



## Review Article

### THERAPEUTIC INDICATIONS OF SHANKHA BHASMA: A REVIEW

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#### ABSTRACT

Shankha Bhasma is a calcium containing formulation which is widely prescribes in practice since ancient time. In the classics of Rasa shastra, Shankha Bhasma recognized as a sole medicines primarily in the treatment of (gastrointestinal disorders) like Amlapitta(~hyperacidity), Grahani(~irritable bowel syndrome), Udarshula (~abdominal colic), Parinamshula(~duodenal ulcer) and Atisara(~diarrhoea). Moreover, Shankha Bhasma provides a good supplementation of calcium as properly manufactured Bhasma. Here an attempt has been made to compile the formulations of Shankha Bhasma in context of different classics, therapeutic indications and recent research works etc. Total 46 formulations are found during the study. By this effort formulations of Shankha Bhasma can be found collectively and could be used widely to get better efficacy to cure the many diseases.

**Keywords:** Shankha Bhasma, Amlapitta, gastrointestinal disorders, therapeutic indications

#### INTRODUCTION

The word Shankha in Sanskrit means “the substance which pacifies evil or calamity”.<sup>1</sup> It is well known since Vedic period and according to Ayurveda, it is related with lord Dhanvantari as it has been held by one of his hand during churning of sea. Zoologically, Shankha is exo skeleton formed by the secretion of gastropoda class of snail belongs to the phylum molluska mostly found in shallow oceans coasts with abundant sea weeds; mainly used species of Shankha is *Turbinella pyrum*. Two types of Shankha are available that is Vamavarta and Dakshinavarta. Vamavarta is used for the preparation of Shankha Bhasma while Dakshinavarta considered for worship. In Samhita period it came into field of medicines and afterword in the classics of Rasa shastra, Shankha recognized as a sole medicines primarily in the treatment of (gastrointestinal disorders) like Amlapitta(~hyperacidity), Grahani(~irritable bowel syndrome), Udarshula (~abdominal colic), Parinamshula(~duodenal ulcer) and Atisara(~diarrhoea).<sup>2,3</sup> Moreover Shankha Bhasma provides a good supplementation of calcium as properly manufactured Bhasma contains 61.36% of calcium in the form of CaCO<sub>3</sub>,<sup>4</sup> which was the first antacid to be used.<sup>5</sup>

The fast and busy schedule of the modern man necessitates improper food habits, which made him susceptible to gastro intestinal disturbances. Among those gastric hyperacidity and

ulcers are the most common entities. The gastric hyperacidity and ulcers are nothing but an imbalance between damaging factors within the lumen and protective mechanisms within the gastro duodenal mucosa. Current statistical data shows more than 70% of the people are suffering from gastro intestinal disturbances. Modern anti-ulcer treatment usually includes a series of drugs that are synthetic in nature and having a lot of side effects which made physicians to look for a safe effective alternative method. Shankha Bhasma comes under Shukla Varga, Sudha Vargeeya dravya etc. It is having the properties like madhura, laghu, seetala etc so it can be administered in Amlapitta(~hyperacidity) and other gastrointestinal disorders. The Bhasma are the compounds of Shankha explained in the Rasashastra classical texts having almost similar properties. Hence keeping all these factors in mind, following study has been designed under the topic.

#### CLASSIFICATION OF SHANKHA

In classical text, Shankha is included in Sudha Varga, Shukla Varga, Dhatu Varga, Suvarnadi Varga, Uparatna Varga, Uparasa Varga, Vaarishya Varga, Chandanadi Varga, Maansa Varga etc. Rasarnava of 10<sup>th</sup> century, which is considered as one of the oldest text, is first to include the Shankha in ‘Shukla Varga’ may be because of its white colour. Classification of Shankha according to different classical text is given below-

Table 1: Classification of Shankha

S.No.	Name of Varga	Reference
1.	Shukla Varga	Rasamava(5/40), Dhanvantri Nighantu(63, pg 271), Rasa Ratanakar(2/6), Raja Nighantu(67, pg 669)
2.	Sudha Varga	Rasamritam
3.	Dhatu Varga	Kaideva Nighantu(131-132/pg 296), Bhavaprakasha Nighantu(159/pg 622)
4.	Uprasa Varga	Bhavaprakash Nighantu. 101/pg 614, Dhanvantari Nighantu (87-88/pg 275), RasaRatnakara(Ri.3/67), Rasendra Chi. ntamani(70/pg 98), Rasendra Sara Samgraha(1/118-119), Ayurveda Prakasha(2/346)
5.	Upratana	Bhavaprakash Nighantu. 189/pg 628, Dhanvantari Nighantu(86/pg 275), Ayurveda Prakasha(3/6)
6.	Suvarnadi Varga	Madanpala Nighantu(62-64/pg 118), Raja Nighantu(120-122/pg 452)
7.	Chandanadi Varga	Dhanvantari Nighantu(159-160/pg 119), Sodhala Nighantu(S.N.I.480/50, S.N.II 35/93)
8.	Maansa Varga	Kaideva Nighantu(34-35/pg 445), Bhavaprakasha Nighantu(34/pg 710)
9.	Vatapittaghana and Kaphapittaghana Varga	Siddha Mantra Prakasha(73/33, 111/35-36)
10.	Svedaja Varga	Dravya Guna Vigyana(Sharma, 2005, pg 60-61)

### Pharmacological properties

Table 2: Pharmacological properties of Shankha according to different classics

	Dh. N <sup>6</sup>	M.P. N <sup>7</sup>	A. P <sup>8</sup>	K. N <sup>9</sup>	R. N <sup>10</sup>	B.P.N <sup>11</sup>	R. T <sup>12</sup>
Rasa	Madhura	Kashaya, Madhura	Kshara	Kashaya, Madhura	Katu	-	Kshara
Guna	-	Laghu	-	Laghu, Lekhana	-	Laghu	-
Virya	Usna	Sheeta	Sheeta	Anushna	Sheeta	Sheeta	Sheeta
Vipaka	Katu	Katu	-	Katu	-	-	-
Doshghanta	-	Kapha pitta dusta rakta nasak	Tridosh nashak	-	-	Pitta kapha nashak	-

### Therapeutic indications

Table 3: Rogaghanta of Shankha Bhasma according to different Acharyas

Rogaghanta	R.T <sup>13</sup>	A.P <sup>14</sup>	R. S. S <sup>15</sup>	B.R.R.S <sup>16</sup>	D.N <sup>17</sup>	R.N <sup>18</sup>	Y.R <sup>19</sup>	S.Y.S <sup>20</sup>
Amlapitta (~hyperacidity)	+	-	+	-	-	-	-	+
Grahani (~irritable bowel syndrome)	+	+	-	+	-	-	+	-
Parinamashula(~duodenal ulcer)	+	-	-	-	+	-	-	+
Udarasula(~abdominal colic)	-	-	+	-	-	+	-	+
Tarunypidika (~achne)	+	+	-	+	-	-	+	-
Netra pushapahara (~eye disease)	-	+	-	-	-	-	+	-
Gulma (~blenching)	-	-	+	-	-	+	-	-
Swasa (~asthma)	-	-	-	-	-	+	-	-
Meha (~urinary disorder and diabetes)	-	-	+	-	-	-	-	-
Atisara (~diarrhoea)	+	+	-	-	-	-	-	-
Vishadosha	+	-	-	-	-	+	-	-
Raktapitta (~bleeding disorder)	-	-	-	-	+	-	-	-

**Charaka Samhita** - Acharaya Charaka has placed Shankha in Vaarishaya Varga. Shankha used as an externally as netravarti etc. and internally as rasayana. It is used as an ingredient in much yoga for various ailments which are listed below-

**Table 4: Formulation of Shankha in Charaka Samhita**

Name of Formulation	Indication	Reference
Indrokta Rasayana <sup>21</sup>	Rasayana	C. Chi. (1-4/23)
Ushiradi Churana <sup>22</sup>	Raktapitta	C. Chi. (4/73)
Avapida nasya <sup>23</sup>	Nasagata raktapitta	C. Chi. (4/99)
Muktadi Churna <sup>24</sup>	Hikka, Shwasa, Kasa	C. Chi. (17/125)
Krishnamratikadi yoga <sup>25</sup>	RaktAtisara	C. Chi. (19/82)
Shadvaladi Pradeha <sup>26</sup>	Visarpa	C. Chi. (21/75)
Sumanakorkadi varti <sup>27</sup>	Netragata raktapita	C. Chi. (26/241)

**Sushruta Samhita** - Here, Shankha is first indicated in the preparation of Madhyama Kshara where Shankha nabhi is used as a prakshepa dravya. Shankha has been used as ingredient in much yoga which is as follows-

**Table 5: Formulation of Shankha in Sushruta Samhita**

Name of Formulation	Indication	Reference
Churna <sup>28</sup>	Raktastambhana	Su. Su. (14/36)
Churna <sup>29</sup>	Lomashatana	Su. Chi. (1/105)
Mustadhyanjana <sup>30</sup>	Pittaja abhisyanda	Su. U. (11/8)
Vaiduryadhyanjana <sup>31</sup>	Shukti	Su. U. (11/15)
Shankh adhyanjana <sup>32</sup>	Arma, Pidka, Siraja	Su. U. (15/25-28)
Rasakriya <sup>33</sup>	Timira	Su. U. (17/43)
Putapaka <sup>34</sup>	Lekhana	Su. U. (18/24-25)

**Ashtanga Hridaya**- Acharya Vagbhata has placed Shankha in the Matsya varga. It is also used in the preparation of Madhyama kshara. Shankha darshana and dhvani are mentioned as dutashakuna. It is also used in various yogas which are shown in the table below-

**Table 6: Formulation of Shankha in Astanga Hridaya**

Name of Formulation	Indication	Reference
Krishnamratikadi yoga <sup>35</sup>	RaktAtisara	A.H. Chi(9/91)
Bhallatakadi taila <sup>36</sup>	Shvitra	A.H. Chi(20/16-17)
Dhantavarti <sup>37</sup>	Kshatashukra	A.H. U.(11/34)
Churnanjanana <sup>38</sup>	Timira	A.H. U.(13/20-22)
Sarpavasadhyanjana <sup>39</sup>	Dristiprada	A.H. U.(13/41)
Vimala varti <sup>40</sup>	Nirmala drishti	A.H. U.(13/70)

**Sharangdhara Samhita**: Acharya Sharangdhara has used Shankha in many formulations to treat various disorders which are listed below-

**Table 7: Formulation of Shankha in Sharangdhara Samhita**

Name of Formulation	Indication	References
Loknatha Rasa <sup>41</sup>	Kshaya	Sh.Sa. M 12/58-61
Hemgarbhapottali rasa <sup>42</sup>	Kasa, Kshaya	Sh.Sa. M 12/112
Chandrody varti <sup>43</sup>	Netra roga	Sh.Sa. U.13/75-77
Dantavarti <sup>44</sup>	Shukra roga	Sh.Sa. U.13/80
Rasakriya <sup>45</sup>	Arma Vartma	Sh.Sa. U.13/87-88
Krishnasarpavasa raskriya <sup>46</sup>	Drishtiprada	Sh.Sa. U.13/105
Lekhana anjana <sup>47</sup>	Arma	Sh.Sa. U.13/106

**Rasa Ratna Samucchaya**- Rasa vagabhata gives first indication of Shankha for the purpose of Kshara bandha. Other important yogas of Shankha are listed below-

**Table 8: Formulation of Shankha in Rasa Ratna Samucchaya**

Name of Formulation	Indication	Reference
Bhutankusha rasa <sup>48</sup>	Kasa	R.R.S. 13/33-35
Shankh eshvara rasa <sup>49</sup>	Rajyakshma	R.R.S. 14/16-19
Mrigankapottali rasa <sup>50</sup>	Rajyakshama	R.R.S. 14/20-22
Vaidhyanatha rasa <sup>51</sup>	Rajyakshama	R.R.S. 14/47-50
Loknatha rasa <sup>52</sup>	Rajyakshama	R.R.S. 14/51-53
Arshakuthara lepa <sup>53</sup>	Arsha	R.R.S. 15/83
Lokeshvara rasa <sup>54</sup>	Grahani	R.R.S. 16/25-28
Shulahara rasa <sup>55</sup>	Shula	R.R.S. 18/159-160
Ksharavati <sup>56</sup>	Gulma	R.R.S. 18/161-163

**Rasa Tarangini**- Acharya Sadananda Sharma has described the synonyms, varieties, and grahya (acceptable) qualities of Shankha. He also described the different Shodhana and Marana process. He also gives many formulations in which Shankha is as an ingredient.

**Table 9: Formulation of Shankha in Rasa Tarangini**

Name of Formulation	Indication	Reference
Trirekh vartika <sup>57</sup>	Timira.Arjuna	R.T.12/12-14
ArjunaharShankha churna <sup>58</sup>	Arjuna	R.T.12/15
Shankh avarti <sup>59</sup>	Netra shukra	R.T.12/16
Shankh adravaka (first) <sup>60</sup>	Agnimandhya, Visuchika	R.T.12/35-42
Bhasma <sup>61</sup>	SamGrahani	R.T.12/101
Bhasma <sup>62</sup>	Tridoshaja shula	R.T.13/21
Muktapachamritarasayana <sup>63</sup>	Jirna jvara, Yakshma	R.T.23/82-86
Kaphaketurasa <sup>64</sup>	Pratishyaya, Kasa	R.T.24/106-109
Vishaprabha vartika <sup>65</sup>	NetraShukla, Arma	R.T.24/151-155
Shulanirmulana rasa <sup>66</sup>	Grahani , Visuchika	R.T.222-226

## RECENT RESEARCH WORKS

Shankha Bhasma has been tested for many pharmacological activities both in vivo and in vitro. Pandit S. et al have studied that Shankha Bhasma showed induced dose dependent (indomethacin and cold restrain models) protection against experimental gastric ulcers as well as exhibit a potent anti-peroxidative effect without altering serum calcium level.<sup>67</sup> In another study Shankha Bhasma shows significance antacid property, evaluated by preliminary antacid test, acid neutralizing capacity test, Rosset Rice test, and Rehels test. It was observed that Shankha Bhasma at 300mg dose prepared by traditional as well as muffles furnace neutralized 9.5 mili equivalent and 7.05 mili equivalent of acid respectively.<sup>68</sup> In one study Shankha Bhasma has been showed clinically effective in treating GERD it is a chronic recurring disease with many complications including stricture and bleeding. Two purified form of Shankha Bhasma (A-purification was done with lemon juice and B-with sour gruel) was given to patients from which Resolution of symptoms was statistically (P<0.005) more significant in group A than group B.<sup>69</sup> Shankha Bhasma also showed significant antispasmodic activity on acetylcholine induced excised rat ileum compared to Atropine showed expected receptor blocking action (antispasmodic) on isolated rat ileum.<sup>70</sup> Shankha Bhasma have show similar therapeutic response against Acetic acid induced writhing test in rats, showed statistically significant decrease in no. of writhing but therapeutic response is less in comparison with standard.<sup>71</sup> In other study Shankha Bhasma showed efficient in vitro anti-inflammatory activity related to inhibition of protein denaturation.<sup>72</sup>

## CONCLUSION

Shankha has been quoted in almost all the ancient as well as recent treaties of Ayurveda. People of India are using Shankha since ages for worship purpose or as a naad yantra for battles. In Ayurveda during Samhita period and afterword in the classics of Rasa shastra, it recognized as a good quality medicine in the treatment of (gastrointestinal disorders) like Amlapitta (~hyperacidity), Grahani (~irritable bowel syndrome), Udarshula (~abdominal colic), Parinamshula (~duodenal ulcer) and Atisara (~diarrhoea). Shankha Bhasma is a very potent antacid, anti inflammatory, antispasmodic and anti diarrhoeal drug which provides calcium supplementation also. Some of the researches of recent years have provided evidence on the validity and authenticity of the classical review points about Shankha Bhasma especially in gastrointestinal disorders. Ayurvedic formulations are finding and increasing range of application in pharmaceuticals research. Bhasma are claimed to be biologically produced nano particles and are comparable with

the action of nano particles in the body provides selective, targeted and controlled delivery of drug to specific site of action in the body likely to allopathic medicines. Hence Shankha Bhasma can be considered a potential alternative instead of using allopathic medicines having numerous side effects in gastrointestinal disorders.

## LIST OF ABBREVIATIONS

Dh. N.	Dhanvantari Nighantu
M.P. N.	Madanpala Nigantu
A. P.	Ayurveda Prakash
K. N.	Kaidev Nighantu
R. N.	Raja Nighantu
B.P.N.	Bhava Prakash Nighantu
R. T.	Rasa Tarangini
R. S. S.	Rasendra Sara Sangraha
B.R.R.S.	Brihad Rasa Raja Sunder
Y.R.	Yoga Ratanakar
S.Y.S.	Siddha Yoga Sangraha
C. Chi.	Charaka Chikitsasthana
Su. Su.	Sushruta Sutrasasthana
Su. U.	Sushruta Uttartantra
A.H. Chi.	Ashtanga Hridaya Chikitsasthana
A.H. U.	Ashtanga Hridaya Uttartantra
Sh. Sa. M.	Sharangdhara Samhita Madhyamkhanda
Sh. Sa. U.	Sharangdhara Samhita Uttarkhanda
R.R.S.	Rasa Ratana Samuccaya

## REFERENCES

1. Raja Radhakantdeva. ShabdKalpadrum: Vol. 5, 3 edition Chaukhamba Sanskrit series office: Varanasi, 1967, 11.
2. Acharya shri madhava. 2/261-62. Hindi commentary Mishra gulraja sharma. Ayurveda prakash, Chaukhamba bharti academy, Varanasi, 2009, PP323
3. Shri Krishna gopal. 1/243. Rasendra sara sangraha, 1 edn. Chaukhamba Krishna Das Academy, Varanasi, 2003, PP171
4. Dr. Chand Deep. Pharmaceutico-analytical standardization of Shankha Bhasma w.s.r. to Puta, Department of Rasashastra and Bhaishajya Kaplana, Uttarakhand Ayurveda University, Rishikul campus, Haridwar. 2015
5. Apoorva bhatt role of praval pisti -Bhasma on hyperacidity-2003
6. Dr.Singh Amrit Pal, Dhanwantari Nighantu, Chandanadi Varga, 79/160, Puna, 1925, page no.119
7. Nripamadanapala, Pt. Tripathi Harihar Prashad, Madanapala Nighantu, Suvarnadi Varga, shloka 62, Varanasi Chaukhamba Krishna Das Academy, , 2009, page no.127

8. Hindi commentary Mishra gulrajasharma, acharya shri madhava, Ayurveda prakash, chapter 2/259-63, Varanasi : Chaukhamba bharti academy, , 2009, page no.323
9. Sharma P.V. and Sharma Guruprasad, Kaiyadeva Nighantu, Dhatu varga, 49/132, Varanasi : Chaukhamba Orientatia, , 1st Edition, 1979, page no.296
10. Durvedi Acharya Vishwanath, Tripathi Indradev, Raj Nighantu, Suvarnadi Varga, shloka 122, Varanasi : Chaukhamba Krishna Das Academy, 1982, page no.452
11. Late. Dr Pandey G.S., Chunekar KC, Bhavaprakash Nighantu, Dhatwadi Varga,159 , Varanasi : Chaukhamba Bharat Academy, , 6th edition, 1982, page no.610
12. Sharma Sadanand, RasaTaringini, Shankha divigyaniyo taranga, 12/20, Delhi : Motilal Banarasi Das, Delhi, 11 edition, 2009, page no. 288
13. Sharma Sadanand, RasaTaringini, Shankha divigyaniyo taranga, 12/21, Delhi : Motilal Banarasi Das, , 11 edition, 2009, page no. 288
14. Hindi commentary Mishra gulrajasharma, acharya shri madhava, Ayurveda prakash, chapter 2/262, Varanasi : Chaukhamba bharti academy, 2009, page no.323
15. Shri Krishna gopal, Rasendra sara sangraha, 1/243, Varanasi:Chaukhamba Krishna Das Academy, , edition I, 2003, page 172
16. Pandit chaubey Dattaram, Brihat rasraja sunder , Uparasa adhyaya, Shankha , Varanasi : Chaukhamba orientalia, 3 edition, 2000, pg 172
17. Dr.Singh Amrit Pal, Dhanwantari Nighantu, Chandanadi Varga, 79/160, Puna, 1925, page no.119
18. Durvedi Acharya Vishwanath, Tripathi Indradev, Raj Nighantu, Suvarnadi Varga, shloka 122, Chaukhamba Krishna Das Academy Varanasi, 1982, page no.452
19. Vaidhya Shastri Laxmipati editor, Bhishagratna shastri brahamshankar complier- edited by, vaidhya shastri laxmipati, vidhyotani hindi commentary , Yogaratnakara, shloka 2 , Varanasi: Chaukhamba prakashana, , 2009, pg 164
20. Vaidhya Yadav ji Trikamji. Siddha Yoga Samgraha. New Delhi : Shri Bidhyanath Ayurveda Limited; 2000, p.158
21. Shashtri Kashinath and Chaturvedi Gorakhnath editors, Agnivesha compiler. Vidhyotini Hindi Commentary, Charaka Samhita, Chikitsasthana. Varanasi: Chaukhamba Bharati Academy; 2005. 1-4/22. p. 56
22. Shashtri Kashinath and Chaturvedi Gorakhnath editors, Agnivesha compiler. Vidhyotini Hindi Commentary, Charaka Samhita, Chikitsasthana. Varanasi: Chaukhamba Bharati Academy; 2005. 4/73. p. 189
23. Shashtri Kashinath and Chaturvedi Gorakhnath editors, Agnivesha compiler. Vidhyotini Hindi Commentary, Charaka Samhita, Chikitsasthana. Varanasi: Chaukhamba Bharati Academy; 2005. 4/99. p. 194
24. Shashtri Kashinath and Chaturvedi Gorakhnath editors, Agnivesha compiler. Vidhyotini Hindi Commentary, Charaka Samhita, Chikitsasthana. Varanasi: Chaukhamba Bharati Academy; 2005. 17/125. p. 526
25. Shashtri Kashinath and Chaturvedi Gorakhnath editors, Agnivesha compiler. Vidhyotini Hindi Commentary, Charaka Samhita, Chikitsasthana. Varanasi: Chaukhamba Bharati Academy; 2005. 19/82. p. 571
26. Shashtri Kashinath and Chaturvedi Gorakhnath editors, Agnivesha compiler. Vidhyotini Hindi Commentary, Charaka Samhita, Chikitsasthana. Varanasi: Chaukhamba Bharati Academy; 2005. 21/75. p. 602
27. Shashtri Kashinath and Chaturvedi Gorakhnath editors, Agnivesha compiler. Vidhyotini Hindi Commentary, Charaka Samhita, Chikitsasthana. Varanasi: Chaukhamba Bharati Academy; 2005. 26/241. p. 758
28. Shashtri Ambika dutta editor, Maharishi Sushruta compiler. Ayurveda Tattva Sandeepika Hindi Commentary, Sushruta Samhita, Sutrasthana. Varanasi: Chaukhamba Sanskrit Sansthan; 2016. 14/36. p. 71
29. Shashtri Ambika dutta editor, Maharishi Sushruta compiler. Ayurveda Tattva Sandeepika Hindi Commentary, Sushruta Samhita, Chikitsasthana. Varanasi: Chaukhamba Sanskrit Sansthan; 2016. 1/105. p. 14
30. Shashtri Ambika dutta editor, Maharishi Sushruta compiler. Ayurveda Tattva Sandeepika Hindi Commentary, Sushruta Samhita, Uttarantra. Varanasi: Chaukhamba Sanskrit Sansthan; 2016. 11/8. p. 56
31. Shashtri Ambika dutta editor, Maharishi Sushruta compiler. Ayurveda Tattva Sandeepika Hindi Commentary, Sushruta Samhita, Uttarantra. Varanasi: Chaukhamba Sanskrit Sansthan; 2016. 11/15. p. 57
32. Shashtri Ambika dutta editor, Maharishi Sushruta compiler. Ayurveda Tattva Sandeepika Hindi Commentary, Sushruta Samhita, Uttarantra. Varanasi: Chaukhamba Sanskrit Sansthan; 2016. 15/25-28. p.72
33. Shashtri Ambika dutta editor, Maharishi Sushruta compiler. Ayurveda Tattva Sandeepika Hindi Commentary, Sushruta Samhita, Uttarantra. Varanasi: Chaukhamba Sanskrit Sansthan; 2016. 17/43. p. 81
34. Shashtri Ambika dutta editor, Maharishi Sushruta compiler. Ayurveda Tattva Sandeepika Hindi Commentary, Sushruta Samhita, Uttarantra. Varanasi: Chaukhamba Sanskrit Sansthan; 2016. 18/24-25. p. 95
35. Gupta Atrideva. Ashtanga Hridya. Chikitsasthana. Vidyodini Hindi Commentary. Varanasi: Chaukhamba Prakashan; 2012. 9/91. p. 489
36. Gupta Atrideva. Ashtanga Hridya. Chikitsasthana. Vidyodini Hindi Commentary. Varanasi: Chaukhamba Prakashan; 2012. 20/16-17. p. 564
37. Gupta Atrideva. Ashtanga Hridya. Uttarantra. Vidyodini Hindi Commentary. Varanasi: Chaukhamba Prakashan; 2012. 13/70. p. 676
38. Gupta Atrideva. Ashtanga Hridya. Uttarantra. Vidyodini Hindi Commentary. Varanasi: Chaukhamba Prakashan; 2012. 13/20-22. p. 672
39. Gupta Atrideva. Ashtanga Hridya. Uttarantra. Vidyodini Hindi Commentary. Varanasi: Chaukhamba Prakashan; 2012. 13/41. p. 674
40. Gupta Atrideva. Ashtanga Hridya. Uttarantra. Vidyodini Hindi Commentary. Varanasi: Chaukhamba Prakashan; 2012. 13/70. p. 676
41. Srivastava Shailaja editor. Sharangdhar Samhita. Madhyama Khand, Jeevanprada Hindi Commentary. Varanasi: Chaukhamba Orientalia; 12/58-61. p. 275.
42. Srivastava Shailaja editor. Sharangdhar Samhita. Madhyama Khand, Jeevanprada Hindi Commentary. Varanasi: Chaukhamba Orientalia; 12/112. p. 291.
43. Srivastava Shailaja editor. Sharangdhar Samhita. Uttar Khand, Jeevanprada Hindi Commentary. Varanasi: Chaukhamba Orientalia; 13/75-77. p. 499.
44. Srivastava Shailaja editor. Sharangdhar Samhita. Uttar Khand, Jeevanprada Hindi Commentary. Varanasi: Chaukhamba Orientalia; 13/80. p. 500.
45. Srivastava Shailaja editor. Sharangdhar Samhita. Uttar Khand, Jeevanprada Hindi Commentary. Varanasi: Chaukhamba Orientalia; 13/87-88. p. 501.
46. Srivastava Shailaja editor. Sharangdhar Samhita. Uttar Khand, Jeevanprada Hindi Commentary. Varanasi: Chaukhamba Orientalia; 13/105. p. 504.
47. Srivastava Shailaja editor. Sharangdhar Samhita. Uttar Khand, Jeevanprada Hindi Commentary. Varanasi: Chaukhamba Orientalia; 13/106. p. 504.

48. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Raktapitta-kasa-hikka-chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 13/33-35. p. 151
49. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Rajyakshma chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 14/16-19. p. 160
50. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Rajyakshma chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 14/20-22. p. 160
51. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Rajyakshma chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 14/47-50. p. 162
52. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Rajyakshma chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 14/51-53. p. 162
53. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Arsha chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 15/83. p. 178
54. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Udavarta-Atisara-sangrihini-ajeerna chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 16/25-28. p. 181
55. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Vidradhi roga chikitsa, Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 18/159-160. p. 226
56. Tripathi Indradev editor, Sri vagbhatacharya compiler, Rasprabha Commentary, Rasaratana Samuchchaya. Vidradhi roga chikitsa. Varanasi: Chaukhamba Amarbharti Prakashan; 2009. 18/161-163. p. 226
57. Sharma Sadananda. Rasa tarangini. 12/7-11. 11th ed.:Motilal banarasi das publication; 2011.
58. Sharma Sadananda. Rasa tarangini. 12/15. 11th ed.:Motilal banarasi das publication; 2011.
59. Sharma Sadananda. Rasa tarangini. 12/16. 11th ed.:Motilal banarasi das publication; 2011.
60. Sharma Sadananda. Rasa tarangini. 12/35-42. 11th ed.:Motilal banarasi das publication;2011.
61. Sharma Sadananda. Rasa tarangini. 12/101. 11th ed.:Motilal banarasi das publication; 2011.
62. Sharma Sadananda. Rasa tarangini. 13/21. 11th ed.:Motilal banarasi das publication;2011.
63. Sharma Sadananda. Rasa tarangini. 23/82-86. 11th ed.:Motilal banarasi das publication;2011.
64. Sharma Sadananda. Rasa tarangini. 24/106-109. 11th ed.:Motilal banarasi das publication; 2011.
65. Sharma Sadananda. Rasa tarangini. 24/151-155. 11th ed.:Motilal banarasi das publication; 2011.
66. Sharma Sadananda. Rasa tarangini. 24/222-226. 11th ed.:Motilal banarasi das publication; 2011.
67. Pandit S, Sur TK, Jana U, Bhatt Acharya D and Debnath PK. Anti ulcer effect of Shankha Bhasma in rats: A preliminary Study. Indian Journal of Pharmacology 2000; 32:378-380.
68. Richa Aphale, Kadam HM, Kadam SS and Paradakar AR. Studies of Shankha Bhasma: Antacid activity evaluation of Shankha Bhasma. Indian Journal of Pharmaceutical Sciences. 1997; Sept.:1-3
69. Ranade Majiri and Chary Digari Laxmana. Comparison of two purification products of Shankha Bhasma: A prospective randomized control trial. J. Nat. Sci. Bio. Med 2013; 4(1):160-162.
70. Dr. Chand Deep. Pharmaceutico-analytical standardization of Shankha Bhasma w.s.r. to Puta, Department of Rasashastra and Bhaishajya Kaplana, Uttarakhand Ayurveda University, Rishikul campus, Haridwar. 2015
71. Dr. Chand Deep. Pharmaceutico-analytical standardization of Shankha Bhasma w.s.r. to Puta, Department of Rasashastra and Bhaishajya Kaplana, Uttarakhand Ayurveda University, Rishikul campus, Haridwar. 2015
72. Dr. Chand Deep. Pharmaceutico-analytical standardization of Shankha Bhasma w.s.r. to Puta, Department of Rasashastra and Bhaishajya Kaplana, Uttarakhand Ayurveda University, Rishikul campus, Haridwar. 2015

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