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Therapeutic potential of formulations of Shankha Bhasma described in Bharat Bhaishajya Ratnakar

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Abstract---*Shankha* (Conch Shell) is one of the animal origin drug mentioned in *Rasashastra*. According to different texts *Shankha* is classified under various categories such as *Shukla Varga*, *Sudha Varga* and *Uparasa Varga*. Its medicinal usage is known since Vedic era and was used to treat various ailments effectively. Aim of the present study is to collect the formulations containing *Shankha Bhasma* described in the text *Bharat Bhaishajya Ratnakar* and find out its therapeutic potential. All the formulations containing *Shankha bhasma* are reviewed from all the five volumes of *Bharat Bhaishajya Ratnakar* and again categorized according to its dosage forms. Total 114 formulations containing *shankha bhasma* have been reviewed which are indicated in gastro-intestinal and other disorders such as *Amlapitta* (hyperacidity), *Grahani* (irritable bowel syndrome), *Udarshula* (abdominal colic), *Parinamshula* (duodenal ulcer), *Atisara* (diarrhoea). Eye and skin diseases. These formulations are advised to be taken in different dosage

forms such as powder, tablets, varti etc. The present work will be valuable in recognition of newer formulations of *Shankha bhasma* and their therapeutic applications in various ailments.

Keywords: *Shankha bhasma*, *Bharat Bhaishajya Ratnakar*, Gastro-intestinal diseases.

Introduction

Rasashastra is the science of *Ayurvedic* Pharmaceutics which deals with alchemy and the preparation of medicines from drugs of herbal, mineral, metals and animal origin. The drugs are classified by its usages. *Shankha* (Conch Shell) is one such drug mentioned in *Rasashastra* under *Sudha Varga Dravyas*. The word “*Shankha*” literally means “the substance which pacifies evil or calamity” [1]. *Shankha* is a conical or oblong shell of a marine animal. It is available from most of the water sources. Its medicinal usage is known since Vedic era and was used to treat various ailments effectively. The *Shankha* which is round bodied with smooth external surface, which has small opening towards the base, which is clean and bright like full moon, and the one, which is lengthy and heavy is considered as the best sample of *Shankha* (Conch shell) used for therapeutic purposes.

There are mainly two types of *Shankha*, *Dakshinavarta Shankha* (Right sided opening) and *Vamavarta Shankha* (Left sided opening) described in *Ayurveda* texts. Whereas *Dakshinavarta Shankha* is rarer variety of Conch shell. Since it is not abundantly available, it is considered auspicious and used in temples to blow during prayers. Therapeutically it can mitigate all the three *Doshas*. *Vamavarta Shankha* is abundantly available. It is the one, which is used for purification, incineration and for the preparation of all the other compound formulations. According to the *Rasatarangini*, the *Shodhan* (purification) of *Shankha* is done in the *Amla Dravya* mainly in *Nimbuka Swarasa*, *JambirNimbu Swarasa*, *Tanduliya Swarasa*, *Kanji* and *Jayanti Patra Swarasa*. After purification *Shankha* is subjected to *Maran* (Incineration) where it is converted into white colored *bhasma* which is used therapeutic purpose and in various formulations [2].

According to different texts *Shankha* is classified under various categories such as *Shukla Varga* by *Rasarnava*, *Dhanvantarinighantu*, *Rasanighantu*. *Sudha Varga* by *Rasamritam*, *Dhatuvarga* by *Kaideva Nighantu*, *Bhavprakasha Nighantu*, *Uparasa Varga* by *Bhavprakasha nighatu*, *Dhanvantari nighantu*, *Rasaratnakar*, *Rasendrachintamani*, *Rasendra Sara Samgraha* and *Ayurveda Prakasha*. *Shankha Bhasma* is having the properties like *Madhura*, *Laghu*, *Seeta* and indicated in *Amlapitta* (hyperacidity), *Grahani* (irritable bowel syndrome), *Udarshula* (abdominal colic), *Parinamshula* (duodenal ulcer) and *Atisara* (diarrhoea) and so many other disorders [3]. Hence the aim of the present study is to collect the formulations containing *Shankha Bhasma* described in *Bharat Bhaishajya Ratnakar* and find out its therapeutic potential.

Material and Methods

In the present review, all the formulations are reviewed from *Bharat Bhaishaj Ratnakar*. Formulations that are described, collected volume wise from five different volumes of *Bharat Bhaishaj Ratnakar* and again categorized according to its dosage forms [4].

Observation and Results

In the present review, total 114 formulations containing *shankha bhasma* have been reviewed and collected from *Bharat Bhaishaj Ratnakar* which are indicated in various disorders to be taken with different *anupana* (adjuvant) as shown in table 1. These formulations are advised to be taken in different dosage forms such as powder, tablets, varti etc. as depicted in graph 1.

Table 1
List of Formulations Containing *Shankha bhasma*
*B.B.R.- Bharat Bhaishajya Ratnakar Volume 1-5

S.N.	Name of Formulations	Dosage Forms	Dose	Anupana (Adjuvant)	Therapeutic Indications	Reference
1	<i>Agnimukho Rasa</i>	<i>Vati</i>	125mg	Warm Water	Indigestion, Pain, Regurgitation of abdomen.	B.B.R. Vol-1, p 96
2	<i>Agnisandipano Rasa</i>	<i>Vati</i>	125mg	Warm Water	Loss of appetite, Indigestion, Acidity, Pain.	B.B.R. Vol-1, p 98
3	<i>Arkalokeshwar Rasa</i>	<i>Vati</i>	250mg	<i>Ghee, Maricha Churna</i>	Gastro-intestinal parameters, Acidity, Cough.	B.B.R. Vol-1, p 119
4	<i>Aragvadhadi Taila</i>	<i>Taila</i>	-	-	Body hair removal.	B.B.R. Vol-1, p 149
5	<i>Ushiradi Churna</i>	<i>Churna</i>	-	Rice	Bleeding disorders, Tuberculosis.	B.B.R. Vol-1, p 167
6	<i>Dvitiya Kulathyadyam Ghruta</i>	<i>Ghruta</i>	-	-	Heart diseases, Gastro-intestinal disorders, Cough, Fever.	B.B.R. Vol-1, p 257
7	<i>Karpuradi Tail</i>	<i>Tail</i>	-	-	Body hair removal.	B.B.R. Vol-1, p 262
8	<i>Kanchanni Lepa</i>	<i>Lepa</i>	-	-	Fistula	B.B.R. Vol-1, p 275
9	<i>Kanady Anjana</i>	<i>Anjana</i>	-	-	Eye disorders	B.B.R. Vol-1, p 277
10	<i>Katphaladi Yoga</i>	<i>Vati</i>	-	-	Eye disorders.	B.B.R. Vol-1, p 278
11	<i>Kapard Rasa</i>	<i>Vati</i>	250mg	Warm water	Diabetes	B.B.R. Vol-1, p 284
12	<i>Chaturtham Kaphaketu Rasa</i>	<i>Vati</i>	250mg	-	All types of disorders.	B.B.R. Vol-1, p 287
13	<i>Pancham Kaphaketu Rasa</i>	<i>Vati</i>	125mg	Ginger juice	Cold, Cough, Mumps, Toothache.	B.B.R. Vol-1, p 288
14	<i>Kasasanhara bhairava</i>	<i>Vati</i>	625mg	<i>Suntha, Vasa, Kantakari</i>	Cough, Cold, Loss of taste, Loss of strength, Skin disorders.	B.B.R. Vol-1, p 306

15	<i>Krumi dhulijalaplavo Rasa</i>	<i>Vati</i>	250mg	Cold water	Worm infestation.	B.B.R.Vol-1, p 317
16	<i>Khadiradi Gutika</i>	<i>Vati</i>	250mg	-	Mouth disorders	B.B.R.Vol-1, p 326
17	<i>Gunjadi Lepa</i>	<i>Lepa</i>	-	-	Skin disorders, Itching.	B.B.R.Vol-2, p 70
18	<i>Guduchyadi Modak</i>	<i>Modak</i>		Ghee, Honey	Bleeding disorders, Urinary stone, Diabetes, White discharge.	B.B.R.Vol-2, p 108
19	<i>Gulmam debhasinho Rasa</i>	<i>Vati</i>	125mg	Warm Water	Fever, Anemia, Thrust, Bleeding disorders, Harshness of voice, Loss of appetite.	B.B.R.Vol-2, p 111
20	<i>Grahanikapato Rasa</i>	<i>Vati</i>	-	Ghee, Honey	Fever, Gastro-intestinal disorders, Loss of taste, Osteoarthritis.	B.B.R.Vol-2, p 120
21	<i>Grahanigajendra Vatika</i>	<i>Vati</i>	2 gm	Goats milk	Gastro-intestinal disorders, Fever, Pain, Acidity, Jaundice, Itching, Skin disorders.	B.B.R.Vol-2, p 125
22	<i>Chinchaksharadi Shankha Vati</i>	<i>Vati</i>	2gm		Regurgitation of abdomen, Pain, Indigestion, Loss of appetite, Pricking pain in abdomen.	B.B.R.Vol-2, page no 155
23	<i>Chandrakala Varti</i>	<i>Varti</i>	-	-	Eye disorders.	B.B.R.Vol-2, page no 192
24	<i>Chandraprabha Varti</i>	<i>Varti</i>	-	-	Eye disorders.	B.B.R.Vol-2, page no 193
25	<i>Chandrodaya Varti</i>	<i>Varti</i>	-	-	Eye disorders.	B.B.R.Vol-2, page no 193
26	<i>Chandrodaya Varti</i>	<i>Varti</i>	-	-	Eye disorders, Itching in eye.	B.B.R.Vol-2, page no 194
27	<i>Chaturthikari Rasa</i>	<i>Vati</i>	250mg	Mishri, Cold Water, Ghee	Persistent fever.	B.B.R.Vol-2, page no 1916
28	<i>Jwarebhasinho Rasa</i>	<i>Vati</i>	250mg	-	Rheumatoid arthritis, Pain, Fever with chills, Pricking pain in abdomen.	B.B.R.Vol-2, page no 308
29	<i>Tiladi Vati</i>	<i>Vati</i>	12gm	Cold Water	Indigestion, Loss of appetite.	B.B.R.Vol-2, page no 351
30	<i>Talakadi Prayog</i>	<i>Vati</i>	-	-	Body hair removal	B.B.R.Vol-2, page no 383
31	<i>Tamalpatradi Varti</i>	<i>Varti</i>	-	-	Eye disorders.	B.B.R.Vol-2, page no 390

32	<i>Timirnashini Varti</i>	<i>Varti</i>	-	-	Cataract, Ptergium	B.B.R.Vol-2, page no 392
33	<i>Tarakriya prakara</i>	<i>Vati</i>	48gm	Ghee	Loss of appetite.	B.B.R.Vol-2, page no 434
34	<i>Tutthadi kajwaragsha</i>	<i>Vati</i>	375mg	Mishri	Fever	B.B.R.Vol-2, page no 474
35	<i>Trinetryakho Rasa</i>	<i>Vati</i>	125gm	<i>Punarnavas warasa</i>	Pain, Fissure, Regurgitation of abdomen, Swellings.	B.B.R.Vol-2, page no 484
36	<i>Tryahikari Rasa</i>	<i>Vati</i>	500mg	<i>Jiraka churna</i>	Fever	B.B.R.Vol-2, page no 506
37	<i>Darvyadi Lepa</i>	<i>Vati</i>	-	-	Itching, Abrasion.	B.B.R.Vol-3, page no 93
38	<i>Dakshandatvaka dy Anjana</i>	<i>Anjana</i>	-	-	Skin disorders, Eye disorders.	B.B.R.Vol-3, page no 97
39	<i>Drushtipradam Anjanam</i>	<i>Anjana</i>	-	-	Eye disorders.	B.B.R.Vol-3, page no 98
40	<i>Drushtiprada Varti</i>	<i>Varti</i>	-	-	Cataract, Ptergium	B.B.R.Vol-3, page no 99
41	<i>Nishadi Lepa</i>	<i>Lepa</i>	-	-	Brest disorders.	B.B.R.Vol-3, page no 210
42	<i>Nilakantha Rasa</i>	<i>Vati</i>	125mg	Warm water	Fever, Cough, Cold.	B.B.R.Vol-3, page no 247
43	<i>Padminipangadi Lepa</i>	<i>Lepa</i>	-	-	Skin disorders.	B.B.R.Vol-3, page no 388
44	<i>Palngyandi Gutika</i>	<i>Vati</i>	250mg	-	Eye disorders.	B.B.R.Vol-3, page no 399
45	<i>Pushakshadi rasakriya</i>	<i>Vati</i>	-	-	<i>Cataract, Pterigium.</i>	B.B.R.Vol-3, page no 402
46	<i>Putikarandiyam Churna</i>	<i>Churna</i>	-	<i>Kanji</i>	Gastro-intestinal disorders.	B.B.R.Vol-3, page no 500
47	<i>Prataplanakeshwar Rasa</i>	<i>Vati</i>	375mg	Ginger juice	Pain, Fissure, All types of disorders.	B.B.R.Vol-3, page no 509
48	<i>Pachaniya kshar</i>	<i>Vati</i>	500mg	-	Regurgitation of abdomen, Splenomegaly, Infertility.	B.B.R.Vol-3, page no 534
49	<i>Bhaskaro Rasa</i>	<i>Vati</i>	250mg	Warm Water	Pain, Loss of appetite.	B.B.R.Vol-3, page no 668
50	<i>Bhairavi Vati</i>	<i>Vati</i>	1gm	-	Loss of appetite, Cough, Cold.	B.B.R.Vol-3, page no 681
51	<i>Manjithady Anjana</i>	<i>Anjana</i>	-	-	Bleeding disorders, Skin disorders.	B.B.R.Vol-4, page no 150
52	<i>Tritiya Manashilady Anjana</i>	<i>Anjana</i>	-	-	Eye disorders.	B.B.R.Vol-4, page no 150
53	<i>PanchamManashiladyaAnjana</i>	<i>Anjana</i>	-	-	Cataract, pterigium, Itching.	B.B.R.Vol-4, page no 151
54	<i>Manashiladya Varti</i>	<i>Varti</i>	-	-	Eye disorders.	B.B.R.Vol-4, page no 151
55	<i>Mungapottali Rasa</i>	<i>Vati</i>	125mg	-	All types of disorders.	B.B.R.Vol-4, page no 243

56	<i>Raktasutashekhar Rasa</i>	Vati	125mg	Honey, Ginger juice	Diabetes, Fever.	B.B.R.Vol-4,page no 382
57	<i>Ravisundaro Rasa</i>	Vati	125mg	<i>Kullatha, Manda</i>	Fever, Loss of appetite.	B.B.R.Vol-4,page no 389
58	<i>Rasataleshwara Rasa</i>	Vati	250mg	<i>Maricha churna, Honey</i>	Skin disorders.	B.B.R.Vol-4,page no 399
59	<i>Laghushankha bhasma Yoga</i>	Bhasma	1gm	Warm Water	Pain	B.B.R.Vol-4,page no 514
60	<i>Pratham Lokeshwar Rasa</i>	Vati	500mg	<i>Maricha churna, Ghee</i>	Loose motion, Gastro-intestinal disorders.	B.B.R.Vol-4,page no 537
61	<i>Lohanmrutunjaya Rasa</i>	Vati	375mg	-	Splenomegaly, Hepatomegaly, Loss of appetite.	B.B.R.Vol-4,page no 550
62	<i>Vaidehi Varti</i>	Varti	-	-	Cataract, Pterigium.	B.B.R.Vol-4,page no 694
63	<i>Vangeshwara Rasa</i>	Vati	125mg	-	Increases the strength.	B.B.R.Vol-4,page no 706
64	<i>Vadvanal Vati</i>	Vati	375mg	Ginger juice	Loss of appetite, Loss of taste, Regurgitation of abdomen, Tuberculosis.	B.B.R.Vol-4,page no 728
65	<i>Vantihrud Rasa</i>	Vati	500mg	<i>Ajmoda churna.</i>	Worm infestation.	B.B.R.Vol-4,page no 752
66	<i>Vishwadi Vati</i>	Vati	3gm	-	Pain, Loose motion.	B.B.R.Vol-4,page no 778
67	<i>Shankhachurnadi Lepa</i>	Churna	-	-	Body hair removal.	B.B.R.Vol-5,page no 74
68	<i>Pratham Shankhadi Lepa</i>	Lepa	-	-	Body hair removal	B.B.R.Vol-5,page no 74
69	<i>Dvitiya Shankhadi Lepa</i>	Lepa	-	-	Body hair removal	B.B.R.Vol-5,page no 74
70	<i>Tritiya Shankhadi Lepa</i>	Lepa	-	-	Tumor, Lipoma.	B.B.R.Vol-5,page no 75
71	<i>Shankhanabhya dya Varti</i>	Varti	-	-	Cataract, Pterigium.	B.B.R.Vol-5,page no 83
72	<i>Shankhapushpadi Vati</i>	Vati	-	-	Eye disorders.	B.B.R.Vol-5,page no 84
73	<i>Pratham Shankhadi Vatika</i>	Vati	-	-	Eye disorders.	B.B.R.Vol-5,page no 84
74	<i>Dvitiya Shnakhadi Vatika</i>	Vati	-	-	Eye disorders.	B.B.R.Vol-5,page no 84
75	<i>Pratham Shankhady Anjan</i>	Anjana	-	-	All types of eye disorders.	B.B.R.Vol-5,page no 84
76	<i>Dvitiya Shankhady Anjan</i>	Anjana	-	-	Eye disorders.	B.B.R.Vol-5,page no 85

77	<i>Shilanj Anam</i>	<i>Anjana</i>	-	-	Cataract.	B.B.R.Vol-5,page no 87
78	<i>Shuklari Varti</i>	<i>Varti</i>	-	-	Pterigium	B.B.R.Vol-5,page no 87
79	<i>Shankha garbha pottali Rasa</i>	<i>Vati</i>	125mg	<i>Pippali churna, Honey</i>	Loss of strength.	B.B.R.Vol-5,page no 94
80	<i>Shankhachula Rasa</i>	<i>Vati</i>	4gm	Honey	Hiccoughs	B.B.R.Vol-5,page no 95
81	<i>Shankha Churna</i>	<i>Churna</i>	1gm	-	Rheumatoid arthritis,Pain,Intestinal disorders.	B.B.R.Vol-5,page no 95
82	<i>Dvitiya Shankha Churna</i>	<i>Churna</i>	1gm	Warm Water	Pain, Loss of appetite.	B.B.R.Vol-5,page no 95
83	<i>Shankha drava</i>	<i>Vati</i>	6 Drops	-	Regurgitation of abdomen, Splenomegaly, Hepatomegaly.	B.B.R.Vol-5,page no 98
84	<i>Shankhadravako Rasa</i>	liquid	1 Drop	-	Fissure,Urinary stone,Kidney Stone.	B.B.R.Vol-5,page no 100
85	<i>Shankhadrava Rasa</i>	<i>Vati</i>	4gm	-	Regurgitation of abdomen, Splenomegaly, Hepatomegaly	B.B.R.Vol-5,page no 100
86	<i>Shankhanabi Churna</i>	<i>Churna</i>	1gm	-	Splenomegaly	B.B.R.Vol-5,page no 101
87	<i>Pratham Shankhapottali Rasa</i>	<i>Vati</i>	1gm	-	Loose motion, Fever, Cough, Cold.	B.B.R.Vol-5,page no 102
88	<i>Shankhabhasma kar Rasa</i>	<i>Vati</i>	4gm	Butter	Pain	B.B.R.Vol-5,page no 103
89	<i>Shankhayoga</i>	<i>Vati</i>	-	-	Jaundice	B.B.R.Vol-5,page no 104
90	<i>Shankha Vati</i>	<i>Vati</i>	1gm	-	Indigestion,Pain.	B.B.R.Vol-5,page no 104
91	<i>Pratham Shankh Vati</i>	<i>Vati</i>	1gm	-	Pain, Indigestion, Loss of appetite.	B.B.R.Vol-5,page no 104
92	<i>Dvitiya Shankha Vati</i>	<i>Vati</i>	125mg	-	Cough,Cold,Loss of appetite.	B.B.R.Vol-5,page no 105
93	<i>Chaturtham Chinchashankha Bhasma</i>	<i>Bhasma</i>	250mg	-	Regurgitation in abdomen,Indigestion , Loss of appetite,Pain,Pricking pain in abdomen.	B.B.R.Vol-5,page no 106
94	<i>Pancham Shankha Vati</i>	<i>Vati</i>	500mg	-	Gastro-intestinal disorders,Acidity	B.B.R.Vol-5,page no 106

					,Pain, Loss of appetite.	
95	<i>Shatam Shankha Vati</i>	<i>Vati</i>	125mg	-	Ingestion, Pricking pain in abdomen, Pain.	B.B.R.Vol-5,p106
96	<i>Shankheshwar Rasa</i>	<i>Vati</i>	-	-	Tuberculosis	B.B.R.Vol-5,p110
97	<i>Shankhodara Rasa</i>	<i>Vati</i>	125mg	Butter	Diarrhea and Dysentery	B.B.R.Vol-5,p110
98	<i>Shambukadya Vatika</i>	<i>Vati</i>	3gm	-	Pain,Abdominal disorders,Diarrhea and Dysentery.	B.B.R.Vol-5,p116
99	<i>Shitari Rasa</i>	<i>Vati</i>	62.5mg	-	Fever with chills.	B.B.R.Vol-5,p139
100	<i>Shulahar kshar</i>	<i>Vati</i>	12gm	-	All types of pain.	B.B.R.Vol-5,p149
101	<i>Shadanga Kwath</i>	<i>Kashay</i>	-	-	Pain,Pain in ear,Blindness.	B.B.R.Vol-5,p177
102	<i>Swarjikadi Lepa</i>	<i>Lepa</i>	-	-	Tumors.	B.B.R.Vol-5,p289
103	<i>Saindhavadi Varti</i>	<i>Varti</i>	-	-	Male infertility	B.B.R.Vol-5,p295
104	<i>Sphatikadi Varti</i>	<i>Varti</i>	-	-	Male infertility	B.B.R.Vol-5,p295
105	<i>Sutashekhar Rasa</i>	<i>Vati</i>	250mg	Ghee, Honey	Pain,Cough,Gastro-intestinal disorders,Loss motion.	B.B.R.Vol-5,p372
106	<i>Sutikaharo Rasa</i>	<i>Vati</i>	125mg	-	Post-delivery disorders.	B.B.R.Vol-5,p376
107	<i>Siskadiyoga</i>	<i>Vati</i>	-	-	Hair disorders	B.B.R.Vol-5,p428
108	<i>Haritaladi Lepa</i>	<i>Lepa</i>	-	-	Abdominal disorders	B.B.R.Vol-5,p471
109	<i>Haritakyadhy Anjan</i>	<i>Anjana</i>	-	-	Eye disorders	B.B.R.Vol-5,p477
110	<i>Hiranyagarbhapotkali Rasa</i>	<i>Vati</i>	250mg	Ghee, Honey	Gastro-intestinal disorders,Loss of appetite,Loose motion.	B.B.R.Vol-5,p492
111	<i>Hutashan Rasa</i>	<i>Vati</i>	250mg	Ginger juice	Loss of appetite, Pain, Loss of taste.	B.B.R.Vol-5,p501
112	<i>Kshartamra Rasa</i>	<i>Vati</i>	250mg	-	Cough,Cold, Running Nose.	B.B.R.Vol-5,p538
113	<i>Akshyayoga</i>	<i>Vati</i>	-	-	Eye Disorders	B.B.R.Vol-5,p589
114	<i>Agnikumar Rasa</i>	<i>Vati</i>	125mg	-	Loss of appetite, Indigestion, Fever,	B.B.R.Vol-5,p592

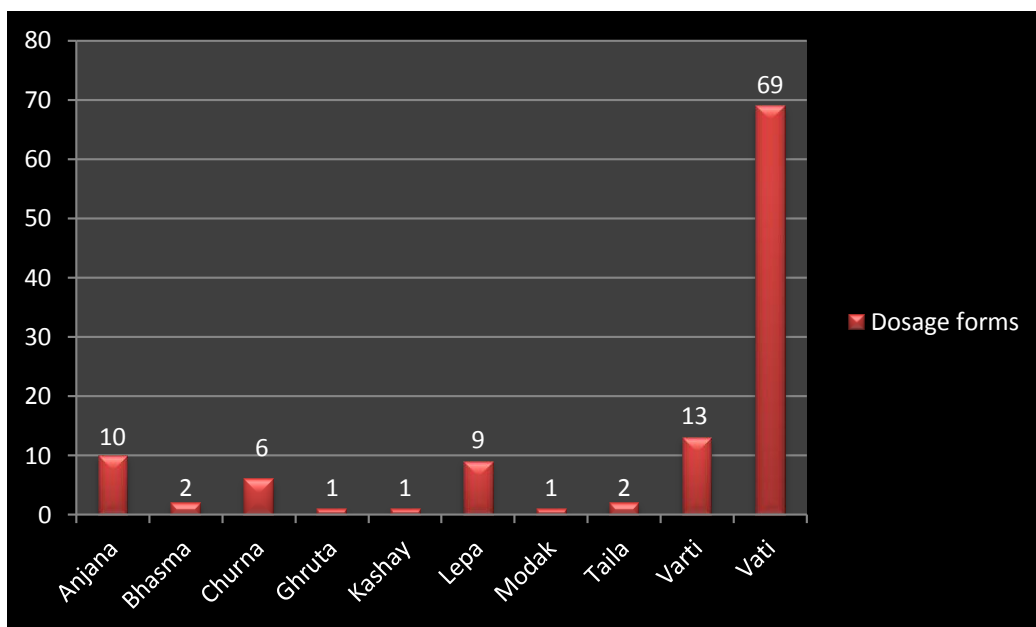


Figure 1. Different dosage forms of *Shankha Bhasma*.

Discussion

The Ayurvedic medicinal formulations preparations i.e. Pharmaceuticals is an important part of Ayurveda and were evolved gradually from a simpler form to more complex forms based on herbo and herbo mineral combinations. There are several pharmaceutical preparations described in all texts such as *Anjana* (collyrium) *Bhasma*, *Churna* (powder), *Kashaya* (decoction), *Lepa* (topical applications), *Varti* (suppository) *Vati* (tablets) etc. developed for therapeutic purpose. *Bharat Bhaishajya Ratnakara* written by Vaidya Nagindas Chaganlal Shah drurng a period of 20th century in five volumes. It is the compilation of herbal, herbomineral and mineral formulations described in previously published *Rasa* texts. It contains total 114 formulations in different dosage forms having *Shankha Bhasma* as one of the ingredients as shown in table 1. These all formulations are having a different therapeutics potential and indicated in diverse disorders such as *Amlapitta* (hyperacidity), *Grahani* (irritable bowel syndrome), *Udarshula* (abdominal colic), *Parinamshula* (duodenal ulcer) and *Atisara* (diarrhoea). Out of 114 formulations, 69 are of tablet forms which is one of the most preferred formulation due to its accurate dosage, non palatability and easy administration [5]. *Anupana* plays a vital role in therapeutics. Some of the specific formulations required specific *Anupana* like *Shankhodara Rasa* is advised to be taken with *Navneet*. Honey, warm water, ginger juice is found frequently used *anupanas*. *Anuapan* is a carrier which helps to carry the drug to the target organ and can enhance the activity of the drugs. It also aids in the rapid absorption and assimilation of medications. *Anupanas* are sometimes utilized to induce an antidotal effect [6].

Anjana kalpana (Application of collyrium)/ *Anjana* is a procedure of applying medicine in the form of *Gutika*, *Raskriya* or *Churna* (powder) to the inner side of lower lid either by fingertip or by *Anjanashalaka* (probe) [7]. Total 10 *Anjana*

formulations are available in BBR of which *Shankhadyanjana* provided significant relief on breadth of *Avrana Shukla* (Corneal opacity) [8]. *Manashiladyanjana*, another formulation of *Shankha bhasma* and *Manasila* (Red arsenic) is suggested in the treatment of eyes, skin, respiratory tract and oral cavity [9]. *Haritkyadyanjana* in the form of *Haritkyadi* eye drops is showing considerable results in ophthalmia neonatorum [10]. *Bhasma* is a calcined preparations (ash) in which the mineral, gem, or metal is converted into ash after its purification and treated by triturating in herbal extracts, then followed by incineration. The nano-size particles are not only increased the surface area but the size of the drug help to reach the target site efficiently and it shows different therapeutic potential individually [11]. Only two *Bhasmas* BBR has mentioned for Gastro-intestinal disorders is *Chincha shankha Bhasma* and *Laghushankha Bhasma* which is known for its antiulcer effects in rats [12]. *Churna* (Powder formulations) term is applied to the powder prepared by using a single drug or a combination of more drugs in dried form. Particular *Churna* formulations are formulated by collecting drugs as mentioned in formulations, individually powdered and prepare fine powder by using 85 number sieve and then mixed with particular proportion [13]. In BBR there are about six *Churna* formulations are described. In which *Putikaranjyam Churna* (*Caesalpinia bonducella* Linn.) has also been found to exert a soothing, anti-inflammatory action, which makes it particularly beneficial for improving an enlarged prostate [14]. *Shankha Nabhichurna* (dusting powder) named as per the ingredients in it, used successfully in diaper dermatitis for symptomatic reduction and irritability in children [15]. *Shankha Churna*, contrary to expectations, considerably increased gastric acid in a pharmacological research, and is thus used in gastrointestinal ailments [16].

Sneha Kalpana (Medicated fatty formulations) is a pharmaceutical process to prepare oleaginous medicaments. It can be said a lipophilic compounds in Ayurveda. *Ghritha* and *Taila* are remarkable examples of the application of food formats to deliver drugs. A liposome is micro-unit of *Snehakalpana*, which carry an active component to target cell topically or internally [17]. BBR mentioned two *Taila* formulations and one *Ghritha* formulation of which *Karpuradi Taila* (Camphor oil) is having quality to reduce pain, cramps, stiffness, and numbness. It contains Camphor (*Cinnamomum camphora* Linn.) and sesame oil and *Shankha Bhasma* [18]. *Lepa Kalpana* (Topical dosage form) is the herbal preparation used for external use. In *Lepa Kalpana* different herbal drug in the form of powder is taken and triturated with different media to form paste and applied externally as *Lepa* [19]. Total 9 *Lepa* formulations has mentioned in BBR in which *Gunjadi lepa* is effective in *Vrana*, *Kushtha* [20]. *Shankhadi-Lepa*, *Swarjikadi lepa*, *Haritaladi lepa* show *Lomashatana* property as it contain *Shankha* and *Sarjikshar* [21].

Modaka Kalpana (tablet preparation) a well-known *Ayurvedic* preparation where fine powders of all the drugs are mixed with *Guda* (jiggery) and *Modaka* is prepared [22]. *Guduchyadi Modaka* containing *shankha bhasma* is very effective in gastrointestinal disorders. It is also having anti-diabetic, antipyretic and antispasmodic property [23]. *Varti Kalpana* (Formation of Suppository) basically comes under "Vati" *Kalpana*. The major difference is in shape and use. *Vartis* are elongated with tapering ends while *Vatis* are in round shape. *Vartis* are used externally as well as internally. Depending upon organ and action *Vartis* are classified in different types [24]. Total 12 *Varti* preparations present in BBR which contain *Shankha Bhasma*

as one of the ingredient of which *Chandrodaya Varti* is used in the various eye ailments like Cataract, Pterygium, Night blindness, Granular Eyelid disorder, Itching, Conjunctivitis [25]. *Vati Kalpana* (Tablet Preparations) prepared in the form of pills is known as *Vati*. These are made up of one or more drugs of plants, animal and mineral origin. Fine powder of medicinal drugs mixed with various liquid media and prepared in various sizes called as *Vati* [26]. Total 69 tablet formulations are described in *BBR* of which *Agnikumar Rasa* found effective in the management of loss of appetite and indigestion [27]. *Hiranya Garbha Pottali Rasa* used in treatment of digestive disorders [28]. *Sutshekhar Rasa* [29], *Shankha Vati* [30] and *Shankha Dravaka Rasa* [31-33] are abundantly used in the *Amlapitta* disorders and gastrointestinal disorder. *Shankha* having the property to reduce the *Pitta* Vitiations hence suggested in hyperacidity. Those formulations are prescribed for certain ailments, but because of the synergetic impact of each medicine in each formulation, each Ayurvedic formulation has the extra benefit of acting on several levels to provide therapeutic benefits. As a result, they can serve as multiple therapeutics. As previously stated in many illnesses, a large number of formulations have yet to be confirmed about their efficacy. As a result, more research is required.[34-41]

Conclusion

Bharat Bhaishajya Ratnakar has mentioned about 114 Ayurvedic formulations containing *Shankha bhasma* in different dosage forms which can be mainly used in gastro-intestinal disorders. Different dosage forms are developed by processing the raw drugs in significant manner for their better absorption, distribution, metabolism, and excretion. As gastro-intestinal diseases are a broad topic to deal with, *Shankha bhasma* formulations can provide gastro-intestinal protective drugs without any side effects. The present work will be valuable in recognition of newer formulation and their therapeutic applications. If further such studies are planned with other formulations then it will be boon to the patients suffering from gastro-intestinal and other disorders.

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References

1. Raja Radhakant deva. *Shabdkalpadrum*: Vol.5, 3 edition Chaukhamba Sanskrit Series office: Vara-nasi,1967, p11
2. Angadi R. *Rasatarangini*, Choukhamba Surbharati Prakashan ,1st ed-2015,Varanasi,12-2,p.192.
3. Dukare P, Rathi B. Pharmaceutico-Analytical Study Of shankha bhasma Prepared By Two Different Methods And Evaluation Of Its Relative Oral Bioavailability In Healthy Volunteers. *European Journal of Molecular & Clinical Medicine*. 2020;7(11):2020.

4. Shah Nagindas C. Bharat Bshhajya Ratnakar, Vol I to V B. Jain Publishers Pvt Ltd, New Delhi 2nd edition, 1999.
5. Rathi B, Rathi R. Pharmaceutical standardization of Bakuchi vati: A modified dosage form of Dhatryadi Yoga, *International Journal of Research in Ayurveda and Pharmacy*, 2017;8(1):57-61
6. Rathi B, Rathi R. Principals of ethical ayurveda prescription writing in clinical practice: A literature review. *Journal of Datta Meghe Institute of Medical Sciences University*. 2019;14(6):97.
7. Bagde A., Ramteke A. Critical review of anjanakriya (application of collyrium) in ayurvedic literature , *World journal of pharmacy and pharmaceutical sciences*, 2019; 8(4): 520-528
8. Pawar A. Thorat S. Evaluation And Comparison Between Shankhadi Rasakriya Anjana And Madhu Anjana In The Management Of Avrana Shukla With Special Reference To Corneal Opacity *World Journal of Pharmaceutical Research* 2019;8(13):1082-1088
9. Sharma V., Reddy KRC., Singh G., An Ayurvedic review on therapeutic potentials of manashila –A review , *Innovare journal of Ayurvedic sciences*, 2016;4(3):1-6
10. Srikantha KV, Chethan Kumar VK and Nagaratna SJ, Preparation of Haritakyadi eye drops: An Ayurvedic formulation for ophthalmia neonatorum, *The Pharma Innovation Journal* 2018; 7(6): 590-593.
11. Garde D, Rathi B, Wanjari A, Rajput D. Pharmaceutical standardization of Kapardika Bhasma prepared by three different varieties. *Journal of Indian System of Medicine*. 2017 Oct 1;5(4):249.
12. Pandit S, Sur TK, Jana U, Bhattacharyya D, Debnath PK. Anti-ulcer effect of Shankhabhasma in rats: a preliminary study. *Indian Journal of Pharmacology*. 2000; 132(6):378-80.
13. Shelke S, Rathi B. Review on Dhatryadi Churna: An Ayurvedic Antipyretic Polyherbal Formulation. *Indian Journal of Forensic Medicine & Toxicology*. 2020 Oct 1;14(4):6968-6972
14. Shrivastava A., Gupta V., Various treatment options for benign prostatic hyperplasia: A current update, *Journal of Mid Life Health*, 2012 Jan-Jun;3(1):10–19.
15. PuranikP., Sharashchandra R. Sariva shankhanabhi churna: A topical dusting powder for diaper dermatitis, *The Pharma Innovation Journal* 2019; 8(1): 282-284
16. Kodlady N, Patgiri BJ. Varieties in ShankhaVati-An Ayurvedic classical formulation for GIT disorders. *Annals of Ayurvedic Medicine*. 2012;1(3):102-8.
17. Singh N, Chaudhary A. A comparative review study of Sneha Kalpana (Paka) vis-a-vis liposome. *AYU*. 2011 Jan;32(1):103-8.
18. Suganya Jenifer F. Effectiveness of camphor oil application on reduction of joint pain among menopausal women at selected rural areas, Coimbatore .Doctoral dissertation, PPG College of Nursing, Coimbatore, 2014
19. Dhote M, Rathi B, Rajput DS, Dongre R. A review on Lepa Kalpana: An inherent topical formulations described in Sharangadhar Samhita. *Journal of Indian System of Medicine*. 2019 Apr 1;7(2):75.
20. Dahikar GK, Rathi B, Rathi R. Exploring the therapeutic potential of Gunja (*Abrus precatorius* Linn.): A classical semi-poisonous herbal drug. *International Journal of Botany Studies*, 2020;5(6): 87-94

21. Bhagavathi N.N.L, Rajkumar C, Srikanth B, A Bird's Eye View of Trichology In Ayurved, *World Journal of Pharmaceutical Research*, 2016;6(2):441-451
22. ShelavaleV, AtramR, KolteS, Pharmacognostical and Pharmaceutical Evaluation of Guda-Haritakyadi Modak –An Ayurvedic Compounds, *European Journal of Pharmaceutical and Medical Resaerch* ,2020,7(7),910-914,ISSN2394-3211.
23. Mishra G, Pandya D H, A Pharmacognostical And Physico-Chemical Analysis Of Guduchi Modaka (VATI), *International Journal of Applied Ayurved* 2018;3(10):1459-1464
24. Shevalkar HS, Dubewar A. Review of Netravarti. *Journal of Ayurveda and Integrated Medical Sciences*. 2021 Apr 30; 6(02):92-5.
25. Vyas M, Patgiri V.J.Process Validation of *Chandrodaya Varti*– an Ayurvedic Ophthalmic Suppository , *International Journal of Pharmaceutical & Biological Archives* 2012; 3(2):296-299.
26. Choudhary A, Review of vati Kalpana w.r.s. to Sharandharokata vatikalpana, *International Ayurvedic Medical Journal*, 2017;5(12): 4469-4475
27. Katterao B, Asore G, Review of Literature of *Agnikumar rasa* –A herbo-mineral Ayurvedic formulation, *Ayurlog Natioanl Journal of Research in Ayurved*, 2019;7(1):1-8
28. Kothari S, Singh R, Math P, Motghare K, Soni D., Rasakalpas & Pottali Kalpana In Rasashastra, *World Journal Of Pharmaceutical And Medical Research*, 2019;5(4):171-174
29. Kumar A, Singhal T, Scientific Explanation Of Mode Of Action Of Sutshekhar Ras In Amlapitta With Special Reference To Acid Peptic Disorders: A Review, *International journal of research in Ayurveda and pharmacy*, 2018;9(5):47-49
30. Kodlady N, Patgiri BJ. Varieties in Shankha Vati-An Ayurvedic classical formulation for GIT disorders. *Annals of Ayurvedic Medicine*. 2012;1(3):102-8.
31. Jibkate BR, Rathi BJ, Wanjari AS, Rajput DS. Critical review on pharmaceutical prospects of acid formulations described in Ayurveda classics with respect to Draavak Kalpas. *Journal of Indian System of Medicine*. 2019 Jan 1;7(1):33.
32. Gondivkar SM, Indurkar A, Degwekar S, Bhowate R. Evaluation of gustatory function in patients with diabetes mellitus type 2. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*. 2009 Dec 1;108(6):876-80.
33. Prasad N, Bhatt M, Agarwal SK, Kohli HS, Gopalakrishnan N, Fernando E, Sahay M, Rajapurkar M, Chowdhary AR, Rathi M, Jeloka T. The adverse effect of COVID pandemic on the care of patients with kidney diseases in India. *Kidney international reports*. 2020 Sep 1;5(9):1545-50.
34. Walia IS, Borle RM, Mehendiratta D, Yadav AO. Microbiology and antibiotic sensitivity of head and neck space infections of odontogenic origin. *Journal of maxillofacial and oral surgery*. 2014 Mar 1;13(1):16-21.
35. Lohe VK, Degwekar SS, Bhowate RR, Kadu RP, Dangore SB. Evaluation of correlation of serum lipid profile in patients with oral cancer and precancer and its association with tobacco abuse. *Journal of oral pathology & medicine*. 2010 Feb;39(2):141-8.
36. Korde S, Sridharan G, Gadbail A, Poornima V. Nitric oxide and oral cancer: A review. *Oral oncology*. 2012 Jun 1;48(6):475-83.
37. Gondivkar SM, Gadbail AR. Gorham-Stout syndrome: a rare clinical entity and review of literature. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*. 2010 Feb 1;109(2):e41-8.

38. Gadbail AR, Chaudhary M, Gawande M, Hande A, Sarode S, Tekade SA, Korde S, Zade P, Bhowate R, Borle R, Patil S. Oral squamous cell carcinoma in the background of oral submucous fibrosis is a distinct clinicopathological entity with better prognosis. *Journal of Oral Pathology & Medicine*. 2017 Jul;46(6):448-53.
39. Gadre PK, Ramanojam S, Patankar A, Gadre KS. Nonvascularized bone grafting for mandibular reconstruction: myth or reality?. *Journal of Craniofacial Surgery*. 2011 Sep 1;22(5):1727-35.
40. Sorte K, Sune P, Bhake A, Shivkumar VB, Gangane N, Basak A. Quantitative assessment of DNA damage directly in lens epithelial cells from senile cataract patients. *Molecular vision*. 2011;17:1.
41. Basak S, Rajurkar MN, Mallick SK. Detection of *Blastocystis hominis*: a controversial human pathogen. *Parasitology research*. 2014 Jan;113(1):261-5.