

PHARMACOANALYTICAL STUDY OF BALYADI LEPA (CHURNA)

Dr. Suneel Kumar Rajpoot*¹, Dr. Vivekanand Kullolli² and Dr. Hitaba Gohil³

¹3RD Year Shalya P.G. Scholar Parul Institute of Ayurveda.

²Professor, b Department of Shalya Tantra Parul Institute of Ayurveda.

³In Charge, Central Research Laboratory Parul Institute of Ayurveda.

Corresponding Author: Dr. Suneel Kumar Rajpoot

³RD Year Shalya P.G. Scholar Parul Institute of Ayurveda.

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ABSTRACT

Ayurveda, the science of life, speaks about many types of treatments to get rid of human ailments *Shwitra* is one of the commonest skin disorders which is correlated with Vitiligo to certain extent in Contemporary system of medicine. And it is a *Raktadushtijanya vikaar.Sthanik Shaman* in the form of *lepa kalpana* to allow the locally applied drug to penetrate to the deeper dhatus i.e. *Rakta, mamsa* and *meda* is the need of the hour. *Balyadi Lepa* is taken up to overcome the limitations of the *shwitra* treatment. *Balyadi lepa* is a Herbomineral formulation having seven ingredients.

KEYWORDS: lepa, Shwitra, herbomineral, shodhana, balyadi.

INTRODUCTION

Ayurvedic medicines are mainly based on the plants and herbs. Even in the present era, when the science has reached to its maximum, the herbo-mineral drugs are still considered as an effective source of therapy. Herbo-mineral drugs are reserving the human society for curing various ailments from the time immemorial.

The term of lepa is originated from the word Lepana. Which is a commercial external use dosage form of our classical text. This dosage form is introduced in to *Ayurveda* by *Yogaratanakara*. *Balyadi lepa*.^[1] is a great composition is given in *Yogaratanakara Kustha Chikitsa Adhayay Shlok no. 58*. Which is very effective in *Shwitra Chikitsa*. Its constituent *Amaltas* (stem bark), *Nimba Twak* (stem bark), *Dantimool* (root), *Chitraka mool* (root), *Vayabidanga* (fruit), *Bhallatak* (fruit) and *Gandhaka*. And *Kanzi* used as a liquid to make in form of lepa (paste). Almost all ingredients are *varnya*, *krimighana*, *kusthaghana*, *swedajanan*, *shwitrahara*, *ranjana* and *dahashamaka*.

MATERIAL AND METHOD

Balyadi lepa is developed on the basis of *churna kalpana* process mentioned in *rasatantra sara siddha prayoga sangrah*. *Balyadi lepa* is a herbomineral formulation having seven ingredients in its composition. Ingredients of *Balyadi Lepa* are *Amaltas* (stem bark), *Nimba Twak* (stem bark), *Dantimool* (root), *Chitraka mool* (root), *Vayabidanga* (fruit), *Bhallatak* (fruit) and *Gandhaka*.

Pharmaceutical procedure

It is divided into different stage like

Stage 1 shodhana of ingredients of balyadi lepa

Stage 2. kanji preparation

Stage 3. balyadi lepa churna preparation

Stage 1- shodhana of balyadi lepa ingredients

Chitraka mool Shodhana- *Rakta chitraka mool* gave Lime water *Bhavana* after that dry in sun light its make pure to *chitraka mool*.^[2,3]



Chitrakmul shodhana

Bhallataka Shodhana- A- First of all take *bhallataka* fruit and fine powder of red brick, and fill in a cotton bag and rub in medium pressure. When brick powder absorb the oil of *bhallataka* fruit oil means when the skin of *bhallataka* fruit separate from it then its clean in warm water.^[4]

B- Make two pieces of bhallataka fruit, and fill the coconut water in a vessels and dip the bhallataka fruits in

the vessels and boiled 2 hours. This process make pure to bhallataka fruits.^[5]



Bhallatak shodhana

Gandhaka Shodhana- for gandhaka shodhana take a iron vessels and put on stove and pour pure cow ghee on it and warm it, when ghee hot properly then pour same quantity of fine powder of gandhaka and mix it with help of big spoon, when gandhaka came in liquid form then this liquid passed away a fine clean cotton cloth in milk

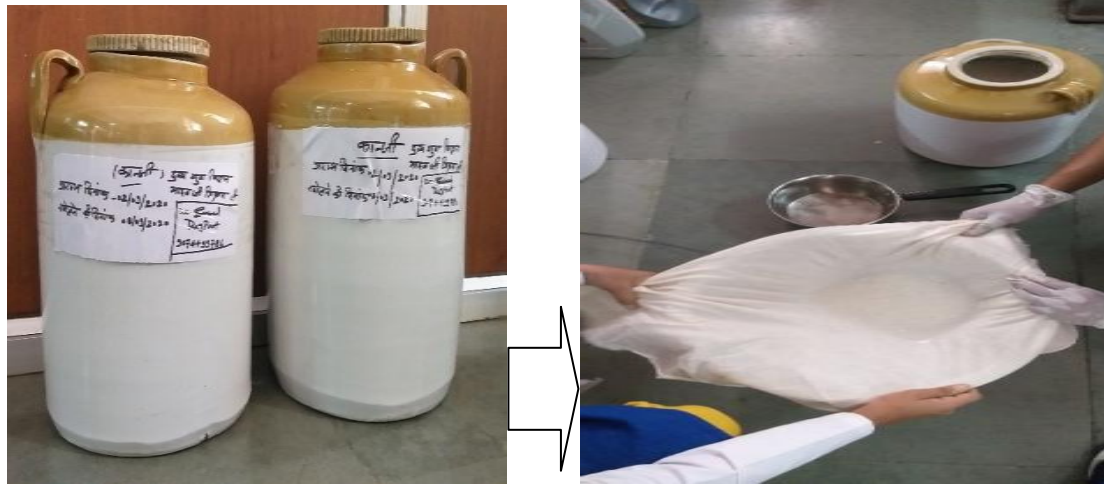
vessels and gandhaka take out from the milk vessels and wash with luke warm water. And this process we found solid form of gandhaka. And make a fine powder of gandhaka with the help of khalva yantra. Above mentioned process applied three time for purification of gandhaka for external use only.^[6]



Stage 2: kanzi preparation.

Take sathi rice and boiled in clay vessels and make rice. When rice ripe then mixed three time water in rice and filled in clay pot and vessels mouth packed air tight and after seven days after examine this solution filter by

cotton cloth and keep in glass bottle preparation of Lepa- Take drug powder and mixed with kanzi and get in Paste form.



Kanji Preparation

Stage 3. Balyadi lepa churna preparation

- Take all ingredients of balyadi lepa and make fine powder. disintrigatour,micropulverizer and shifter used for power making.
- Fine powder passed 80 #
- After that powder is homogenous mixed with help of mass mixture
- Fine powder of balyadi lepa packed in air tight container.

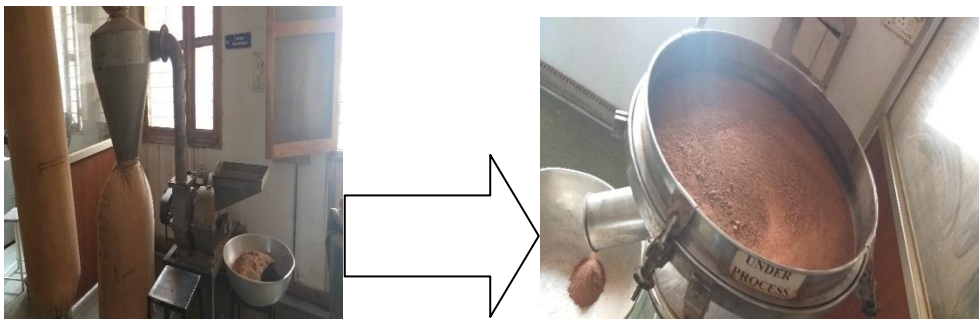


Table seen the ingredients of balyadi lepa.

Ingredients	Botanical Name	Quantity taken	Action
Vaybidanga	EmbeliaRibes	01 kg	Kaphavata- shamak Kushtha, Varnya
Chitraka	Plumbago Zeylanica	01 kg	Kaphavata-shamak, Pittavardhak,
Bhilawa	Semicarpus Anacardium	01 kg	Kaphavata-shamak, Pittavardhak
Dantimool	Baliospermum Montenum	01 kg	Kaphapittahar
Amaltas	Casia Fistula	01 kg	Vatapitta Shamak
Nimba	Azadirachta Indica	01 kg	KaphapittaShamak
Gandhak		01 kg	Twak vicar



Picture seen ingredients of Balyadi lepa

Precaution taken during shodhana process**1- Bhallatak**

- Use coconut oil on face hand and expose area, and wear gloves, face shield and mask properly.
- Bhallatak fruit break very carefully. And mixed with red brick powder properly.
- During boiling in plain water its rotate carefully.

2- Gandhak

- Use gloves, mask, hair cap properly.
- Always check heating temp. and melt carefully.
- Trichurate solid gandhak very carefully.
- Use precise amount of lime powder and mixed properly in normal water.

Precaution taken during kanji preparation

- Take good quality rice and clean it before using.
- Take rice and water in classical ratio.
- Use air tight clay pot for fermentation of rice.
- Check smell, flame test for surety of good kanji.

Precaution taken during lepa preparation-

- Homogenous mixture must be done
- Take sterile vessels for making of lepa.

- Use kanji by drop by drop in balyadi powder to make a good quality of lepa.
- Lepa use freshly and removed before drying.

Completion test of kanzi

Smell	Sour
Sound	Heezing
Flame test	Be extinguished

Result obtain of balyadi lepa

Parameter	Result
Raw material taken(in kg)	07 kg
Received quantity(in kg)	6.2 kg
Loss during preparation	0.8kg
Loss in Percentage % w/w	11.42%

The Analysis studies done under standard parameter of Superficial Lepa.

Drug Analysis^[7,8,9,10]**Table 1- Organoleptic Characteristics.**

Colour	Brown
Odour	Odourless
Taste	---
Consistency	Solid (Powder)

Table 2- Physio-chemical Parameters.

Sr. No.	Sample Parameter	BalyadiLepa Value
01	Loss on Drying at 110 c(% w/w)	1.2
02	Total Ash Value(% w/w)	1.38
03	Acid Insoluble Ash(% w/w)	0.88
04	Water Soluble Extractive(% w/w)	50.05
05	Alcohol Soluble Extractive(% w/w)	15
06	P ^H Value (10% aqueous soln.)	5.0
07	Particle size distribution	
	10-20 mess #	100%
	20-40 mess #	100%
	40-60 mess #	89.70%
	60-80 mess #	79.10%
	120 mess #	20%

Thin Layer Chromatography

Extract: Methanol Soluble Extract

Solvent System: Petroleum Ether: Diethyl Ether: Acetic Acid (9:1:1)

SPOT NO	Day Light		Long UV		Short UV	
	Color of spot	Rf value	Color of spot	Rf value	Color of spot	Rf value
1	Dark Green	0.34	Dark Blue	2.1	Light Green	2.1
2	Light Yellow	0.55	Light Red	3.4	Light Yellowish Red	3.4
3	Blue	0.70	Dark Blue	4.3	Blue	4.3
4			Bluish Orange	4.8	Light Yellow	4.8

DISCUSSION

Fusion method is ideal for preparation of Balyadi Lepa(Powder). Balyadi Lepa has consist of madhur, katu, tikta and Kashaya rasa. Laghu, ruksha, tikshna, mradu, guru and snighdha guna. Ushna and sheet virya. Madhur and katu vipaka, Kaphavatashamak,

kaphapittahar, kaphapittashamak, vatapittashamak and pittavardhak. Amaltas, vaybidanga and nimba containing tenin matter for colouring of skin.

Before lepa churna preparation shodhana process is done.

After powder prepared it must be passed through 80 # (here used vibro shifter).mass mixture is used for homogenous mixing purpose.

Before used lepa(soft paste) is prepared.prepaed lepa(semisolid form) expiry is short.so here we prepared lepa churna and same store it before every used lepa(paste) prepared.

Prepared churna is 79 % fine powder result saw our balyadi lepa is fine.while mixing with kanji good lepa(paste) is prepared it is easy to aply in infected area.

Shelf life of lepa churna is 2 years.

Kanji for use at mixing agent of balyadi powder.

CONCLUSION

Balyadi Lepa is developed on the basis of Yogaratanakara chikitsa adhayaya. Therapeutic activity for external administration without any harmful effects. The analytical studies showed that drug does not contain any microbes and also comes under standard parameter of superficial application. Fusion method is ideal for preparation of Balyadi lepa.

Balayadi lepa churna is fine powder.when it mix with kanji soft paste 'LEPA 'is prepared which is apply easily.

Lepa churna is store 2 years while if ones lepa/semisolid mass prepared its shelf life is short.so one can prepared lepa churna and store it before every used lepa/semi solid mass prepared.

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