<i>Netrayam</i>	<i>Ra. Ra. Sa. 3/146</i>
29.	<i>Tamra Bhasma</i>	<i>Netraya</i>	<i>Ra. Ra. Sa. 5/46</i>
30.	<i>Arshoghani vati</i>	<i>Arsha roga in vartama</i>	<i>Ra. Ra. Sa. 15/28-36</i>
31.	<i>Tamra varti</i>	<i>Netra roga</i>	<i>Ra. Ra. Sa. 23/29</i>
	<i>Tamra druti</i>	<i>Kacha, vrana, shukra roga, arma, abhishyanda</i>	<i>Ra. Ra. Sa. 23/30-33</i>
	<i>Gandhak druti</i>	<i>Netra Vrana, pilla roga, kacha, kukunaka</i>	<i>Ra. Ra. Sa. 23/37-43</i>
	<i>Garudanjana</i>	<i>Drishti vardhaka</i>	<i>Ra. Ra. Sa. 23/44-45</i>
	<i>Timiraharanjana</i>	<i>Timira</i>	<i>Ra. Ra. Sa. 23/46</i>
	<i>Patalaharanjana</i>	<i>Patalagata roga</i>	<i>Ra. Ra. Sa. 23/47-48</i>
	<i>Raktanjana</i>	<i>Timira</i>	<i>Ra. Ra. Sa. 23/49-50</i>
	<i>Shambookadi varti</i>	<i>Shukla roga, arma, timira, pilla roga</i>	<i>Ra. Ra. Sa. 23/ 51-52</i>
	<i>Panchanga gutika</i>	<i>Naktandhya</i>	<i>Ra. Ra. Sa. 23/53</i>
	<i>Navnetra-datri varti</i>	<i>Abhishyanda, kacha timira netra vrana, adhimantha, kukunaka, patala, netra kantaka</i>	<i>Ra. Ra. Sa. 23/54-56</i>
	<i>Nayanaroga-hari varti</i>	<i>Sarva netra rogas</i>	<i>Ra. Ra. Sa. 23/57</i>
	<i>Nagadi varti</i>	<i>Abhishyanda, adhimantha</i>	<i>Ra. Ra. Sa. 23/59</i>
	<i>Indradi varti</i>	<i>Vataja abhishyanda</i>	<i>Ra. Ra. Sa. 23/60</i>
	<i>Shulwadi varti</i>	<i>Kaphaja abhishyanda</i>	<i>Ra. Ra. Sa. 23/ 61</i>
	<i>Rasendra varti</i>	<i>Tridoshaja abhishyanda</i>	<i>Ra. Ra. Sa. 23/62-63</i>
	<i>Teekshanadi varti</i>	<i>Pittaja abhishyanda</i>	<i>Ra. Ra. Sa. 23/64</i>
	<i>Tamradi varti</i>	<i>Sarva netra rogas</i>	<i>Ra. Ra. Sa. 23/66</i>
	<i>Paradadi varti</i>	<i>Adhimantha, timira, arma, pilla roga, netra shukla</i>	<i>Ra. Ra. Sa. 23/67-68</i>
	<i>Ektrishanga varti</i>	<i>Adhimantha, pilla roga</i>	<i>Ra. Ra. Sa. 23/69-71</i>
	<i>Shadanga varti</i>	<i>Shuklarma, kacha, timira</i>	<i>Ra. Ra. Sa. 23/72</i>
	<i>Dwadashanga varti</i>	<i>Kacha, arma, netra srava, timira, Shukla roga, pilla roga</i>	<i>Ra. Ra. Sa. 23/73</i>
	<i>Patala-harendra rasa</i>	<i>Patalagata roga</i>	<i>Ra. Ra. Sa. 23/74</i>
	<i>Swarnadi varti</i>	<i>Netra pushpa roga</i>	<i>Ra. Ra. Sa. 23/75</i>
	<i>Vishadyanjana</i>	<i>Timira</i>	<i>Ra. Ra. Sa. 23/76</i>
	<i>Pushpaharanjana</i>	<i>Netra pushpa roga</i>	<i>Ra. Ra. Sa. 23/77</i>
	<i>Haranjana</i>	<i>Timira</i>	<i>Ra. Ra. Sa. 23/89</i>
32.	<i>Kantanaga lohakalpa anjana</i>	<i>Netra roga</i>	<i>Ra. Ra. Sa. 29/98</i>
33.	<i>Vishakalpa</i>	<i>Timira</i>	<i>Ra. Ra. Sa. 29/87-89</i>
		<i>Kacha</i>	<i>Ra. Ra. Sa. 29/90-92</i>
		<i>Shuklarma</i>	<i>Ra. Ra. Sa. 29/93</i>
		<i>Shukla roga</i>	<i>Ra. Ra. Sa. 29/94-96</i>
		<i>Pilla roga</i>	<i>Ra. Ra. Sa. 29/97</i>
		<i>Naktandhya</i>	<i>Ra. Ra. Sa. 29/98-99</i>
34.	<i>Rasakalpa</i>	<i>Timira, kacha</i>	<i>Ra. Ra. Sa. 30/79</i>
35.	<i>Rajata Bhasma</i>	<i>Netra roga</i>	<i>Yo. Ra.</i>
36.	<i>Nepaladi varti anjana</i>	<i>Kaphaja timira</i>	<i>Netra roga chikitsa Yo. Ra.</i>
37.	<i>Muktadi mahanjana</i>	<i>Various chronic eye diseases</i>	<i>Netra roga chikitsa Yo. Ra.</i>
38.	<i>Nayanashana namanjana</i>	<i>Timira, patala roga, netra pushpa</i>	<i>Netra roga chikitsa Yo. Ra.</i>
39.	<i>Chandrodaya varti</i>	<i>Timira, mansa vridhi, kacha, patala roga, arbuda,</i>	<i>Netra roga chikitsa Yo. Ra.</i>

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		<i>naktandhya, netra pushpa</i>	
40.	<i>Shashikala varti</i>	<i>Timira, netra pushpa, kandu, srava, raga, arma, pilla roga</i>	<i>Netra roga chikitsa Yo. Ra.</i>
41.	<i>Khasadi potli</i>	<i>Netra peeda</i>	<i>Netra roga chikitsa Yo. Ra.</i>
42.	<i>Nayanamritanjana</i>	<i>Timira, kacha, patala roga, shukra roga, arma, arjuna, etc.</i>	<i>Netra roga chikitsa Yo. Ra.</i>
43.	<i>Shankhadi vati anjana</i>	<i>Timira, arbuda, picchita, arjuna</i>	<i>Netra roga chikitsa Yo. Ra.</i>
44.	<i>Saptamrit lauha</i>	<i>Timira, arbuda, raktaraji, kandu, naktandhya, daha, shola, toda, patala roga, Shukla roga, kacha, pilla roga</i>	<i>Netra roga chikitsa Yo. Ra.</i>
45.	<i>Meshashringyadi anjana</i>	<i>Kacha, netra mala</i>	<i>Netra roga chikitsa Yo. Ra.</i>
46.	<i>Shilarasadi rasakriya</i>	<i>Kacha, shukra roga, arma, timira</i>	<i>Netra roga chikitsa Yo. Ra.</i>
47.	<i>Nadeejadi gutika</i>	<i>Naktandhya, diwandhya</i>	<i>Netra roga chikitsa Yo. Ra.</i>
48.	<i>Karanjadi vati Anjana</i> <i>Rasanjanadi anjana</i>	<i>Naktandhya</i>	<i>Netra roga chikitsa Yo. Ra.</i>
49.	<i>Chandanadi varti</i> <i>Samudrafena varti</i> <i>Pippalyadi Anjana</i> <i>Kukutandajadi Anjana</i> <i>Lohadi guggulu</i>	<i>Vrana shukra</i>	<i>Netra roga chikitsa Yo. Ra.</i>
50.	<i>Krishanadi anjana</i> <i>Pippalyadi gutikanjana</i>	<i>Arma</i>	<i>Netra roga chikitsa Yo. Ra.</i>
51.	<i>Pushpakshadi rasakriya</i>	<i>Arma, kacha, timira, arjuna, vartma roga</i>	<i>Netra roga chikitsa Yo. Ra.</i>
52.	<i>Shankhadyanjana</i>	<i>Arjuna</i>	<i>Netra roga chikitsa Yo. Ra.</i>
53.	<i>Rasanjanadi vati anjana</i>	<i>Anjananamika</i>	<i>Netra roga chikitsa Yo. Ra.</i>
54.	<i>Gorochanadi anjana</i>	<i>Lagana, nimesha</i>	<i>Netra roga chikitsa Yo. Ra.</i>
55.	<i>Triphlamrita rasakriya</i>	<i>Krimigranthi</i>	<i>Netra roga chikitsa Yo. Ra.</i>

Table 2 *Rasaushadhis* that are beneficial for *karna rogas*

S. no.	Yoga	Indication	Reference
1.	<i>Loha Bhasma</i>	<i>Karnagata raktasrava</i>	<i>Ra. Ta. 20/87-96</i>
2.	<i>Karpada Bhasma + samudrafena (pradhamana into karna)</i>	<i>Karnasrava</i>	<i>Ra. Ta. 12/97</i>
3.	<i>Samudrafena (pradhamana into karna)</i>	<i>karnasrava</i>	<i>Ra. Ta. 12/120</i> <i>Karna roga chikitsa Yo. Ra.</i>
4.	<i>Sannipatadao suchimukha rasa</i>	<i>Badharya</i>	<i>Ra. Ra. Sa. 12/92-93</i>
5.	<i>Vajrardi vartika</i>	<i>Karna roga</i>	<i>Ra. Ra. Sa. 24/2-3</i>
6.	<i>Krimikarnadi taila</i>	<i>Krimikarna, karna, pravishtha keeta</i>	<i>Ra. Ra. Sa. 24/5-6</i>
7.	<i>Vishakalpa</i>	<i>Karnashoola</i>	<i>Ra. Ra. Sa. 29/100</i>
8.	<i>Gandhak taila</i>	<i>Karnanadi roga</i>	<i>Karna roga chikitsa Yo. Ra.</i>
9.	<i>Hartala churna + gomutra</i>	<i>Krimikarna</i>	<i>Karna roga chikitsa Yo. Ra.</i>

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Table 3 *Rasaushadhis* that are beneficial for *nasa rogas*

S.no.	Yoga	Indications	Reference
1.	<i>Kafaketu rasa</i>	<i>Pratishyaya, kasa, kantha roga, karna roga</i>	<i>Ra. Ta. 24/110-113</i>
2.	<i>Panchamrita rasa</i>	<i>Peenasa, galagraha, nasa roga, kantha roga, shirah-shoola</i>	<i>Ra. Ta. 24/83-86</i>
3.	<i>Loha bhasma</i>	<i>Peenasa, nasagata raktapitta</i>	<i>Ra. Ta. 20/87-96</i>
4.	<i>Yashada Bhasma + ghruta</i>	<i>Recurrent pratishyaya (shleshma kala dourbalya)</i>	<i>Ra. Ta. 19/129-130</i>
5.	<i>Sphatika + godugdha</i>	<i>Nasagata raktapitta</i>	<i>Ra. Ta. 11/186</i>
6.	<i>Rasa sindoora + tulsi patra swaras</i>	<i>Pratishyaya (in children)</i>	<i>Ra. Ta. 6/233</i>
7.	<i>Chandrakala rasa</i>	<i>Urdhwaga raktapitta</i>	<i>Ra. Ra. Sa. 13/5-14</i>
8.	<i>Arshoghani vati</i>	<i>Nasarsha</i>	<i>Ra. Ra. Sa. 15/28-36</i>
9.	<i>Tamra druti rasa</i>	<i>Pratishyaya</i>	<i>Ra. Ra. Sa. 18/201-2101</i>
10.	<i>Maniparpati rasa</i>	<i>Sarva nasa roga</i>	<i>Ra. Ra. Sa. 24/20-23</i>
11.	<i>Navsacara + chuna (pradhamana nasya)</i>	<i>Pratishyaya, shirah-peeda</i>	<i>Nasa roga chikitsa Yo. Ra.</i>

Table 4 *Rasaushadhis* that are beneficial for *mukha rogas*

S. no.	Yoga	Indications	Reference
1.	<i>Shudha kaseesa + sphatika+ hingu + devdaru churna (make tablet), (kept in affected teeth)</i>	<i>Krimidanta Danta shoola</i>	<i>Ra. Ta. 21/248 Danta roga chikitsa Yo. Ra.</i>
2.	<i>Rasa Manikyam</i>	<i>Mukha roga</i>	<i>Ra. Ta. 11/89</i>
3.	<i>Sphatika + lavanga + ela + mishri</i>	<i>Dant sharkara</i>	<i>Ra. Ta. 11/204-209</i>
	<i>Saindhava + sphatika (gharshana)</i>	<i>Danta srava</i>	
	<i>Jala + sphatika (kawal-gandoosha)</i>	<i>Danta paichhilya, mukhapaka, kantha shundi, adhijihwa</i>	
	<i>Sphatika + triphla + supari + ela + vidanga + tutha + patranga + kaseesa + Khadira + mayaphala + loha Bhasma + musta (pratisarana)</i>	<i>Dantaroga</i>	<i>Danta roga chikitsa Yo. Ra.</i>
4.	<i>Shudha gandhaka with triphla kwath</i>	<i>All urdhawajatrugata roga (nasa, karna mukha, etc.)</i>	<i>Ra. Ta. 8/41</i>
5.	<i>Vaikrant Bhasma + Swarna Bhasma +</i>	<i>Mukha roga</i>	<i>Ra. Ra. Sa. 2/70</i>

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	<i>pippali churna + ghrita + vidanga</i> (used in 1 <i>gunja matra</i>)		
6.	<i>Vajra Bhasma + shudha parada</i> (vati form), (<i>dharana in mukha</i>)	<i>Dantachala</i>	<i>Ra. Ra. Sa.</i> 4/46
7.	<i>Suchimukha rasa</i>	<i>Mookta</i> (inability to speak)	<i>Ra. Ra. Sa.</i> 12/92-93
8.	<i>Parpati rasa</i>	<i>Swara bhanga</i>	<i>Ra. Ra. Sa.</i> 13/80-94
9.	<i>Arshoghani vati</i>	<i>Mukharsha</i>	<i>Ra. Ra. Sa.</i> 15/28-361
10.	<i>Tapyadi vati</i>	<i>Sarva mukha rogas</i>	<i>Ra. Ra. Sa.</i> 24/30
11.	<i>Dhatubaddha rasa gutika</i>	<i>Dantagata shoola</i>	<i>Ra. Ra. Sa.</i> 24/31-33
	<i>Parpati rasa</i> followed by <i>dhatubaddha rasa gutika</i> (hold in mouth)		<i>Mukhapaka</i> <i>Ra. Ra. Sa.</i> 24/42
12.	<i>Kaseesadi gutika</i>	<i>Dantakrimi janya shoola</i>	<i>Ra. Ra. Sa.</i> 24/55
13.	<i>Paradadi lepa</i> (in oral cavity)	<i>Kantha shalooka,</i> <i>galagranthi</i>	<i>Ra. Ra. Sa.</i> 24/61
14.	<i>Mandoora lepa</i> (external application)	<i>Gala roga</i>	<i>Ra. Ra. Sa.</i> 24/63
15.	<i>Gandhakadi lepa</i>	<i>Gandamala</i>	<i>Ra. Ra. Sa.</i> 24/67-68
16.	<i>Hemataradi vatika</i>	<i>Chaladanta</i>	<i>Ra. Ra. Sa.</i> 24/70
17.	<i>Devdarvadi churna</i>	<i>Swara bhanga</i>	<i>Ra. Ra. Sa.</i> 25/46-47
18.	<i>Kamla vilasa rasa</i>	<i>Mukha roga</i>	<i>Ra. Ra. Sa.</i> 27/48-50
19.	<i>Baddha parada vati</i> (hold in mouth)	<i>Mukha roga</i>	<i>Yo. Ra.</i>

Table 5 *Rasaushadhis* that are beneficial for *shirorogas*

S. no.	Yoga	Indications	Reference
1.	<i>Loha rasayana</i>	<i>Vali, palita</i>	<i>Sha. Sa. Ma.</i> 12/276-286
2.	<i>Tamra bhasma + Rajata bhasma + Swarna makshika</i> (give 7 <i>bhawnas</i> of <i>chitraka kwatha</i>)	<i>Suryavrata,</i> <i>ardhavbhedaka</i> etc. <i>shiroiroga</i>	<i>Ra. Ta.</i> 17/92
3.	<i>Rajata bhasma + ela + mishri</i>	<i>Suryavrata,</i> <i>ardhavbhedaka</i>	<i>Ra. Ta.</i> 16/57
4.	<i>Swarna bhasma + bala kwatha</i>	<i>Shirah kampa</i>	<i>Ra. Ta.</i> 15/95
5.	<i>Rasa sindoora + dashmoola kwatha</i>	<i>Jeerna vatakaphaja</i> <i>shirah shoola</i>	<i>Ra. Ta.</i> 6/221
6.	<i>Rasa sindoora + bala kwatha</i>	<i>Jeerna shirah kampa</i>	<i>Ra. Ta.</i> 6/227
7.	<i>Aarogyasagara rasa</i>	<i>Shiroroga</i>	<i>Ra. Ra. Sa.</i> 19/65-72
8.	<i>Vijaya bhairava rasa</i>	<i>Shirah kampa</i>	<i>Ra. Ra. Sa.</i> 21/149-151
9.	<i>Shirorogadi rasa</i>	<i>Sarva shiroroga</i>	<i>Ra. Ra. Sa.</i> 24/73
10.	<i>Abhradi vatika</i>	<i>Suryavratadi shiroroga</i>	<i>Ra. Ra. Sa.</i> 24/89
11.	<i>Shwasa kuthara rasa</i>	<i>Vataja shiroshoola</i>	<i>Shiroroga chikitsa</i> <i>Yo. Ra.</i>

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Shwasa kuthara rasa + kapoorā + Pittaja shiroroga Shiroroga chikitsa Yo.
naveena kesara + mishri + aja dugdha + Ra.
Chandana

Ra. Ta. – Rasa Tarangini

Ra. Ra. Sa. – Rasa Ratna Samucchya

Yo. Ra. – Yoga Ratnakara

Sha. Sa. Ma. – Sharangdhara Samhita
Madhyama Khanda

GUNAS OF RASAUSHADHIS⁴

▶ **Rasa (Mercury):** *Sarva roga nashaka, tridosha nashaka, parama rasayana*

▶ **Abhraka (Mica):** *Vata-pitta-kshaya nashaka, sarva roganashaka, balya, snigdha, deepana, sheeta virya.*

▶ **Vaikranta (Tourmaline):** *Can be used in place of heerak bhasma, balya, tridoshaghana, sarva roganashaka, deepana.*

▶ **Sasyaka (Copper sulphate):** *Tridoshaghana, arshaghana, rasayana, vishaghana, laghu, lekhanā.*

▶ **Gandhaka (Sulphur):** *Madhura, katu paka, ushna virya, rasayana, kandunashaka, deepana, pachana, krimighana.*

▶ **Hartala (Yellow arsenic):** *Vata-kapha nashaka, raktadosha nashaka, visha dosha nashaka, krimighana, snigdha, ushna, katu, deepana.*

▶ **Sphatika (Potash alum):** *Kashaya, katu, amla, kanthya, netrahita, tridosha shamaka, vishanashaka, vranaropaka.*

▶ **Manahshila (Realgar):** *Rasayana, tikta rasa, katu paka, ushna virya, kapha-vata nashaka, vishanashaka, deepana, kandughana.*

▶ **Anjana (Stibunites, collyrium):** *They are of 5 types – sauveeranjana, rasanjana, srotoanjana, pushpanjana, nilanjana. All are having chakshushya guna. They exhibit madhura rasa, sheeta virya, kaphapitta nashaka etc. properties.*

▶ **Kaseesa (Ferrous sulphate):** *Kshara, amla, guru, ushna virya, visha nashaka, vatakapha nashaka.*

▶ **Gairika (Hematite):** *Kashaya-madhura rasa, sheeta virya, snigdha, raktapittahara, vrana ropaka, tridoshaghana.*

▶ **Navsudara (Ammonium chloride):** *Deepana, pachana, mukhadoshā nashaka, tridosha nashaka.*

▶ **Karpada (Calcium carbonate):** *Deepana, netrya, vatakapha nashaka.*

▶ **Girisindura:** *Tridosha nashaka, netryam.*

▶ **Hingula (Cinnebar):** *Sarva roga nashaka, deepana.*

▶ **Mukta (Pearl):** *Kaphapitta nashaka, kasa nashaka, deepana, daha nashaka.*

▶ **Pravala (Coral):** *Raktapitta nashaka, kasa nashaka, deepana, pachana, laghu, vishaghana, netra roganuta.*

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- ▶ **Vajra (Diamond):** *Tridosha shamaka, sarva roga nashaka, shadrasa, snigdha.*
- ▶ **Swarna (Gold):** *Snigdha, vishanashaka, brimhana, tridoshaghana, sarva roga nashaka, deepana, Madhura paka, rasayana.*
- ▶ **Rajata (Silver):** *Madhura paka, Kashaya-amlarasa, sheeta virya, sara guna, lekhanarasa, deepana, snigdha, vatakapha nashaka, balya.*
- ▶ **Tamra (Copper):** *Tikta-kashaya-amlarasa, Madhura paka, ushna virya, pittakapha nashaka, amadosha nashaka, shodhana, vishadosha nashaka, deepana, arshaghana, lekhanarasa, netryam.*
- ▶ **Loha (Iron):** *Arshaghana, deepana, rasayana, tikta rasa, snigdha, tridosha nashaka.*
- ▶ **Vanga (Tin):** *Tikta, ushna, ruksha, kaphanashaka, kriminashaka.*
- ▶ **Naga (Lead):** *Ushna, snigdha, tikta, vatakapha nashaka, Deepana.*
- ▶ **Kansya (Bronze):** *Laghu, tikta, ushna, drik-prasadanam, krimighana, vatapitta nashaka.*
- ▶ **Varta loha (Bell metal):** *Sheeta, amlakatu, ruksha, kaphapitta nashaka, Deepana, kriminashaka, netrayam.*

MODE OF ACTION OF RASAUSHADHIS

According to ayurvedic texts, diseases are caused due to vitiation of *vatadi doshas* reacting with *dushyas*, thus producing the symptoms. The same theory is applied to the diseases in the *urdhwa jatru* region of the body. The *doshas* get accumulated in the *netra, karna, nasa, mukha* and *shira* leading to the corresponding diseases.

According to the modern medical science, the causes of disease of eye, ear, nose, throat, oral cavity and head are: allergens, toxic substances, systemic diseases, faulty lifestyle etc. All these causative factors are encouraged in the body by the low immunity of the individual, thus leading to the disease.

The *rasaushadhis* being the nanomedicine acts through the following ways in the *urdhwajatrugata vikaras*:

- ▶ **Netra:** The nano-medicinal properties of *rasaushadhis* penetrate into the cornea from the pre-corneal tear film and through the local vasculature in conjunctiva and lids. This ocular drug delivery is enhanced due to fast action of *rasaushadhis*. They act swiftly and give the desired effect in short time if applied properly⁵.

For eyes, the medicine is also given orally. The medicine getting absorbed through the gut is supposed to act on retina (retina being nervous tissue) and over all the eye. It also acts systemically, pacifies the vitiated *doshas* and gives strength to the *chakshur-indriya*.

- ▶ **Karna:** The *rasaushadhis* are poured locally into ear canal in the diseases having discharge, infection, maggots or insects trapped there. The *teekshana* and *laghu guna* of the medicine immediately check the foreign organism's growth and relieves the ear from further deterioration. The anti-microbial action of the *rasaushadhis* prevent the recurrence of the disease.

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The drugs given orally act on whole body providing immunity and strength against the diseases. These drugs provide nutrition to the nervous elements in the ear i.e. the vestibulo-cochlear nerve and protect it from further degeneration improving the quality of hearing.

► **Nasa:** The *deepana* and *amapachana* effects of the *rasaushadhis* are seen on the *shleshma kala* of the nose i.e. the nasal mucosa⁶. Nasal mucosa is responsible for the reaction against the infectious agents and allergens. The olfactory mucosa plays an important role in the olfaction. *Rasaushadhis* getting direct into contact with the causative factor in the mucosa destroys it and pacifies the inflammation and congestion there. These medicines help in maintaining the health and soundness of the nasal mucosa.

The oral drugs act by increasing the immunity of the body against the infections and allergens. These medicines improve the quality and quantity of *prana vayu*.

► **Mukha:** *Mukhagata rogas* are considered to be *kapha* dominant. *Rasaushadhis* pacifies *kaphadi doshas* and make *mukha* clear and free of diseases. The infection is treated by the local application of the *sphatika*, *tankana* etc. by their anti-microbial properties. The oral drugs increase the immunity and ability to unhealthy lifestyle factors. *Agni* is enhanced thus digesting the improper diet too. Proper metabolism reduces the chances of developing diseases.

► **Shiras:** *Rasaushadhis* act on *vatadi doshas* when applied locally and the pain is alleviated. When taken orally, they act on the root cause of the disease and eliminates the *doshas*. *Nasyam* acts by removing the *doshas* through the nasal route.

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Other than these indicated *rasaushadhis*, more preparations can be used systemically to treat the underlying cause like diabetes mellitus, hypertension, autoimmune diseases, etc. for instance, use of *Chandraprabha vati* in glaucoma as potent diuretic to reduce ocular pressure and *pittaja shirahshoola*, use of *rasaraj rasa* in *badhira*, use of *vatanashaka* preparations in tinnitus and sensori-neural hearing loss, use of *vrihat vata chintamani rasa* in eye or ear disorders to pacify *vata dosha*, *pravala panchamarita rasa* to pacify *pitta*, use of *akik pishti* in hypertension, *raktapitta*, use of *kaharwa pishti* in epistaxis, haemorrhagic conditions in the eye, use of *vasant kusumakara rasa* in diabetic retinopathy to control the damage caused by the chronic diabetes, use of *shirahshooladi vajra rasa*, *praval pishti*, *godanti bhasma* in *ardhavybedaka*, *mahalaxmi vilasa rasa* in *shiroroga* and *kaphaja* conditions of *mukha* and *kantha*, *ardha-nareeshwara rasa nasya* in *shiroroga*, *chaturmukha rasa* in *mukha roga*, *erimedadi taila* in *mukha* and *danta rogas*, *indu vati* in *karna rogas*, *tribhuvan kirti rasa* in *jeerna pratishyaya* and many more.

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DISCUSSION

► This topic was chosen so to study the literature regarding the use of *rasaushadhis* in *shalakya-tantra*. Our ancient ayurvedic texts have a rich knowledge of *rasaushadhis* and their judicial use in various diseases.

► Several ayurvedic books and articles were reviewed including *Sharangdhara Samhita*, *Yoga Ratnakara*, *Rasa Tarngini*, *Rasa Ratna Samucchya*, etc. The major texts like *Charak Samhita*, *Sushruta Samhita*, *Ashtanga Hridayam*, etc. were gone through but are not mentioned here as they have very few *rasaushadhis* introduced into treatment of diseases. The reason is *rasa shastra* wasn't developed much in those times. It came into trend in the medieval period.

► The present scenario holds an increasing no. of lifestyle diseases, toxic exposures and pollution causing various eye, nose, ear, dental, oral and throat diseases. The decreased quality of food and life contributes to low immunity thereby helping the diseases to flourish.

► The treatment available in the contemporary science isn't efficient enough to cope with these conditions. They have a limited approach with significant side effects. Recurrence of disease and continuing damage is a common sight among these treatments.

► Here *rasaushadhis* can prove to be a blessing to humankind. They take less time to act, have less to no adverse effects and less dose

is required. Their exclusive drug action can meet the challenges of modern era.

► Most of the metals and minerals present in *rasaushadhis* are components of body too. For example, iron, copper, calcium, magnesium, zinc, etc. This makes their action prompt and nutrition is actively completed.

► *Rasaushadhis* possess anti-oxidant, immuno-modulatory, analgesic and anti-inflammatory properties. So, they can be used in both acute and chronic conditions with accurate dose and *anupana*.

► Some false allegations were made in the recent years on *rasaushadhis* that their use leads to hepatotoxicity and nephrotoxicity. But that's not true to the core. *Rasaushadhis* are scientifically proven for their action and reactions.

CONCLUSION

► This article compiles the *rasaushadhis* and their *rogadhikara* according to different texts of ayurveda and *rasa shastra*.

► In 21st century, known as the century of machines or the digital age, due to lack of proper care and nutrition, low immunity, poor quality diet and hectic life schedule, the prevalence is rising at significant rate.

► Due to insufficiency of allied sciences, ayurveda especially *rasaushadhis* can play an important role in coping with the acute and chronic conditions both.

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► The formulations and combinations enlisted in this article are just the glance. Many more preparations and compositions are practised by different *vaidyas* over the country, which need to be documented and shared to the ayurvedic literature.

► This compilation of knowledge of *rasaushadhis* should be continued further and research should be carried out to prove their therapeutic efficacy on modern parameters too. Though *ayurveda* is a time-tested science but due to change of parameters with time its efficacy is doubted. So, to re-establish the clinical glory of ayurveda and *rasaushadhis* documented research should be done.

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