

Pharmaceutical and Preliminary Analytical Study of Jeevantyadi Malahara

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ABSTRACT

Introduction: Malahara is an ointment preparation used for topical applications and has advantages owing to its dosage form. Jeevantyadi malahara is a unique preparation comprising of jeevanti, manjista, daruharidra, kampillaka, tuttha, go ksheera, go ghrita, sarjarasa and madhuchista. It is indicated in padadari (heel fissures). The same Jeevantyadi malahara after washing with water for 100 times i.e., dhouta karma is indicated in agni dagdha (Burn ulcer), arsha (Piles), pama (Eczema) and kandu (Itching).

Aim: To develop preliminary standards for jeevantyadi malahara and shatadhouta jeevantyadi malahara and highlight the importance of dhouta samskara.

Materials and methods: Jeevanti, manjista, daruharidra, kampillaka, go ksheera, go ghrita, were taken and jeevantyadi sneha was prepared out of it. Jeevantyadi sneha was added with sarjarasa and beeswax to obtain jeevantyadi malahara. The prepared malahara was made into two separate samples. One sample was subjected to repeated washing with water and another kept as it is. Both samples were subjected to organoleptic and physico-chemical parameters. Observations and results: The results of organoleptic characters like appearance, odour, taste and physico-chemical parameters like pH and loss and drying was carried out.

Discussion and conclusion: Jeevantyadi malahara is mainly indicated in padadari. The properties and therapeutic utility also differs after subjecting for washing with water. Shatadhouta jeevantyadi malahara is indicated in dagdha, arsha and vrana. Hence the importance of dhouta karma is highlighted in this paper.

Keywords: Jeevantyadi malahara; Padadari; Vrana; Arsha; Dhoutakarma

INTRODUCTION

The term malahara has originated from the root word malham or marham taken from Unani system of medicine. It is a quite widely used ointment preparation with many advantages. It has been inducted to Ayurveda pharmaceuticals and the first reference can be seen in yogaratnakara. The base material for the preparation of malahara can be taila, ghrita, siktha, sarjarasa, etc. Base material should be taken and its filtered to get rid of impurities, to this filtered base, the fine powder of medicinal drugs are added and stirred. After it is cooled, the product attains a thicker consistency and malahara is obtained. Jeevantyadi malahara is a herbo-mineral preparation comprising of jeevanti, manjista, daruharidra, kampillaka, tuttha, go

ksheera, go ghrita, sarjarasa (Table 1) and it is indicated in padadari (cracked feet). It comes under kshudra kushta and it is also called as heel fissures. The prepared jeevantyadi malahara after washing with water for 100 times (Shatadhouta jeevantyadi malahara) is said to be beneficial in agni dagdha, kandu, pama and arsha². In this present study method of preparation and its physicochemical and analytical parameters of jeevantyadi malahara and shatadhouta jeevantyadi malahara are analysed [1].

MATERIALS AND METHODS

Pharmaceutical preparation was carried out in Department of Rasashastra and Bhaishajya Kalpana, SDMCAH, Hassan (Figure 1).

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Figure 1: Jeevanti, Manjishta, Daruharidra, Kampillaka, Tuttha, Jeevanti churna, Daruharidra churna, Shodhana of Kampillaka, Tila talia, Go ghrita, Go-Ksheera, Rala (Sarja rasa), Bee wax, Preparing Jeevanti sneha, Added kalka to the jeevanti sneha, After the preparation of Jeevanti sneha, Prepared jeevanti sneha, Washing jeevanti sneha with water, Jeevanti sneha and shatadhouta jeevanti sneha.

Method of preparation: Ingredients of Jeevanti malahara and its quantity is tabulated in (Table 1).

Sl No	Ingredients	Botanical name	Part used	Quantity mentioned in classics	Quantity taken for preparation
1	Jeevanti	<i>Holostemma adakodien Schult</i>	Root	4 tola (48 g)	3 g
2	Daruharidra	<i>Berberis aristata DC</i>	Stem	4 tola (48 g)	3 g
3	Manjishta	<i>Rubia cordifolia L.</i>	Stem	4 tola (48g)	3 g
4	Kampillaka	<i>Mallotus philippensis (Lam) Mull.Arg.</i>	Fruit	4 tola (48 g)	3 g
5	Tuttha	<i>Cupric sulphate</i>	-	1 tola (12 g)	0.5 g
6	Tila taila	<i>Sesamum indicum L.</i>	Oil	32 tola (384 g)	50 g

7	Go-ksheera	<i>Bos Taurus Linnaeus, 1758</i>	Milk	32 tola (384 g)	100 ml
8	Go-ghrita	<i>Bos Taurus Linnaeus, 1758</i>	Ghee	64 tola (768 g)	50 g
9	Sarjarasa	<i>Vateria indica L</i>	Exudate	8 tola (96 g)	16 g
10	Beewax	<i>Cera alba</i>	Wax	8 tola (96 g)	16 g
11	Water	-	-	256 tola (3,072 g)	600 ml

Table 1: The Kalka dravya viz., Jeevanti moola, daruharidra, kampillaka, manjista and tuttha were taken in mentioned quantity and shodhana was carried out for kampillaka and tuttha.

Shodhana of kampillaka: Kampillaka was taken and sprinkled on to a wide mouthed vessel containing water. Shuddha kampillaka floats and the brick powder which is the common adulterant, will sink down and settle at the bottom of the vessel. The Kampillaka floating on the surface of water was collected, dried and used for the preparation as kalka dravya.

Shodhana of tuttha: Ashuddha tuttha was taken in clean porcelain khalwa. It was added with sufficient quantity of nimbu swarasa and triturated for six hours. Later the triturated tuttha was dried under sun and used for preparation of jeevanti sneha.

Preparation of jeevanti sneha: All the kalka dravya were taken and powdered and made to fine powder. Tila taila and ghrita were taken as sneha dravya. Go-ksheera and jala were taken as drava-dravya for preparation of taila. Initially sneha dravya i.e., tila taila and go-ghrita were taken in a clean wide mouthed stainless steel vessel. The vessel is placed over mild fire and cooked. When vapours start appearing in sneha, followed by the prepared kalka dravya and later the specified drava dravya i.e., go-ksheera and jala were carefully added to it. Boiling was continued with frequent stirring until sneha siddhi lakshana were attained. Later the Jeevanti sneha was filtered through a clean cloth and kept in wide mouth glass vessel (Table 2).

Sl No.	Organoleptic Characters	Jeevanti sneha	Shatadhouta Jeevanti sneha
01	Colour	Pale green	Pale yellow
02	Odour	Characteristic smell	Characteristic smell
03	Touch	Sticky	Smooth in touch

Table 2: Results of Organoleptic characters.

Preparation of jeevantyadi malahara: The prepared sneha was taken in a clean steel vessel and placed over mild fire. It was heated until foam starts appearing. Soon the specified ratio of bee wax and Sarja rasa was added to it. When all the wax completely melts in oil, it is filtered to another clean vessel and allowed to cool. It attains a thicker consistency as that of bee wax after cooling. This is jeevantyadi malahara [2].

Preparation of shatadhouta jeevantyadi malahara: The prepared jeevantyadi malahara was divided into two samples. One sample was kept as it is and other sample was taken in clean wide mouthed vessel and plain water added to it for dhouta karma. The malahara was washed with water for 100 times. Fresh water was used each time and water was discarded when change in colour was seen. After washing 100 times with water the malahara was considered as shatadhouta jeevantyadi malahara.

Analytical study: Analytical study was carried out in Quality Control Lab of Teaching Pharmacy, SDMCAH, Hassan. The organoleptic characters like appearance, odour, taste and physico-chemical parameters like pH, loss on drying were carried out [3].

pH determination: pH value of an aqueous liquid may be defined as the common logarithm of the reciprocal of the hydrogen ion concentration expressed in grams per litre. The pH value of a solution can be measured with pH meter which consists of a voltmeter connected with two electrodes. pH meter was calibrated to 4,7 and 9 by using buffer solution. One gram of jeevantyadi malahara was dissolved in 10 ml of distilled water and this solution was taken in a glass beaker. The electrode of the pH meter was dipped to the solution and reading was noted [4].

Loss on drying: A sample of 10 grams of the prepared jeevantyadi malahara and shatadhouta jeevantyadi malahara were taken in a tarred evaporating dish and dried at 105°C for five hours and weighed. The process of drying and weighing was continued at one-hour interval until difference between two successive weighing corresponded to not more than 0.25% [5].

RESULTS

Pharmaceutical observation: During preparation of jeevantyadi sneha, sneha kalka attained perfect shape when rolled between fingers. When part of kalka was put into fire, no sound was produced, foam was produced and desired color, odour and taste of the ingredients become appreciable as the preparation was completed (Table 3).

Sl No.	Organoleptic Characters	Jeevantyadi malahara	Shatadhouta Jeevantyadi malahara
1	pH	4.02	5.69
2	Loss on drying	12.5%	14%

Table 3: Physico-chemical characters.

During the preparation of malahara, jeevantyadi sneha was mixed with bee wax and powdered sarjarasa. Total duration of heating was 15 minutes. At 600 Celsius Beewax melted in jeevantyadi sneha and sarjarasa was added. The heating was stopped when Beewax melted in the mixture. The colour of prepared jeevantyadi malahara was pale green in colour. After the preparation of jeevantyadi malahara, one half was kept as control and the other half was taken for dhouta. It was washed for 100 times with plain water and the slowly colour of malahara changed to pale yellow, stickiness was reduced, and became softer than control sample [6].

DISCUSSION

Jeevantyadi malahara is a unique herbo-mineral formulation prepared by using jeevanti moola, kampillaka, tuttha, manjista, daruharidra, go ksheera, goghrita, tila taila, Sarja rasa and beewax. Initially jeevantyadi sneha was prepared and during the conduction of test of perfectness, when the kalka dravya was put over the fire, no sound was produced suggesting absence of moisture in the sneha [7]. After the completion of jeevantyadi sneha it was added with sarjarasa and bee wax to obtain jeevantyadi malahara. A part of the jeevantyadi malahara was subjected for dhouta kriya for 100 times. The prepared jeevantyadi malahara after washing with water for 100 times is called shatadhouta jeevantyadi Sneha. The colour of jeevantyadi malahara was pale green and shatadhouta jeevantyadi malahara was pale yellow colour. The difference in the colour is due to repeated and prolonged trituration of the fat and water mixture. The prepared shatadhouta jeevantyadi malahara was less sticky compared to jeevantyadi malahara. Repeatedly washing of malahara for a longer duration may split the fat particles and make it into an emulsion making it more smooth in consistency [8].

The pH of the jeevantyadi malahara was 4.02 where as shatadhouta jeevantyadi malahara was 5.69 which suggests that the dhouta karma made preparation less acidic. Water is having a neutral pH and that may have diluted the acidic concentration in made it near to neutral pH. Loss on drying value of jeevantyadi malahara and shatadhouta malahara was 12.5% and 14% respectively. This indicates that sample 2 is having high moisture content compared to this implies that the dhouta karma has imparted more water into the ghritha [9].

The Jeevantyadi malahara is mainly indicated in padadari where aggravation of vata and kapha dosha is involved. The ingredients of jeevantyadi malahara possess ushna virya which helps in pacifying aggravated kapha and vata dosha. The jeevantyadi malahara after washing with water for 100 times is indicated in agni dagdha, kandu, pama and arsha where more of saumya guna is needed. The addition of jala and dhouta samskara enhance or add up to the sheeta guna in the preparation by which the change in indications is appreciated. Though the ingredients and method of preparation are same but the properties will change after the dhouta karma. The dhouta karma comes under samskara which helps to change the properties on the basis of samskaro hi gunantaradhanaam. Hence shatadhouta jeevantyadi malahara got sheeta virya and

pittadosha shamana property and thus indicated in pitta dosha involved diseases like agni dagdha, kandu, pama and arsha [10].

CONCLUSION

Jeevantyadi malahara is a combination of both herbal and mineral drugs which comprises of jeevanti moola, kampillaka, tuttha, manjista, daruharidra, go ksheera, goghrita, tila taila, Sarja rasa and Beewax. It is indicated in padadari and shatadhouta jeevantyadi malahara indicated in agni dagdha, kandu, pama and arsha. Though the ingredients and method of preparation was same in both jeevantyadi malahara and shatadhouta jeevantyadi malahara the organoleptic and physico-chemical properties got changed because of dhouta kriya. Because of dhouta samskara properties and therapeutic efficacy of shatadhouta malahara differs from jeevantyadi malahara. In this way the importance of dhouta samskara is highlighted. This formulation is simple in preparation, but not in practice. A clinical study to revalidate the preparation will pave way for the formulation to come into practice.

REFERENCES

1. Ramanani R, Sharma K, Kumar S, Rao K S, Sakhitha K S. Pharmaceutical study of rasapushpadi malahara. *J Ayurveda*. 2021;15:137-140.
2. Chaudhary A, Singh N. Herbo mineral formulations (rasaoushadhies) of ayurveda an amazing inheritance of ayurvedic pharmaceuticals. *Anc Sci Life*. 2010;30(1):18-26.
3. Ajanal MN, Nayak SU, Kadam AP, Prasad BS. Pharmacovigilance study of ayurvedic medicine in ayurvedic teaching hospital: A prospective survey study. *Ayu*. 2015;36(2):130-137.
4. Gawde SR, Shetty YC, Pawar DB. Knowledge, attitude, and practices toward ayurvedic medicine use among allopathic resident doctors: A cross-sectional study at a tertiary care hospital in India. *Perspect Clin Res*. 2013;4(3):175-180.
5. Rastogi S. Development and pilot testing of a prescription quality index for Ayurveda. *J Ayurveda Integr Med*. 2019;10(4):277-283.
6. Saper RB, Kales SN, Paquin J, Burns MJ, Eisenberg DM, Davis RB, et al. Heavy metal content of ayurvedic herbal medicine products. *JAMA*. 2004;292(23):2868-2873.
7. Kales SN, Saper RB. Ayurvedic lead poisoning: An under-recognized, international problem. *Indian J Med Sci*. 2009;63(9):379-381.
8. Thatte U, Bhalerao S. Pharmacovigilance of ayurvedic medicines in India. *Indian J Pharmacol*. 2008;40(Suppl 1):S10-S12.
9. Singh RH. Exploring larger evidence-base for contemporary ayurveda. *Int J Ayurveda Res*. 2010;1(3):195-196.
10. Baghel M. The national pharmacovigilance program for Aayurveda, Siddha and Unani drugs: Current status. *Int J Ayurveda Res*. 2010;1(4):197-198.