Efficacy of Vaman (Therapeutic Emesis) in Vitiligo

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ABSTRACT: This is a single blind randomized clinical study on patients of vitiligo, a disease difficult for cure. The study is carried out on one hundred outdoor patients taking regular ayurvedic medicinal treatment. Patients from both sexes, from age group eight to fifty years complaining mainly as white depigmentation are studied. Patients are treated with the method of Ayurvedic body purification (Panchakarma) i.e vaman (Therapeutic emesis). Emetic compound (Vamakyoga) containing madanphalappalli (Randia spinosa) as main ingredient is used for vaman. Duration of treatment is of 7 days with monthly followup for 3 months. The response to treatment is observed in terms of reduction in area of depigmentation after treatment. Most important factor noted is trigger or sudden upsurge of repigmentation after the treatment. Good result is noted in 33.33% cases, moderate in 56.66% cases and mild in just 10% cases noted. The result is statistically highly significant at 1% level. No major side effects of the treatment given are observed. The treatment is effective in all types of vitiligo. The results of internal medications & local treatment are aggravated specially after vaman. So vaman is very effective in vitiligo.

Keywords: Ayurvedic pachakarma, highly effective, trigger, vaman, vitiligo.

I. INTRODUCTION

Since long ago the treatment of vitiligo is a challenge to the medical fraternity. Allopathy has no satisfactory cure for this disease. It creates a very bad social stigma for the victim, although no other major systemic abnormality is generally present. In Ayurveda it is called as ‘shwitra’.[1].

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 (Muscular tissue) and meda (Adipose tissue – fat) dhatus[2].

Acharya Charak has described some special causes for vitiligo e.g. telling lie, not believing God, not apologising someone’s good deeds, performing sins, deeds of pernicious life (poorvaka) etc.[1] (charak chikitsa 7/177). These causes point to the inheriting nature of the disease in some cases and towards mal or abnormal thinking by brain (pradnyaparadha) as a major cause. 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 upto all Dhatus. Vitiligo (shwitra) occupies only skin, blood, muscular tissue (mansadhatu) and fat (medadhatu).

Treatment needs a holistic approach. There is imbalance of regulating hormones for melanin synthesis. For homeostasis or balancing of hormones & detoxifying 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 any disease.

1.1, Prognosis (Sadhyasadhyata)

Madhavanidana describes that Vitiligo (shwitra) in which hairs are black, in small percentage, with ununited 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 of difficult for cure. [2]

1.2, Treatment (chikitsa)

In Ayurveda Body purification i.e Panchakarma treatment – Therapeutic Emesis (vaman), Purgation (virechan), Basti – purification method for vata, Blood - letting (raktamokshan), Local application (lepchikitsa), sun UV rays exposure (atatapsevan), internal medications (abhayantara chikitsa) etc. advised in texts. Treatment is long term and should be continued from month’s to years. [1]

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1.3 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.

\[ \text{phenylalanine} \rightarrow \text{tyrosine} \rightarrow \text{dihydroxyphenylalanine (DOPA)} \rightarrow \text{melanin (adrenals)} \]

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

Patients with vitiligo have an increased incidence of several autoimmune disorders including hypothyroidism (common), Graves’ disease, pernicious anaemia, Addison’s disease, alopecia areata, chronic mucocutaneous candidiasis etc. Diabetis mellitus is also associated in some subjects.

Localized hypopigmentation is also found in chemical leukoderma, piebaldism (autosomal dominant disorder), post-inflammatory, tinea versicolor etc. Diagnosis of vitiligo can be ascertained by skin biopsy.

1.3.1. Investigations
T3, T4, TSH, BSL, skin biopsy etc.

1.3.2. Treatment
In allopathic system no satisfactory & permanent cure is available. Treatment is steroid based. Systemic psoralens with exposure to long wave UV radiation. Topical potent corticosteroids are used. [3,4]

II. AIMS AND OBJECTIVES
a. To study the efficacy of Vaman (Therapeutic emesis) in vitiligo.

b. To note side effects if any.

III. MATERIALS AND METHODS
The following methodology is adopted to conduct the study.

3.1. Literary review
For collecting all the available information about Vitiligo, literary review of available ayurvedic texts and samhitas done thoroughly. Also references from modern medicine books are also studied.

3.2. Clinical study

3.2.1. Study design
This is a randomised single blind clinical trial in patients of vitiligo. The study is carried out on 100 patients.

3.2.2. Selection of patients
The study is carried out on outdoor patients with regular ayurvedic medicinal treatment for vitiligo.

Inclusion criteria
a. Patients complaining of white depigmentation as a main complaint.
b. Patients from age 8 to 50 years of age.
c. Selection is irrespective of constitution (prakruti), sex, duration of the disease.
d. Patients with or without family history (kulavrutta) of vitiligo.

Exclusion criteria
a. Patients below age of 8 years and above 50 years of age.
b. Patients with history of other major systemic illness e.g., hypertension, heart disease, neurological disorder kidney disease etc.
c. Patients unfit for panchakarma.

3.3. Place of work
DR. MULLA’S AYURVIGYAN HOSPITAL,
ISLAMPUR DIST. SANGLI. MAHARASHTRA . INDIA

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

3.5 Materials
A. Emetic compound (Vamakyoga): each 5 gms containing
i) Madanphalapippali – Randia spinosa powder - 3gms.
ii) Pippali – Piper longum powder – ½ gm
iii) Yashtimadhu – Glycerrhiza glabra powder - ½ gm
iv) Saindhav – Rock salt - ½ gm
v) Tankanbhasma – Tankana boriox – ¼ gm
vi) Honey 5 ml [6,1]
B. Liquid for fulfillment of stomach (Akanthapana): Milk
C. Saindhav – Rock Salt water (lawanjala)

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3.6. Dose (matra)
Textual dose of vamak yoga for vaman is full of onself's finch (antarnakhamushthi).(madanaphalapippali)
Practically used : adults- 3-5 gms of vamakyoga , Childrens- doses adjusted according to age & wt.
Akanthapana: Milk 1 to 2 lit. Saindhavjala – as required.

3.7 Mode of administration
Patients are given vaman (emesis) after internal & external oleation ( snehan ) and medicated steam bath
( swedana ) as per texts. Vaman ( Therapeutic Emesis) is given early in the morning on empty stomach.
Patients observed for proper signs of vaman. Vaman is followed by special rules of diet & living.
( sansarjanakrama) and Rejuvination ( Rasayanachikitsa) as per texts. In children Small Therapeutic Emesis
(Laghuvaaman) is given.
3.7.1 Proper (Samyaga) vaman signs
pittantak ( bile vomited at the end), 6-8 vegas( ejections) , self limiting vegas, feeling of laghuta (lightedness)
in the body, satisfied mind & indriyas (Sensory organs) and most important relief of symptoms.
Eradicated doshapramana – Quantity of Doshas vomited = vomitus-intake quantity = approx 54 tolas or 500-550 ml.

3.8 Duration of treatment
7 days Follow up. Monthly for 3 months

IV. OBSERVATIONS
Observations are made in the following ways,
Initial diameters of white lesions are taken as 100 % for each patient separately.
The response to the treatment is observed in terms of normal pigmentation developed & reduction in area of
depigmentation after treatment and expressed as percentage improvement in each patient. Most important factor
noted is trigger or sudden upsurge of repigmentation. Photographs before & after treatment taken. Also side
effects if any observed , noted & treated accordingly.
Percentage relief is calculated according to following formula:
Percentage relief = \( \frac{Ao-A_L}{Ao} \times 100 \)

Where,
\( Ao = % \) of Vitiligo lesion before treatment.
\( A_L = % \) of vitiligo lesion after 3 months of treatment.

The criteria for evaluation is decided as –

<table>
<thead>
<tr>
<th>Trigger for Repigmentation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 %</td>
<td>Nil</td>
</tr>
<tr>
<td>1- 33% ( intermittent repigmentation)</td>
<td>Mild</td>
</tr>
<tr>
<td>34-67% ( dense repigmentation with borders around lesions )</td>
<td>Moderate</td>
</tr>
<tr>
<td>68-100 % ( very dense repigmentation with borders &amp; Normal skin colour )</td>
<td>Good</td>
</tr>
</tbody>
</table>

Changes in the mean of severity before and after treatment are calculated. Statistical methods like mean,
standard deviation(SD), standard error(SE) etc. are applied to find out variations in observations.

V. RESULT

<table>
<thead>
<tr>
<th>Result</th>
<th>No. of patients</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No trigger for repigmentation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mild trigger for repigmentation</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Moderate trigger for repigmentation</td>
<td>60</td>
<td>56.66</td>
</tr>
<tr>
<td>Good trigger for repigmentation</td>
<td>30</td>
<td>33.33</td>
</tr>
</tbody>
</table>

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Figure 1 showing % of result after vaman (therapeutic emesis)

5.1 Calculations
We take the sample size as 100 & apply paired “t test”.

1. \( X_1 = \% \) of vitiligo lesion before treatment i.e 100 \% for a particular lesion.
   \( X_2 = \% \) of vitiligo lesion after treatment
   \( x = \) difference \((X_1 - X_2)\)

2. Mean of difference \( x = \frac{\sum x}{n} = \frac{4303}{100} = 43.03 \)

Ho = Null hypothesis- there is no real difference between the means of two sets of observations.

3. SD of differences = 22.04
4. SE of difference = SD \( \sqrt{n} = 22.04 \div \sqrt{100} = 2.20 \)
5. \( t_{99} = \frac{x}{SE} = 43 \div 2.20 = 19.54 \)

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The observed ‘t’ value is 19.54 times the standard error. Here probability is < 0.001. At 99 df the highest obtainable values of ‘t’ at 0.1% LOS is 3.390 as found on reference to ‘t’ table. The calculated value in this experiment is 19.54 which is much higher than the highest 3.390 obtainable by chance. So it is highly significant at 99.9% confidence limits. Probability comes to < 0.001 (real variability). So the difference in the means of two sets of observations is highly significant at 0.1% level. So we reject the null hypothesis and accept the alternative hypothesis (H1). So the treatment with vaman (therapeutic emesis) is responsible for this difference.

IV. SUMMARY
This is a single blind randomised clinical trial on patients with vitiligo. Total 100 patients are treated and observed for the response. Ayurvedic Kaphadosha eradicating panchakarma i.e vaman or therapeutic emesis is carried out on patients with regular ayurvedic medicinal treatment for vitiligo. Most important factor noted is trigger or sudden upsurge of repigmentation after the procedure.

The observations can be summarised as follows:
- Patients from all age groups & both sexes observed.
- Patients with vata & kapha dominant prakruties noted predominantly.
- 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.
- Hypothyroidism & diabetes is also noted as major cause in few patients.
- Majority patients observed had kaphaj type of disease. Hence also results are significant for vaman.
- 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 patients signs of proper vaman noted.
- No major side effects of the treatment given observed. Minor side effects like epigastric discomfort, weakness, redness & itching of affected skin, These are managed accordingly.
- No recurrence of vitiligo is noted after stoppage of treatment even after one year or more in completely cured patients. In others the progress remained stationary but doesn’t get worsened.
- The treatment is effective in all types of vitiligo.

VII. CONCLUSION
The following conclusion can be drawn from the present study
- The trial therapy vaman (Therapeutic emesis) has statistically highly significant results in vitiligo.
- The results of internal medications & local treatment are specially aggrevated after the procedure. So vaman (Therapeutic emesis) has a significant role in cure of vitiligo.
- Some patients may need repeated vaman as per textual advice.
- 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 MSH & other related hormones in blood before & after vaman.
- Other ayurvedic panchakarma procedures i.e. virechan, basti etc. should be studied for their efficacy in vitiligo.

BIBLIOGRAPHY
[1]. Agnivesh, Charak, Charaksamhita (Chaukhambha Varanasi, 1993) chikitsathana 7/173, 177, 162
[2]. Madhavkar, Madhavanidana (Chaukhambha Varanasi 1994) 49
[3]. Harrison’s Principles Of Internal medicine (McGraw – Hill 14th ) 316 – 317
[4]. Dr. Golwala, Golwala Medicine for students ( Dr. A.F. Golwala 17th )
[5]. Laghuvagbhata, Ashtangahrudaya (Chaukhambha Varanasi , 1982 ) sutrasthana 15/1
[6]. Bhavamishra, Bhavaprakash ( Chaukhambha Varanasi , – 2002)
[7]. B. K. Mahajan, Methods in Biostatistics (Jaypee Brothers, 1997)

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