

## The Evaluation of Drug Daruharidra with Combination of Ghrita on Melasma

Vihar R Bidwai<sup>1\*</sup>, Pradip O Panda<sup>1</sup> and Sharada T Deshmukh<sup>2</sup>

<sup>1</sup>Department of Shalyatantra, Ayurveda Mahavidyalaya, Pusad, India

<sup>2</sup>Department of Swasthavrutta, Ayurveda Mahavidyalaya, Pusad, India

Correspondence should be addressed to Vihar R Bidwai, Assistant Professor, Department of Shalyatantra, Ayurveda Mahavidyalaya, Pusad, India

Received: October 13, 2020; Accepted: July 15, 2021; Published: October 22, 2021

### ABSTRACT

As known that Melasma mainly cause by four factors i.e., most important is sun exposure that associated with UV irradiation which directly effect on skin. These direct effect gives signal to transduction pathway and regulate melanogenesis. The other factors are pregnancy, hormonal contraception, and family history. Because of this, the effect directly shown on face commonly called as Vyanga. It is nothing but Kshudra Roga.

Since, we selected here 60 women's have the age more than 25-years old age. We make a paste of daruharidra with trifala siddha ghrita for external application as a clinical trial on patients by taking daily history with increasing the doge day by day. It is advised to the patients apply the paste thrice daily. At the same time, we boiled daruharidra from 0.1 gm to 2 gm and as the doge depending on manner it gives to patients.

After treatment of daruharidra, reduction of melasma was observed in 90% of patients ( $P < 0.01$ ). We concluded that daruharidra had excellent capacity to cure melasma, which not only cure melasma but also purifying blood as well. Clinical improvement is good as compared to before one.

The lepan is given to patients for three consecutive months, which is proved to be an effective treatment without any significant side-effects.

### **KEYWORDS**

Melasma; Daruharidra; Ghrita

### INTRODUCTION

Melasma is nothing but sun exposed skin area which is an acquired hyper-melanosis. The facial area most probably included the forehead, the chin, the cheeks, and the upper

lips. These are the most common areas where hyperpigmentation occurs. But the pathogenesis of this disease is not cleared yet.

**Citation:** Vihar R Bidwai, The Evaluation of Drug Daruharidra with Combination of Ghrita on Melasma. Int J AAYUSH Trad Med 1(1): 25-29.

This is hyper-pigmentation disorder after acquired it to skin, patients have the most common complaints in daily basis to dermatology clinic. It also effects on the thoughts on the patients that's makes negative effect on the patient's emotional well-being and social life. So, the treatment and modern science theory for melasma remains challenging now a days. In the United States, the majority of females are affected by the melasma near about (92%-98%) [1].

Melasma is nothing but chronic disease and acquired by sun exposure on face, neck as well as on forearms. It's nothing but hyperpigmented patches seen on face [2]. It is well known fact that ultraviolet (UV) radiation is the most important factor which leads to the development of melasma on skin. In Ayurveda this condition is called as Vyanga, in which the disturbance of in vata pitta dosha. Also associated with manasika nidanas such as krodha (anger), shoka (sorrow) and ayasa (mental exertion) are the main factors [3].

The modern science therapies and their management on melasma are still giving unsatisfactory results in curing hyperpigmentation. This hyperpigmentation remains same time to time because of the sun exposure and other factor like pregnancy, hormone variation, stress, pollution, and busy lifestyle. External applications (bahirparimarjana chikitsa) are playing an important role in the treatment of Vyanga. Charaka Samhita reveals so many drugs on melasma, but we selected only few of them which is easily available and easy to use or apply on the face. Daruharidra is basically meant for the task of restoring the natural colour and complexion of the body. It is useful both for antah parimarjana (purification therapies of blood) as well as bahir parimarjana (external application) [4-7] the present study was aimed at evaluating the efficacy of an Ayurvedic formulation of Daruharidra with Trifala siddha ghrith lepa in Vyanga (melasma).

## **MATERIAL AND METHODS**

Selection of the patients done on the basis of inclusive criteria as given below so here we are selected 60 female's patients irrespective of caste, religion and socioeconomic status who were diagnosed and have the complaint to have vyanga. The patients were selected from the OPD (outpatient department) department of Ayurveda Medical College, Pusad, India. Here in this study the consent was taken from every patient who willingly participate and ready for the ayurvedic treatment and therapies. The study design was a single group clinical - interventional study of 45 days with a pre, post, and follow-up assessment after 45 days.

The patients were categories in three groups as follows. Group A (female patients from age group of 31 years to 40 years), Group B (positive history of melasma), Group C (stress history).

### ***Inclusion Criteria***

Patients who have dark colour patch on face, neck, and forearms between age group of 25 years and 65 years. The melasma patients namely. Centro facial melasma, malar melasma, mandibular melasma. The chronic melasma patients also included here.

### ***Exclusion Criteria***

Those who has tumors as malignant melanoma. Those who has hyperpigmentation because of any other disease like Addison's disease. These all people excluded here in this study.

### ***Diagnostic Criteria***

Patient's complaints with hyperpigmentation as characterized with niruja (painless), shyava (bluish black), freckles, tanu mandalas (macules) on the face were diagnosed to have vyanga.

### Therapy and Treatments

Daruharidra grind and make fine powder then make lepa (paste) by adding trifala siddha ghruta as media for mixing. A thick paste was prepared freshly every day for external application. The female’s patients were suggested to wash their faces with warm water 3 times to 4 times before the application of lepa on face. Then advised to patients apply the lepa on the face from medial to lateral direction (opposite to the direction of hair follicles) in sufficient quantity. It will cover all the face with affected areas in moderate thickness. Patients were advised to apply freshly prepared lepa thrice daily (morning, afternoon, evening). After drying lepa on face wash the face with warm water. The patient’s advised that during treatment and therapy, should not expose their skin to sun directly. Just rap the face then go in sun or else use umbrella.

Daruharidra boiled in water in the morning by increasing the concentration day by day up to 2 gm and it is given to the patients with empty stomach. The raw drug purchased in the market and authenticated at the Department of dravyaguna, Pusad.

### Statistical Analysis

The results of the present study were analyzed statistically using descriptive statistics, frequencies, and percentages. The basic statistical analysis used here.

### OBSERVATION

Total 55 female’s patients completed their treatments and therapy out of 60 female’s patients. After completion of follow-up, it was great experience to us that disease is cure by 95%.

By the observation we come to know that 50% of female’s patents were from the age group of 31 years to 40 years. 40 % female’s patients had a positive history of melasma, 45% females were expose to suns with the patients related to the stress history.

### RESULT

Here in this study, the female’s patients were categories in three groups A, B and C.

#### Group A

##### Females patients from age group of 31 years to 40 years

By the Figure 1, it is come to know that the females’ patients get here excellent result in curing the melasma. Only they have taken precaution they haven’t expose their skin to sun. As seen in above graph we get 95% result to remove hyperpigmentation.

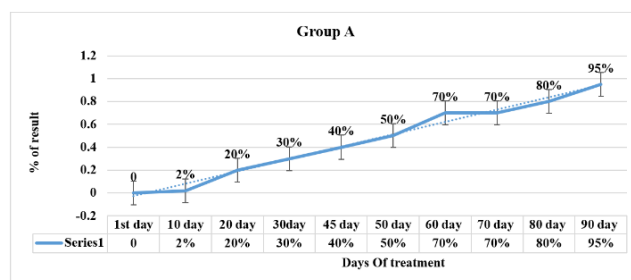


Figure 1: Female patients.

#### Group B

##### Positive history of melasma

By the Figure 2, it is come to know that the female’s patient’s gets 88% result in curing the melasma. Only they have taken precaution they haven’t expose their skin to sun. Those who have family history, they required more time to cure melasma. The family history people get results very slow as shown in above graph.

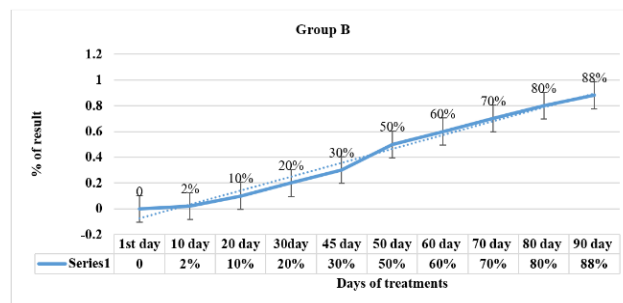


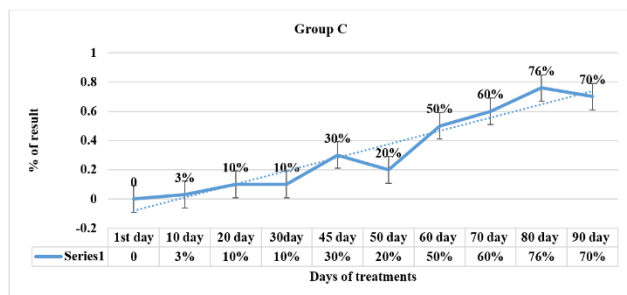
Figure 2: Positive history of melasma.

#### Group C

##### Stress history

By the Figure 3, it is come to know that the female’s patient’s gets 70% result in curing the melasma. Only they

have taken precaution they haven't expose their skin to sun. Moreover, they have to take one more precaution is that they should not take any kind of stress. In above graph, it was showing some ups and downs in curing the melasma because of increasing stress.



**Figure 3:** Stress history.

## DISCUSSION

Observation of above treatment and theory, it is come to know that the patients in Group A associated with more prevalence in childbearing age. Other all group shows that females are more prevalence to the melasma, and the rate of incidence increase day by day. 40% of female's patients have melasma because of the family history but we can't say it is hereditary because of no evidence yet. Moreover, it most probable cause is only suns exposure and UV radiation. Stress is most important factor which cause

melasma without any kind of reasons. If we are correlating another factor like psychological factor also plays an important role to cause melasma [8,9].

As we seen that after treatment of daruharidra with trifala siddha ghrita gives excellent result in treatment of melasma.

It should be recommended that the same study can be carried out for extended period, with different mixture of drug to cure melasma with maintaining the balance of three dosh (vata, pitta, and cough). It also working on skin tanning. It also removes skin wrinkles.

## CONCLUSION

As per the ayurveda, it is believed that facial beauty is the indication of mental, spiritual, and physical wealth is well. If the symptoms showing outside that means, there is some internal problem. So, ayurvedic treatment nothing but the detoxification of blood helps to cure disease. As we seen daruharidra is excellent remedies to cure disease with trifala siddha ghrita.

## CONFLICT OF INTEREST

There are no conflicts of interest.

## REFERENCES

1. Sialy R, Hassan I, Kaur I et al. (2000) Melasma in men: A hormonal profile. *The Journal of Dermatology* 27(1): 64-65.
2. Paul K, Taylor SC (2009) *Dermatology for skin of colour*. New York: McGraw Hill Companies 332.
3. Acharya YT (2005) Varanasi: Chaukhamba orientalia, sushruta samhita of sushruta, nidana sthana 324.
4. Chaukhamba Sanskrit Sansthan (2001) Chakrapanidutta, Commentator. *Charaka Samhita of Agnivesha, Sutra Sthana* 30.
5. Pallavi G, Gupta KV, Shreevathsa M et al. (2015) Clinical evaluation of varnya gana lepa in vyanga (melasma). *Ayu* 36(2): 151-156.
6. Passeron T (2013) Melasma pathogenesis and influencing factors-an overview of the latest research. *Journal of the European Academy of Dermatology and Venereology* 27: 5-6.
7. Inoue K, Hosoi J, Ideta R et al. (2003) Stress augmented ultraviolet-irradiation-induced pigmentation. *Journal of Investigative Dermatology* 121(1): 165-171.
8. Hirlekar PS (1942) Amravati: Saraswati mudranalaya; shareera tatva darshana of purushottama sharma 236.

9. Wong RC, Ellis CN (1984) Physiologic skin changes in pregnancy. *Journal of the American Academy of Dermatology* 10: 929-940.