

A Randomised Comparative Clinical Trail to Evaluate the Varnya Effect of Yashtimadhu and Manjishta Lepa W.S.R. to Nishprabha (Dull Complexion)

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Abstract: Good complexion is a great cause of concern to many people, irrespective of age gender, cast creed and religion. Good complexion is one among the criteria of health. Nowadays busy life style, lack of skin care, over exposure to sunlight, pollution, use of chemical-based cosmetics and hormonal disturbances are the cause for skin dullness and lack of luster. Markets and Medias are bombarded with many external beauty enhancement products. Use of such products will also become the cause of dull complexion and other skin related issues. Bahiparimarjan chikitsa in the form of LEPA have been described in the classical texts of Ayurveda. For enhancement of skin complexion varnya lepas are mentioned. Among those based on their varnyakara properties Yashtimadhu and Manjishta have been considered for application in lepa form (face packs) in dull complexion. These lepas will be tested on hyper pigmented, tanned and dull complexion. Pre and post assessment will be done based on the photographs. The collected data will provide promising results in establishing the complexion enhancing properties of the above mentioned lepas (face packs).

Keywords: Nishprabha (dull complexion), Manjishta, Yashtimadhu, Lepa, Milk cream, Buttermilk.

1. Introduction

Now days, appearance, body language, attractive personality etc plays major role everywhere and much importance is being given for the same. So, people started giving importance to their cosmetic appearance. It has become an essential to protect and preserve the cosmetic appearance for a person's health and self-esteem. And as we know, skin is the largest organ of the body, which covers the outer surface, almost entirely hence, to focus on skin care and management is very much necessary, when it comes to cosmetics.

Ayurveda deals with the diseases which has cosmetic value in an integrated and systemic method. Ayurveda emphasizes on both internal and external remedies to normalize avasthika doshas as well as sthanika vikaras. Varnya dravyas, many shamanoushadhis, shodhana procedures are elaborated for twak vikaaras.

Nishprabha is one of the commonest skin conditions, where in shyava mandala or black patch occurs on face by the vitiation

of vayu and pitta, because of nidanas like krodha, ayasa etc. Due to the development of unusual black patches over face, patients get disturbed and seek for solution, to bring back the normalcy. And as it is seen in all age group and sex, to know the efficacy of treatment principles mentioned in our classics is also very much essential. Considering the above told facts, it is felt significant to have a cosmetic approach in nishprabha.

Hence an attempt has been made to evolve an effective solution for this skin condition using some varnya lepas as mentioned in the classics.

A. Aims and Objectives

There are immense opportunities to use herbal ingredients in the cosmetics in accordance with the principles of Ayurvedic medicine. The aim of this study was to critically evaluate the herbs mentioned in "Varnya Maha Kashaya" for the maintenance of the complexion of skin.

B. Drug Review

The great text in Ayurveda, the Charaka Samhita, stated a group of ten medicinal plants known as "Varnya Maha Kashaya" that can be used to obtain glowing complexion. It includes Shveta Candana (*Santalum album*), Nagkeshara (*Mesua ferra*), Padmaka (*Prunus cerasoides*), Ushera (*Vetiveria zizanioides*), Madhuka (*Glycyrrhiza glabra*), Manjistha (*Rubia cordifolia*), Shariva (*Hemidesmus indicus*), Payasya (*Ipomoea digitata*), Sita (white variety of *Cynodon dactylon*) and Lata (green variety of *Cynodon dactylon*). These herbs can be used individually or combine and also externally or internally. The pharmacological properties of these herbs indicate that apart from the complexion promotion action, they have various medicinal properties. The most of them are prescribed for skin diseases and scientifically proved that they have anti-inflammatory, anti-bacterial, anti-septic, anti-ulcer, anti-tumour properties.

C. Yashtimadhu

Yashtimadhu root has Varnya, Anti-Aging, Anti-oxidant

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Table 1

S.No.	Name of the drug	Latin name	Family	Chemical composition	Rasa	Vipaka	Veerya	Doshagnata
1	Manjishta	Rubia cordifolia	Rubiaceae	Purin, Manjishthin, Jantho sudo Purin	Tikta, Madhur, Kashaya	katu	ushna	Pitta kapha shamak
2	Yashtimadhu	Glycyrrhiza glabra	Leguminosae	Glycrayzin aysolikkiritin estrogen, Glucose, Sucrose, Manait	Madhur	Madhur	Sheet	Tridoshshamak

properties, which are useful for maintenance of healthy skin. [9]

Glycyrrhizic acid present in it controls the secretion of melanin in the skin and thus reduces dark pigmentation and increases fairness of skin.[10]

Hence, used widely in cosmetic products.

D. Manjishtha

Used in different types of skin diseases as it acts Varnya and raktaprasadak [2].

Chemically contains glucosides along with resins, lime salt and colouring agent. Methanolic extract of manjishtha has been reported to show inhibitory action on tyrosinase, hence it acts as an effect skin whitening agent [1].

Khemchand Sharma, Critical review of Ayurvedic varnya herbs and their tyrosinase inhibition effect, Ancient Science of life, Jul-Sep, 2015, 2016; 35(1): 20.



Fig. 1. Manjishtha

2. Materials and Methods

A. Selection of Drug

Trial drug yashtimadhu choorna lepa is a single herbal formulation in the form of churna extensively used to enhance skin complexion.

Yashtimadhu choorna with sufficient quantity of either buttermilk or milk were advised to apply on mukha Pradesh as defined by lepa vidhi/ technique of lepa application.

B. Method of Preparation of Lepa

Both the above-Mentioned single drugs taken and made into fine choorna About 50 gms of churna packed in air tight plastic jars.

1) Lepa

Lepas can be defined as, the medicines in the form of fine, smooth paste and used for external application [6].

2) Varnya

It imparts colour. Rakta chandana, manjishtha, lodhra, kushta, priyangu, vatankuru, masura are used for formation of varnya lepa. It is applied in a thickness of langula.

C. Instructions for Using lepas [7], [8]

- 1) It should be applied in opposite direction of hair follicles.
- 2) It should be applied from below upwards.
- 3) It must be removed as soon as it dried up. After drying they lose their potency.

4) It should not be over coated.

5) It should be not applied during night.

6) Lepas should be used immediately after preparation.

7) They should not come in contact with eyes or mouth.

1) Diagnostic Criteria

Diagnosis was done on the basis of diagnostic criteria for Type of skin, number of freckles, reaction to sun exposure, sensitivity of face to sun(tanning) depth of tan.

2) Inclusion Criteria

The patients of either sex, having age between 21-50 yrs from DGMAMC GADAG, representing with sign & symptoms of Nishprabha/Vyanga), Patients with diffuse bronze pigmentation and willing to participate.

3) Exclusion Criteria

The individuals having skin discoloration due to exposure to chemicals, hormonal imbalances and suffering from other skin disorders were excluded.

4) Criteria of Withdrawal

Redness of the skin, increase symptoms like Kandu, daha and not willing to continue.

5) Treatment Methodology and Schedule

The selected patients as per inclusion criteria were randomly selected. Methodology of the treatment for the patients as follows. The choorna had taken in sufficient quantity in the form of lepa and based on skin type the subjects were advised to apply on the face after thoroughly mixing either in the milk or butter milk. The thickness of lepa should of ardhanguli pramana i.e. 0.98 cm (3/4thof an inch). The applied mukha lepa is kept in mukha pradesha till it gets dried after that wash is advised with fresh water. The patients also advised the technique of lepa application-Lepa application should be gently rubbed in an upward (pratiloma) or reverse direction as of the hairs over the skin to make the action of the application quick and effective. The patients were visited twice in a month, and assessed before, in the middle of the study based on the subjective and objective parameters. Follow up was done after 45th and 60th days.

6) Assessment Criteria

The patients were assessed before, during and after treatment on the basis of subjective and objective criteria with regards to Type of skin, number of freckles, reaction to sun exposure, sensitivity of face to sun (tanning) depth of tan.

D. Probable Mode of Action of Study Drug

The trial drug and standarad drugs are tikta (bitter), madhura kashaya rasa, predominant sheeta veerya, katu vipaka,guru and ruksha in nature with obvious alleviating action on all doshas. Specific raktaprasadaka, twakprasadaka and kushtagna plays important role in improving fair complexion and luster of the skin. The contents drug of lepa makes the skin healthy, glorious

and beautiful. Vyanga is a raktaj vicar [3] in which there is violation of vata, pitta dosha and dushti of rakta dhatu, generally Mukhakantikar lepa contents raktaprasadaka, vata, pitta shamak, kapha, pittashamak,

kushtagna, varnya drugs, acts according to their properties and action on skin, bhrajak pitta [4] & rasavaha, raktavaha srotas. Properties of drugs are opposite from samprapti [5] ghataka so it play an important role in samprapti bhanga of vyanga [14].

The skin colour (complexion) mainly depends on bhrajak pitta and avabhasini twacha, mukhakantikar lepa bring back the balance of these factors and promote the fair complexion (varnys) of the skin. Pharmacologically drugs act as astringent (15), cooling [16], disinfectant [17], blood purifying agent, antiseptic, analgesic, aromatic useful in burning sensation in body, skin disease and blood impurities. By virtue of rasa it helps in removing agnimandya, removes kleda). These may be attributed to free radical scavenging and antioxidant activity. Kashaya nature helps to equalize the vitiated doshas, clear of unwanted metabolites (kledahara) and sandhanakara, madhura rasa influences prasadana (nourishing), improves strength and complexion. It also alleviates vitiated pitta and vata. By virtue of sheeta veerya alleviates daha (burning sensation). By virtue of katu vipak clear of unwanted metabolites (kledahara), meda lekhan, shodan. Thus, the clinical manifestations of hypermelanosis which are mainly due to dosha vitiation will be taken care by rasa and dosha alleviating properties of mukhakantikar lepa.

E. Mode of Action According to Ayurveda

Varnya dravyas when used externally or internally acts on Bhrajaka Pitta. Bhrajaka pitta is an important factor related with Varna (complexion).

Ushna virya stimulates Bhrajaka Pitta and does Raktavardhana. And so, helps absorb the medicines applied externally and improves Varna (complexion).

Madhura rasatmaka dravyas increase the production of Rasa, Rakta, Majja, Shukra, Oja which in turn acts on Varna.

Madhura rasa, Tikta rasa and Sheeta virya has Pittaghna action.

Madhura rasa and Sheeta Virya act as Ojovardhaka and thus helps enhancing skin complexion.

Madhura rasa, Madhura Vipaka, Ushna virya has Vataghna action and hence removes blackish discoloration. Excessive Vata Dosha causes blackish discoloration in skin and blood.

Stickiness and increased fluidity is an indicator of impurities in the blood. Kashaya and Tikta Rasatmaka dravyas absorb Kleda and cools down Pitta. It therefore results in purification of blood, i.e., Raktashodhana. It relieves the blood of excess fluidity and stickiness. And this way leads to Varna Prasadana.

So, we can say that, Dravyas in Varnya Mahakashaya act as Varnya, Raktaprasadak, Raktavardhaka, Raktashodhaka, Ojovardhaka, Pittaghna and Vataghna.

Varnya Mahakashaya not only works on blood but also acts as filtering agent of blood in body, i.e., Liver. It works on stomach where the basic elements that helps prepare blood are abundant.

Yashtimadhu, Shweta chandan & Manjishtha- Stabilises aggravated heat in body and blood.

According to Ayurveda, Skin is produced from Rasa Dhatu. Sariva & Manjishtha- Improves digestive power of intestine.

F. Mode of Action According to Modern

According to modern review- Varnya Dravyas disrupts the melanin formation pathway through tyrosine's inhibition.

So, it's potentially excellent whitening agent that improves skin color.

As per the review of above all mentioned factors,

Majority of dravyas in Varnya Mahakashaya are madhura tikta rasatmaka, kapha pitta shamaka. Therefore, shows varnya effect. They can be used externally or internally. They work on variety of elements which creates and nourishes skin.

So Varnya Mahakashaya described by Charakacharya are without a doubt powerful for enhancing skin complexion.

So, we should use these herbs in different combinations and forms to treat patients to obtain glowing skin complexion.

Varnya dravya has high antioxidant and anti-inflammatory potential. It should be considered synonymous with beautiful skin. We can conclude that Varnya Mahakashaya plays many roles such as helper, purification agent, stimulator and creator of natural blood.

G. Observation and Result

From this clinical trial the varnya effect of Yashtimadhu in Nishprabha/Vyanga with special reference to Dull complexion has been achieved. Manjishta which is already proved as a best Varny drug, similarly Yashtimadhu is having similar effect; hence both are having varnya effect in the form of lepa.



Fig. 2

3. Discussion

The study/trial drugs were selected for the study according to the Ayurvedic classics. The lepa is very effective, easily available, very safe and easy to use and method of preparation is very simple. The unmarried females having pittavataj prakruti were more prone to dull complexion/nishprabha. The aim of the study was to assess the efficacy of yashti madhu and manjishta choorna lepa in nishprabha/dull complexion. The

study drug yashtimadhu choorna lepa was effective in reducing the number and size of shyamvarni mandal, the laxanas like daha, Kandu in total scores and self-reported manifestation of dull complexion. It is also increased skin complexion as known by increase mean total scores of relief in all symptoms. The results were as par with standard therapy. The study drug therapy indicating that the relief in laxanas and improving skin complexion gives better and lasting effects in the management of dull complexion.

By dermatologists is the Fitzpatrick skin photo type (SPT) system devised in 1975, this system was designed to classify an individual's response to ultraviolet radiation (UVR) with respect to burning or tanning ability [11].

Although the Fitzpatrick (SPT) system is a valuable tool because each person can be assigned a skin photo type even if it is difficult to determine racial and ethical classifications, it has limitations.

It has also been suggested that it may be more appropriate to use a skin classification system based on criteria that are more applicable to individuals with darkly pigmented skin, such as the tendency to develop post inflammatory hyper pigmentation. The Taylor Hyperpigmentation Scale is a visual scale that was developed to quantify the degree of hyperpigmentation, and it may be a useful assessment tool in skin of color [12].

Recently, a new skin color chart based on quantitative measurements of the spectrum of human skin colors in two-dimensional color space (clarity and hue) has been proposed [13].

4. Conclusion

Skin is one of the important presentable organs of the body. It has a definite role in one's personality. Hence skin diseases (twacharogas) affect not only on somatic level but also on a psychological level. Hence to get a proper idea of skin disease, one must know the normal echo texture. Hence a norma healthy skin is necessary in a healthy individual in order to combat the various challenges faced by a healthy skin. Here, ayurvedic herbs and herbal drugs play a key role in curing various skin ailments. Ayurvedic Herbs have shown to prove effective in treating skin diseases. Large number of herbs have been formulated into cosmetic products and these pure natural cosmetics are without any synthetic chemical. They are devoid of side effects and equally effective in comparison to their modern counterparts. The use of bioactive ingredients in cosmetics influence biological functions of skin and provides nutrients necessary for the healthy skin.

Dull complexion/nishprabha/Hypermelanosis is more in

female adolescence having pittavataj prakruti. The patients with hypermelanosis were likely to experience a substantial array of problems in social, behavioral fronts. Dull complexion aptly known as nishprabha with predominant vata, pitta and raktadhosha vitiation. Both Manjishta choorna lepa and Yashtimadhu choorna lepa are effective in treating nishprabha/dull complexion and the outcome of yashtimadhu choorna in comparison with manjishta is significantly effective in nishprabha. There were no adverse reactions documented.

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