

A Review of Lokanatha rasa with special reference of *Puta Paka* preparation method

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ABSTRACT: Rasa shastra is an ancient pharmaceutical science dealing with mercury, minerals, metals, gems, calcium-containing materials, and some poisonous materials. Due to its quick action, usage in smaller doses, and its long stability these rasaushadies playa vital role among Ayurveda drugs. According to the preparation method, all rasushadiesare divided into 4 types. They are Kalveeyarasayana (prepared by using mortar and pestle), Papatirasayana (thin flaky preparation), Kupipakwarasayana (prepared inside a glass bottle), and pottalirasayana (prepared into a scattered and comprehensive form.) Lokanatha rasa, is an important rasa preparation mentioned in classical Ayurveda rasa shastra texts. Different lokanatha rasa formulae are mentioned in classical Rasa shastra texts and the preparation methods of all these formulae are similar to the pottali preparation method. Some preparations follow the putapaka after bhavana procedure while some follow the kapardapurnaputapaka method. But all these preparations are not termed as pottali. Lokanatha rasa is a sagandhasagni mercurial preparation prepared according to the pottali preparation method. Furthermore, puta paka method followed by bhavana preparation method is therapeutically effective for liver, spleen, gulma, agnimandya, and dhathuksaya diseases to giving dhathupushtikara and rasayana effect. Lokanatha rasa prepared by kapardapurnaputapaka method, is effective for disorders such as Athisara and grahani.

KEY WORDS: Rasaushadi, Pottalirasayana, Lokanatha rasa

I. INTRODUCTION

Rasa shastra is an ancient pharmaceutical science that dealt with mercury, minerals metals, gems, calciumcontaining materials, and some poisonous materials. Due to its quick action, usage in smaller dosage, and long stability period, these rasaushadies play a vital role among Ayurveda drugs¹. According to the preparation method, all these rasushadies can be divided into 4 types. They are Kalveeyarasayana (prepared by using mortar and pestle), Papatirasayana (thin flakes like preparation), Kupipakwarasayana (prepared inside a glass bottle), and pottalirasayana (prepared into scattered and comprehensive form. 2) According to the preparation method pottali can be classified into three types. They are bhavana, putapaka and gandhakadravapaka. In bhavana method, the ingredients are triturated with prescribed liquid media. In putapaka method, the ingredients are triturated with the recommended liquid or ingredients after filling it into a shell of cowrie or conch and by closing its hollow part by using the Tankana(borax) paste, that is prepared by cow's milk or cow's urine subjected to puta paka by using varaha to gaja puta².Gandhakadravapottali is prepared by keeping the ingredients inside the molten sulphur. Lokanatha rasa (LKR) is an important rasushadi which is a very common preparation in Ayurveda practice. Number of different formulations with the same name is explained in Rasa shastra literature. When considering the preparation methods, most of the textual references reveal that the LKR is prepared according to the pottalikalpana method. All LKR is prepared by bhavana followed by puta paka method or kapardapurnaputapaka method. But the importance is that none of these LKR preparations are termed as pottali. The objective of the present study is to compile available textual references of LKR prepared into puta paka method, and study the dose, anupana, preparation method, and indication related to the preparation.

II. MATERIALS AND METHOD

Several references regarding different pharmaceutical preparations onLKR from various rasashastra texts and all the available literature regarding pharmacological action and properties of the drugof each text has been noted. Also, information gathered by reviewing related research articles on internet and print media.

Finally, the ingredients of the formulae were reviewed and the most probable mode of actions as per indications of the formulae was understood.

Ingredientsand preparation method of LKR (Prepared by using putapaka method) mentioned according to different rasa shastra text

(Please refer table 01 included at the end of the document)

Various indications, dose and anupana of LKR

(Please refer table 02 included at the end of the document)

Pharmacodynamic properties and indications of lokanatha rasa and Accorrding to different texts^{11,12} (*Please refer table 03 included at the end of the document*)

III. DISCUSSION

LKR is an important mercurial preparation mentioned in Rasa shastra. Most of rasa shastra texts follow the pottali preparation method for the preparation of LKR. However, it is not termed as pottali. After reviewing the pharmaceutical preparation of LKR from Rasendrasarasangraha, Rasendrachinthamani, 2 formulas from Bhaisajjarathnavali and one formula of Rasa rathnasamuchchaya it was clear that the putapaka method followed by bhavana with different liquids was followed. Sharangadharasamhitha, 1 formula of Bhaisajjarathnavali and 2 formula of Rasa rathnasamuchchaya followed putapaka by using kapardapurna. Due to bhavana process mineral materials enhance their potency by grinding them with herbal materials and formed them as herbo-mineral preparation. Being a mercurial product LKR has quick absorption and assimilation throughout the body. When parada is administered internally it can be used in three conditions as murchitha, badda, or maritha. Most rasa preparations are prepared by using murchithaparada and LKR too can be considered as a murchithaparada preparation. Administration of murchithaparada preparation can cure all the diseases in the human body. According to the utilization of heat, these murchithaparada preparations can be sagni or niragni preparations. In the presence of gandhaka they can be classified as sagandha and nirgandha. Therefore, according to the classical rasa shastra textual references LKR is considered as sagandhasagni preparation, and that is prepared according to pottali preparation. Being a sagandha preparation every time parada is bonded with Gandhaka and prepared into kajjali form. Due to the presence of kajjali in this preparation it is has high vogavahi property and this property can be assimilated in the body quickly. Also, in Rasarathnasamuchchaya two recipies have rasa basma instead of kajiali. These two preparations are mentioned in Rajavakshmachikithsaadikara and udavarthachikithsa. Mostly rasasindura is considered as rasa basma. It can act as a yogavahi material which can act as paramarasayanavrushyabalavardhaka and agnideepthaka. Therefore, due to the presence of rasa basma the drug acts in the body very quickly and a very quick relief can be given to the patients. Additionally, in rasa rathnasamuchchaya there is 1 formula mentioned that consists of swarnabasma and it is indicated for Rajayakshma. Due to the presence of swarnabasma the preparation gets vrushya, balya, and rasayana effect. Therefore, swranabasma is considered as the potentiate material for mercurial preparations such as LKR. When considering the preparation method agni plays a major role in LKR preparations. Method of all of these preparations are subjected to a unique heat and the heat varies between varaha puta to gaja put i.e. 200°C-1000°C. Due to this temperature bonds between the ingredients become more stable and the materials become laghu (light) in nature. This stable and laghu nature potentiate the preparation and also, it can act as a high therapeutic preparation. Comparing the puta paka followed by bhavana method with kapardapurnaputapaka preparations, kapardapurnaputapaka preparations consists of a high amount of calcium. Because calcium is the one of most effective materials for GIT tract disorders, most kapardapurna puta paka preparations are indicated for GIT tract disorders like grahani and athisara.

IV. CONCLUSION

Lokanatha rasa is a sagandhasagni mercurial preparation prepared according to pottali preparation metod. Nevertheless, it is not termed as pottali. Other than Rasa rathnasamuchchaya most of the formulae prepared by putapaka followed by bhavana is indicated liver spleen and agnimandya conditions. Formulae followed in kapardapurnaputapaka methods are mainly indicated for Athisara, grahani like GIT tract disorders.

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Textual Reference	Shuddhaparad a	Shuddhagand haka	Abhrab asma	Lauhab asma	Thamrab asma	Varatikab asma	Rasa basma	Thuttha	Shankhab asma	Swarna basma	Type of putapaka	Bhavana Materials
Rasendrasarasangr aha (Pleeharogachikitsa) ¹	+ 1part	+ 1part	+ 1part	+ 2 parts	+ 2 parts	+ 6parts	-	-	-	-	Gaja puta	Nagavalli juice (Beetle juice)
Sharanghadara samhitha ³	+2 parts	+2 parts	-	-	-	-	-	-	-	-	Kapardapurna (mouth of kaparda closed by paste of milk and tankana) Gaja puta	
Rasendra chinthamani ⁴ Udara rogaadhikara	+ 1part	+ 1 part	+ 1part	+ 2parts	+ 2parts	+ 6 parts		-	-	-	Gaja puta	Nagavalli juice (Beetle juice)

Bhaisajja rathnawali ⁵ 1ST formula (Athisarachikithsa)		+4 parts					+1 part				Kapardapurna (mouth of kaparda closed by paste of honey and tankana Gaja puta	Nagavallijuice(Beet le juice)
2 nd formula Plihayakrida roga ⁶	+1 part	+1 part	+1 part	+2 parts	+2 parts	+3 parts					Laghu puta	Nagavalli juice (Beetle juice)
3 rd Formula Plihayakrida roga ⁶	+1 part	+1 part	+1 parts	+2 part	+2 parts	+4 parts					Laghu puta	Nagavalli juice (Beetle juice) After grinding for 3 hrs.
Rasajalanidhi Udara rogachikithsa ⁷	+ 1part	+ 1 part	+ 1 part	+ 1 part	+ 1 part	+	-	-	-	-	Gaja puta	Nagavalli juice (Beetle juice)

Rasa rathnasamuchchaya 1 st formula Rajayakshma chikithsa ⁸		+2 parts				+1part		+1/4parts	Kapardapurnamou thofkaparda closed by paste of milk and tankan Arathni size pit for puta	Chithrakakwatha
2 nd formula Rajayakshma chikithsa ⁹	+ ½ Nishka	+ 1 Karsha	+ 2 karsha	+ 9 karsha		+ 1⁄2 Nishka	+ 1 karsha		Varaha puta	Arka leaf juice
3 rd formula Udawartha chikithsa ¹⁰		+4 parts			+1 part				Kapardapurna Mouth of kaparda closed by cow's milk and tunkana paste Gaja puta	

Table 02

LKR prepared by putap	aka method followed by bhavana		
Name of the text	Indication	Dose	Anupana
Rasendrasarasangraha	for liver spleen disorders, gulma, shotha, jeernajwara, pandu, kamala and agnimandaya conditions.	two gunja	Pippalichoorna with honey, harithaki powder with guda and jeeraka powder with guda

Rasendrachinthamani	Same as Rasendrasarasangraha	Same as Rasendrasara sangraha	Same as Rasendrasarasangraha
Rasajalanidhi	Same as Rasendrasarasangraha	Same as Rasendrasara sangraha	Same as Rasendrasarasangraha
BhaisajjaRathnavali			
1 st formula	Same as Rasendrasarasangraha	Three gunja	Same as Rasendrasarasangraha
2 nd formula	Liver spelen disorders, Udara, Agnimandya, sarwajwara	two gunja	AdrakadravathenKhadirakwatha
Rasa rathnasamuchchaya	Rajayakshma	1/8 th Nishka	¹ / ₂ Nishkamarichachoorna mixed with1 NishkaGandhaka with gomuthra
	LKR prepared by putapaka method followed by kapardapurna		
Sharanghadarasamhitha	Vatadisorders,Pitta,kaphaatisara, Kshaya, Aruchi, Grahani, Malabadda, Mandagni, Kasa, Swasa, Gulma	Six (6) gunja Mixed with 29 maricha seeds (pepepper seeds)	Ghee for vathajadisorders,butter for pittaja disorders and,honey for kaphaja disorders.
BhaisajjaRathnavali	Sarwaathisara	Four (4) Gunja	Honey Also take the decoction of dried ginger, athivisha, mustha, devararu, and vacha.

Rasa rathnasamuchchaya			
1 st formula	Pushtikara ,veeryavardhaka	Four (4) gunja	Ghee,Marichachurna
3 rd formula	Vathathisara	Four (4) gunja	Honey Nagara, athivisha, mustha and devadarukashaya for vaththisara

Table 03

					Table 05
Ingredients of	Rasa	Guna	Veery	Vipa	Karma
lokanatha rasa			а	ka	
According to different texts					
Shuddaparada	Shad rasa	Sara, guru, snigdha			Yogavahi, Thdidoshagna, Rasayana, shodana, Sarvarogavarjitha
Shuddagandhaka	Katu	Sara, snigdha,	ushna,	Mad hura	Pachana, deepana, yogavahi, Kaphavatasamaka
Abhrabasma	Kashaya, madhura	Snigdha	sheeta	Mad hura	Deepana, balya, Pragnanabodha, Rupaprasada, Shareeradardyakara, Veeryasthambakara, Veeryavruddhi, Punsathvakara, Rasayana
Lauhabasma	Thiktha, Kashaya, Madhura	Sheeta, Sara, Guru, Ruksha	Sheeth a		Anilapaha, Shleshmahara, Thridoshahara
Thamrabhasma	Tiktha, Kashaya, Madhura	Laghu,sara, snigdha	ushna	Katu	Pittakapahara, urdhawaadahshodana, garavishahara, KSHUTKARMA
kapardabasma	Katu	Ruksha. Theekshna	Katu	Ushn a	Deepana, vrushya nethraya, Rasayana, shukrakara, rasendrajarana, doshari, vidanirmanakari

Tankana	Katu	Ruksha, theekshna	Ushna		Vathakapagna, pitthakruth, Hridya, Balya, Sthavaradee vishanashaka, Agnideepthikara, Sthreepushpajanana
Shankhabhasma	Kashaya, Katu	Laghu	Sheeta	Sheet a	Grahi.Balya, Lekhana, Agnideepana, Thridoshagna, Ksaya, visha, kshinatha, and Nethraroga, nashaka
Rasa basma		Yogavahi			Rasayana, vajeekarana, snayubalavardhaka,
swarnabasma	Madura, Kashaya, Thikta, Katu	Sheeta, Guru, Snigdha	Sheeta	Mad hura	Vrushya, Balya, Vrunhana, Rasayana, Medhya, Smruthiprada, Nethrya, Ayushya, Kanthikara, Vagvishudhikara, Sthirathvakruth, Pavithra, Rasayana, Paramavishagna, Garavishahara, Sukakhara, Lekhana, Deharogapramathi, Ruchya, Thvachcha, Varnya, Pushtipradha, Ojovardana, Vayassthirakara, Bhavasukakara, Thridoshagna
Thutthabasma	Katu, Kashaya, Madhura	Kshareeya	ushna	Katu	Lekhana, Bedhana, vamana, Krimigna, Chakshushya, Balya, Bhedana, Sankochakara, Garavishanashaka, Deepana, Medohara. Kaphapitthanashaka