

## Efficacy of Bastikarma in Vitiligo

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### ARTICLE INFO

#### Article history:

Received 20210419

Received in revised form 20210519

Accepted 20210610

Available online 20210629

#### Keywords:

Bastikarma

Trigger

Repigmentation

Vitiligo

### ABSTRACT

This is a case series study on patients suffering from Vitiligo. The study was carried out on 30 outdoor patients taking regular ayurvedic medicinal treatment. Patients from both sexes, from age group 10 to 60 years complaining mainly as white patches were studied. Patients were treated with Ayurvedic body purification treatment i.e. (Panchakarma) Bastikarma. Duration of treatment was of 7 days with monthly follow-up for 3 months. The response to treatment was observed in terms of reduction in area of patches after treatment. Most important factor noted was trigger or sudden upsurge of repigmentation after the treatment. The treatment was effective in all types of vitiligo. The results of internal medications & local treatment were aggravated specially after Bastikarma. So Bastikarma was very effective in vitiligo.

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### Introduction

Vitiligo, in which whitish patches of skin patches appears on skin is very complex disease. Many a times, it is manifestation of some underlying hormonal or immunological abnormality. It creates a very bad social stigma for the victims. In Ayurveda it is called as 'shwitra'.<sup>1</sup>

As per Ayurveda, it has same causative factors as kushtha i.e. leprosy. It is without discharge, vitiated with three doshas i.e. Vata, Pitta, kapha. It is associated with rakta (blood), mansa (Muscle tissue) and meda (lipid) dhatus.<sup>2</sup>

Unbalanced diet (Virrudhahara) is also an important cause. It is different from Leprosy (kushtha) in respect that it is non-contagious, non-bacterial, it doesn't destroys body tissues, doesn't have any discharge (vyadhiswabhava). Leprosy (Kushtha) deeply goes up to all Dhatus. Vitiligo (shwitra) occupies only skin, blood, muscle tissue (mansadhātu) and fat (medadhātu).

Treatment needs a holistic approach. There is imbalance of regulating hormones for melanin synthesis. For homeostasis or balancing of hormones & body, Ayurvedic body purification treatment i.e. Panchakarma is very useful. In fact in Ayurveda it is described as powerful treatment & should be done before commencing any medical treatment for most of the diseases.<sup>1</sup>

### Prognosis (Sadhyasadhya)

Madhavanidana describes that Vitiligo (shwitra) in which hairs are black, in small percentage, with diverse spots, new (< 1 year-charak) is curable. Others including developed due to burns

, in genitals, hands and feet, lips, with history of inheritance are non – curable or difficult for cure.<sup>2</sup>

### Treatment (chikitsa)

In Ayurveda Body purification i.e. Panchakarma treatment – Therapeutic Emesis (vaman), Purgation (virechan), – purification method for vata, Blood - letting (raktamokshan), Local application (lepachikitsa), sun UV rays exposure (aatapsevan), internal medications (abhyantara chikitsa) etc. advised in texts. Treatment is long term and should be continued from months to years.<sup>1</sup>

### Modern (Allopathic Medicine) view

According to modern pathophysiology, in generalized vitiligo melanocytes are not found in the affected skin. Melanocytes contain the pigment melanin which serves a protective action against the harmful effects of sunlight.

phenylalanine → tyrosine → dihydroxyphenylalanine (DOPA) → melanin (adrenals)

Melanin formation in skin is augmented by the hormone melanocyte stimulating hormone (MSH) of the pituitary gland (Ant pituitary). ACTH by ant pituitary has melanocyte stimulating activity similar to MSH although to a much lesser degree. 25% cases are autoimmune.

Localized hypopigmentation is also found in chemical leucoderma, piebaldism (autosomal dominant disorder), post-inflammatory, tinea versicolor etc.

Diagnosis of vitiligo can be ascertained by skin biopsy.

**Investigations:** T<sub>3</sub>, T<sub>4</sub>, TSH, BSL, skin biopsy etc.

### Treatment

In allopathic system no satisfactory & permanent cure is available. Treatment is steroid based. Systemic psoralens with exposure to long wave UV radiation. Ttopical potent corticosteroids.<sup>3-4</sup>

### Aims and Objectives

- To study the efficacy of Bastikarma in vitiligo.
- To note side effects if any.

### Materials and Methods

- Literary review: ayurvedic texts and samhitas done, modern medicine books, journals etc.
- Clinical study.
- Study design: Case series study on 30 patients suffering with vitiligo.
- Selection of patients.

### Inclusion criteria

- a. Patients complaining of white patches (vitiligo) as a main complaint.
- b. Patients from age 10 to 60 years of age.
- c. Selection was irrespective of constitution (prakruti), sex, duration of the disease.
- d. Exclusion criteria
- e. Patients with history of major systemic illness e.g. heart disease, neurological disorder, metastatis etc.
- f. Patients taking steroids or other long term treatment.
- g. Patients unfit for bastikarma.

### Place of work

Mulla Ayurvigyan Hospital, Islampur, Sangli, Maharashtra

### Informed consent

Informed consent about nature and purpose of study from each patient was taken.

### Duration of treatment

7 days. Follow up - fifteen days or monthly for 3 months The criteria for evaluation is decided as –

Trigger for repigmentation	Result
0%	Nil
1- 33 % ( intermittent repigmentation)	Mild
34-67% (dense repigmentation with borders around lesions)	Moderate
68-100 % (very dense repigmentation with borders & normal skin colour)	Good

### Materials

#### A. Bastidravaya – For Niruhabasti

- i. Dashamoola + Erandamoola ( Decoction )
- ii. Kalka ( Paste ) ( Madanphala + Vekhand + Kutaj + Yashtimadhu ) ( 1/8 of kwath )
- iii. Chandanbalalakshadi oil - 50 ml
- iv. Saindhav – Rock salt - about 10 gms
- v. Honey 10 ml<sup>5-6</sup>

B. Anuvasan: with Siddha (Medicated) Til oil at prior evening of First Bastikarma

C. Matrabasti - Chandanbalalakshadi oil

### Dose (matra)

Prepared Bastidravaya 700 to 960 ml as per bala, prakriti & doshaprokopa of the patient. Childrens- doses adjusted according to age & weight of child.

Dose of Anuvasan Basti: 120 ml Dose of Matrabasti- 60 ml

### Mode of administration

Patients were given external oleation (snehan) and medicated steam bath ( swedana ) as per texts.

One Anuvasan Basti was given to each patient on evening before first Niruhabasti. Then Niruhabasti was given early in the morning on empty stomach. Patient was asked to take hot water bath after bastikarma. Bastikarma was followed by special rules of diet & living (sansarjanakrama) as per texts.

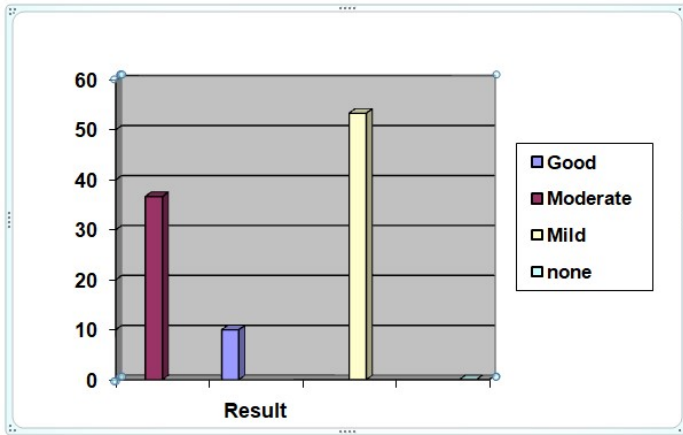
In the evening snehabasti (Matrabasti) was given after food.<sup>7</sup> such settings were given.

### Proper (Samyaga) Bastikarma signs

Mala, pitta, kapha & vayu doshas were serially evacuated, feeling of laghuta ( lightedness) in body, Agni (Digestive power ), taste was increased, satisfied mind & indriyas (Sensory organs) and most important relief of symptoms.

**Results**

Result	No. of patients	Percentage
No repigmentation (No trigger)	0	0
Mild repigmentation (Mild trigger)	16	53.33
Moderate repigmentation (Moderate trigger)	11	36.66
Good repigmentation (Good Trigger )	3	10



Probability comes to  $< 0.001$  (real variability) on referring to 't' table. So it is highly significant at 99.9 % confidence limits. So the difference in the means of two sets of observations is highly significant at 1% level. So we reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_1$ ). So the treatment with Bastikarma is responsible for this difference.<sup>7</sup>

**Some Photographs of Patients under study :**



Before Treatment

On treatment



Before Treatment

On treatment



Before Treatment

After Treatment



Before Treatment

After Treatment



Before Treatment

After Treatment



Before Treatment

After Treatment



Before Treatment

After Treatment



Before Treatment

After Treatment

## Discussion

This is an observational case series study on 30 patients with vitiligo. Ayurvedic panchakarma treatment i.e. Bastikarma was carried out on patients taking regular ayurvedic medicinal treatment for vitiligo.

The observations can be summarized as follows:

- Five patients noted with history of inheritance. Also the response to treatment is mild to moderate in this group.
- Causative factors like unbalanced diet (viruddhahara), excessive consumption of milk, rice, non-vegetarian food etc. noted. In most patients cause is unknown.
- In five (16.66%) patients thyroid hormone derangements especially hypothyroidism were observed, 13.33 % patients were suffering from madhumeha (diabetes mellitus).
- History of taking allopathic medicines including steroids is noted in significant number of cases.
- Early cure is noted in patients with short duration of disease occurrence (few days to months).
- In most of the patient's signs of proper bastikarma noted.
- No major side effects of the treatment given were observed.
- The treatment is effective in all types of vitiligo.
- Thyroid diseases & Diabetes Mellitus may be considered as causative factor in some cases.

## Conclusion

- ✓ Ayurvedic Panchakarma therapy Bastikarma has statistically significant results in vitiligo.
- ✓ The results of internal medications & local treatment are specially aggravated after the procedure. So Bastikarma has a significant role in cure of vitiligo.
- ✓ The results from the present study need to be verified by taking larger sample size.
- ✓ There is also need to do some laboratory research like estimation of hormones in blood before & after the Bastikarma.
- ✓ Immunological studies related to changes in antigen – antibody response can be undertaken. That will give sound proof for effectiveness of treatment.
- ✓ Effectiveness of Bastikarma through Enteric Nervous system (ENS) is again a matter of separate study.
- ✓ Ayurvedic Panchakarma methods are very effective tools for body homeostasis & hormonal balance. This should be proved by more scientific research at the Institute Level.

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