

Analytical Evaluation of Katabhyadi Malahara

Dr. Milankumar G. Bharad,

III year PG Scholar, Dept. Of Agadatantra, Alva's Ayurveda Medical College, Moodbidri, Karnataka, India.

Submitted: 05-09-2022

Accepted: 13-09-2022

ABSTRACT:

Dermal toxicity due to poisonous plants or animal is condition from which the mankind suffering from since its origin. Katabhyadi Malahara is developed on the basis of Malahara Kalpana process mentioned in Rasatarangni, which is very effective in dermal toxicity by poisonous plants and animal. Katabhyadi Yoga has been mentioned in Charak Chikitsa Sthan with ingredients Katabhi, Arjuna, Shirisha, Shelu, Udumbara, Aswatha, Plaksha, Nyagrodha, and Parisha Twak with Vishahara property. This study aims at introduction of one such efficient dermal toxicity healing medicine and its modification into Malahara form. Taila was prepared from mentined the drug. Katabhyadi Malahara was prepared from that Tail mixing with Sikhtha(Bee wax). Analytical study carried out to standardize the preparation. Yellow coloured, semi solid homogenous Malahara with no smell was obtained. The pH value was 7.86. Spreadability value was 215.25 firmness. Loss on drying value was 3.47. Oil separation was not observed during thermal stability test. The result of analytical study was found to be encouraging and it can be taken up for clinical study.

KEYWORDS: Katabhyadi Taila, Katabhyadi Malahara, Ointment, Analytical evaluation

I. INTRODUCTION:

Agada Tantra is a branch of Astanga Ayurveda which deals with the science of poison which is meant for diagnosis and treatment of various venomous bites by snakes, insects, spiders, etc and also other poisonous substances like plants and minerals^[1]. Many animals, plants and minerals are manifest dermal toxicity by contact of skin and produce itching, burning, pain, and exudation.

Acute toxicity by the dermal route refers to those adverse effects occurring following a single dermal (skin) exposure to a substance, or multiple such exposures within 24 hours^[2].

Classical reference of Katabhyadi Yoga has mentioned in Charaka Samhitha Chikitsa Sthana with ingredients like bark of Katabhi,

Arjuna, Shirisha, Shelu and Panchaksheerivriksha that use as Kashaya (decoction), Kalka (paste) and Churna (powder) for treatment of wounds caused by Kitavisha (insect bite poisoning) and Lutavish (spider bite poisoning)^[3]. The drugs of this Yoga are Sheeta Virya, Vishahara, Tridosahara in action and having Vishahara properties.

Katabhyadi Yoga in form of Kalka for local application was taken for M.D dissertation work by Dr. Sreedevi Anil Kumar in the Dept of Agada tantra of Alva's Ayurveda Medical College in the cases of Paederus Dermatitis and had shown encouraging results on the symptoms like blisters; burning sensation and pain and result shows the properties like Kapha Pitta Shamaka and Tridosahara, Vishaghna, Kandughna, Vranahara and Twak Doshahara. Katabhyadi yoga has as per the suggestions mentioned in the study the Kalka form can be transformed in to Malahara form which will be easy to use^[4], so Katabhyadi yoda was prepared as Malahara for easy to use in dermal toxicity.

The word Maraham and Malaham are basically originated from Unani system of Medicines. Yogaratnakara mentioned this by the name of Malahara Kalpana. Malahara is a kind of dosage form, which eliminates the Mala (impurities) from the site of action^[5]. This is Similar to ointments in modern Pharmaceutics.

II. MATERIALS AND METHODS:

I. Identification and collection of drugs

Fresh barks of Katabhi, Arjuna, Shirisha, Shelu and Panchaksheerivriksha were obtained from Alva's Ayurvedic Pharmacy, Mijar, Moodbidri, Karnataka, India. Cleaned well, washed and dried.

II. Pharmaceutical preparation:

Pharmaceutical preparations such as Katabhyadi Taila and Katabhyadi Malahara was carried out under the supervision of experts from the Rasashastra and Bhaishajya Kalpana Lab, Alva's Ayurveda Medical College, Moodbidri, Karnataka, India.

Ingredient of Katabhyadi Taila: The ingredients of the Katabhyadi Taila are depicted in Table No. 1.

Table No. 1

Sr. No.	Drug name	Botanical name	Family	Part used	Quantity
1	Katabhi	Careya arborea Roxb	Barringtoniaceae	Bark	1 Part
2	Arjuna	Termanalia arjuna(Roxb W&A)	Combrataceae	Bark	1 Part
3	Shirisha	Albizia lebbek(L) Benth	Mimosoideae	Bark	1 Part
4	Shelu	Cordia dichotoma forst	Boraginaceae	Bark	1 Part
5	Udumbara	Ficus racemosa Linn	Moraceae	Bark	1 Part
6	Aswatha	Ficus religiosa Linn	Moraceae	Bark	1 Part
7	Plaksha	Ficus lacor Buch Ham	Moraceae	Bark	1 Part
8	Nyagrodha	Ficus bengalensis Linn	Moraceae	Bark	1 Part
9	Parisha	Thespesia populnea Linn	Malvaceae	Bark	1 Part
10	Tila Taila	Sesamum indicum L.	Pedaliaceae	Seed	4 Part

Ingredients of formulation for Katabhyadi Malahara: The composition of Katabhyadi Malahara is depicted in Table 2.

Table No. 2

SL.NO	Ingredients	Ratio	Quantity Used
1.	Katabhyadi Taila	6 Part	300 ml
2.	Bee wax	1 Part	50 gm

III. Analytical study:

Analytical studies were carried out from Alva's Traditional Medicine Archive (ATMA) & Research Centre, Alva's Ayurveda Medical College, Moodbidri, Karnataka, India.

The parameters considered for analysis includes:

Organoleptic evaluation: Carried out by sensory organs. It includes:

1. Colour
2. Odour
3. Appearance

Physico- chemical evaluation: It includes:

1. Determination of Ph^[6],
2. Thermal stability^[7]
3. Loss of Drying^[8]
4. Spreadability^[9]
5. Microbial contamination^[10]

III. RESULTS

Organoleptic Characters

Table No. 3: Organoleptic Characters:

Parameters	Results
1. Colour	Yellow
2. Odour	No smell
3. Appearance	Semi solid like ointment

Table No. 4: Physico- Chemical Analysis:

Parameters	Results
1. pH	7.86
2. Thermal stability (at 37°C for 72 hrs)	No Oil Separation observed
3. Loss of Drying	3.47
4. Spreadability	215.25 firmness
5. Microbial contamination	11.5 CFU

IV. DISCUSSION:

DRUG:

Katabhyadi Yoga has been mentioned in Charak Chikitsa Sthan with ingredients Katabhi, Arjuna, Shirisha, Shelu, Udumbara, Aswatha, Plaksha, Nyagrodha, and Parisha Twak with Vishahara property.

So that the drugs of Katabhyadi Malahara shows the properties like Kapha Pitta Shamaka and Tridosahara, Vishaghna, Kandughna, Vranahara and Twak Doshahara.

Most of the drugs of this Yoga are having the properties of Pitta Kaphahara and Tridosahara in action and Seetha Veerya and are capable of antagonizing the adverse effect of Visha.

Some of the drugs of this Yoga are individually Vishaghna and in combination of drugs would bring about impressive effects. Due to the above mentioned properties Katabhyadi Malahara is Vishaghna, Raktha Shodhana, Kushtaghna, Twakdoshahara, Vranahara and Kandughna.

Analytical study:

Katabhyadi Malahara showed organoleptic characters with yellow colour, no smell and semi solid like ointment appearance. Physico- Chemical analysis showed alkaline pH it was found to be 7.86. It is observed that pH between 6.2 to 6.8 is ideal for the body. There is no phase separation found in thermal stability test in Katabhyadi Malahara. The loss on drying for Katabhyadi Malahara was 3.47 which is normal limit. Spreadability of the drug Katabhyadi Malahara was found to be firmness of 215.25. It shows that ointment will spread easily without too much drag and friction in rubbing process. Microbial contamination of the samples was assessed and Katabhyadi Malahara showed value 11.5 CFU.

V. CONCLUSION:

Katabhyadi Malahara is developed on the basis of Malahara Kalpana process mentioned in Rasatarangni. Katabhyadi Malahara with ingredients like Katabhi, Arjuna, Shirisha, Shelu and Panchaksheerivriksha have Vishahara properties like Kapha Pitta Shamaka and Tridosahara, Vishaghna, Kandughna, Vranahara and Twak Doshahara and therapeutic activity for external administration without producing any harmful effects. The analytical studies showed that drug does not contain any microbes and, also comes under standard parameter of superficial ointment.

REFERENCES:

- [1]. Kaviraj Ambikadutta Shastri, Sushruta samhita of Maharshi Sushrut, Chaukhamba Sanskrita Sansthana, Varanasi; Sutrastahana 1/14, Vedotpatti adhyay. 2003;4(1):page no. 4.
- [2]. The SCHC-OSHA Alliance GHS/HazCom Information Sheet Workgroup, AcuteDermalToxicity, [https://www.schc.org/assets/docs/ghs_info_sheets/Acute%20Dermal%20Toxicity%20\(Final%202018-03\)](https://www.schc.org/assets/docs/ghs_info_sheets/Acute%20Dermal%20Toxicity%20(Final%202018-03)): Accessed on 30th August 2022.
- [3]. Agnivesa Charaka Samhitha, with Ayurveda deepika vyakhya of Chakrapanidatta, edited by vaidya Yadavji Trikamji Acharya, Chaukhamba Orientalia, Varanasi, edition-2011, Chikitsasthana chap-23, sloga-204, pageno-793
- [4]. Dr. Shreedevi Anil Kumar, 'Evaluation of the efficacy of Katabhyadi Kalka in Paederus dermatitis-A clinical study'- A thesis submitted to Rajiv Gandhi University of Health Science by,



- Department of Agada Tantra, Alva's Ayurvedic Medical College, Moodbedri, D.K.2019;page no.1-135.
- [5]. Dr. Purva et al., A REVIEW STUDY OF MALAHARA KALPANA, World Journal Of Pharmaceutical and Medical Research, 2020,6(10), page no. 93-95.
- [6]. Ministry of AYUSH, Government of India, The Ayurvedic Pharmacopeia of India, Pharmacopeia commission for Indian medicine and Homeopathy 1st edition, 2008; 1(6): 291.
- [7]. <https://www.formulacian.com/en/news/blog/thermal-stability-creams-ointments-cosmetics-non-contact-technology>. [Cited on 07/09/2022]
- [8]. Ministry of AYUSH, Government of India, The Ayurvedic Pharmacopeia of India, Pharmacopeia commission for Indian medicine and Homeopathy 1st edition, 2008; 6: 243.
- [9]. Sabale V, Kunjwani H, Sabale P. Formulation and in vitro evaluation of topical antiageing preparation of the fruit of Benincasa hispida. J Ayurveda Integra Med., 2011; 2: 124-8. [Cited on 07/09/2022].
- [10]. Ministry of AYUSH, Government of India, The Ayurvedic Pharmacopeia of India, Pharmacopeia commission for Indian medicine and Homeopathy 1st edition, 2008; 1(6): 275.