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# Clinico comparative study of *Vamana* and *Virechana Karma* in the management of *Shvitra* w.s.r. to Vitiligo

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#### ABSTRACT

**Introduction:** One of the baffling problems of mankind since time immemorial is the skin disease. *Shvitra* (Vitiligo) may become; a psychologically devastating disorder when it typically occurs in exposed areas. **Aim:** To evaluate and compare the efficacy of the *Vamana* and *Virechana Karma* in the management of the *Shvitra* (Vitiligo). **Materials and Method:** In this study total 92 patients of *Shvitra* were registered at Panchakarma dept. of I.P.G.T. & R.A. Hospital, Jamnagar. Patients were randomly divided in three groups by lottery random sampling method. In Group A - *Vamana Karma* and in Group B - *Virechana Karma* was given. After *Shodhana* in both Groups and in Group C Oral administration of *Darvigomootra Ghanavati* 6g/day with the *Apamarghkshara Lepa* for 8 weeks was given. **Result:** In VASI Score 2.16% and 4.61% relief was found in Group A and B respectively which was statistically highly significant. While in Group C 0.38% relief was found which were statistically insignificant. **Conclusion:** Any kind of *Shodhana* therapy either *Vamana* or *Virechana* play a key role in the management of Shvitra. For long far and sustainable effect of the therapy *Shodhana* should be performed priorly.

Key words: Shvitra, Vitiligo, Vamana, Virechana

#### **INTRODUCTION**

The man of 21st century is breathing under various adversities, stresses, strains and anxiety. The everchanging modes of livelihood force one to continuously update oneself in every respect to

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survive and to keep at the pace with new developments. The lifestyle is far from what the natural anatomy and physiology of human body permits. Irregular and unnatural food habits, suppression of natural urges, lack of proper sleep and less time for relaxation are the inseparable parts of our routine which enervate body and finally lead to the disease. These physical factors, along with everiding stressful psychological conditions contribute to most of the psychosomatic diseases.

Ayurveda emphasizes on maintenance of positive health and alleviation of the diseases engulfing humankind, among which skin diseases are one, which are visible and agonizing the individual psychosomatically. Skin is the envelope of our body expressing the harmony inside. It is one of the five 'Gyanendriyas' as told by Ayurveda, which is responsible for the perception of touch. It also

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performs functions such as protection of the body against physical, chemical, mechanical and biological injuries, thermoregulation etc. Besides all this it plays an important role in the expression of beauty, leaving impression.

The skin has long been recognized as the 'organ of expression' and serves as the boundary between ourselves and the outside world. Dermatological disorders have an immediate impact on tactile communication and bodily interaction. So one of the baffling problems of mankind since time immemorial is the skin disease, which manifest in variety of forms. Shvitra is mentioned along with other types of Kushtha, but the difference between Shvitra and Kushtha is based on non-secretary and non-infectious nature of disease, involvement of Twaka only, peculiarity of Nidana, Asadhya Lakshana and chronicity. According to modern dermatology, Shvitra can be correlated with Vitiligo and Leucoderma. There are several diseases marked by a lack of pigment in the skin that are grossly referred to as Leucoderma; some are caused by an inability of melanocytes to produce melanin, while others are caused by melanocytes either not being present or being destroyed. Vitiligo is a progressive disease in which the melanocytes are gradually destroyed causing unpigmented areas on the skin.

Many times common causes are observed as severe emotional stresses, (in some countries) social and emotional discrimination etc. Vitiligo may be become; a psychologically devastating disorder when it typically occurs in exposed areas (face and hands). According to the modern line of treatment PUVA (Psoralen + Ultra violet A) remains the therapy of choice along with the corticosteroid therapy, vitamin B12, folic acid, pseudocatalase, antioxidant, MSH analogues, khellin, calcium etc. PUVA has several adverse effects, so It is also time consuming and carries certain health risk for both patient and physician. Therefore it's a time need look for harmless and as well as effective treatment in the Ayurveda. Acharya Charaka has mentioned that Samshamana therapy can be administered to patient after Shodhana therapy in this disease. [1] Because of the chronic and relapsing nature of the disease radical therapies like *Shodhana* should be undertaken for long lasting relief. *Sodhana* essentially refers to biopurification of the body aiming to cleanse the macro and micro channels of the biological system-*Srotas*. Therefore, on the basis of classical references in the present study *Vamana Karma* and *Virechana Karma*,<sup>[2]</sup> *Darvigomootra Ghanavati* [3] and *Apamarga Kshara Lepa* [4] has been selected in the treatment of *Shvitra* (Vitiligo).

#### **OBJECTIVES**

To evaluate and compare the efficacy of the *Vamana* and *Virechana Karma* in the management of the *Shvitra* (Vitiligo) and also to evaluate the clinical efficacy of *Darvigomootra Ghanavati* and *Apamarga Kshara Lepa* in the management of the *Shvitra* (Vitiligo).

#### **MATERIALS AND METHODS**

Patients having sign and symptoms of *Shvitra* (Vitiligo) were selected for present studies. Patients fulfilling the criteria and attending OPD and IPD of Dept. of Panchakarma, and cases referred by other Departments of I.P.G.T. & R.A. Hospital, G.A.U. Jamnagar, were selected randomly irrespective of race, cast, sex, religion etc.

The study was carried out after obtaining permission from institutional ethics committee. Inform concert (IC) of patients was taken prior to clinical study. After ethical clearance of the synopsis, study was registered in CTRI with registration no CTRI/2014/09/005004.

#### **Inclusion Criteria**

- Patients having sign and symptoms of Shvitra (Vitiligo)
- Patients between age group of 15 years to 50 years were selected.
- Patients having chronicity less than 10 yrs.

#### **Exclusion Criteria**

 Patients complicated with any cardiovascular diseases, renal diseases, hepatic disease, carcinoma, major illness like IDDM, NIDDM,

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patches due to burning, chemical explosion, any other serious systematic illness or any other disease effecting multiple body systems and pregnant women etc.

 Patients contraindicated for Vamana and Virechana Karma as per classics.

#### **Study Design**

Randomised clinical trial, Interventional. Patients were allocated by using lottery randomisation method.

#### **Grouping**

In the present study 3 groups were done.

- Group A In this group classical Vamana Karma was given. Followed by oral administration of Darvigomootra Ghaanavati 6g/day with the Apamargakshara Lepa for duration of 8 weeks.
- Group B In this group classical Virechana Karma was given. Followed by oral administration of Darvigomootra Ghanavati 6g/day with the Apamargakshara Lepa for duration of 8 weeks.
- Group C Oral administration of Darvigomootra Ghanavati 6g/day with the Apamargakshara Lepa for duration of 8 weeks.

#### Darvigomootra Ghanavati

Prepared with *Darvi* (*Berberis Aristata*) and *Gomootra* (Cow Urine) by the classical method of *Ghana Kriya*.

#### Apamargkshara Lepa

Prepared with Apamarga Kshara and Gomootra.

#### **Advice**

All subjects were explained the *Pathyapathya* of *Shvitra* (Vitiligo). Nature of the diseases was explained and reassurance was given to all the subjects belonging to groups.

#### **Assessment**

There is acurrent lack of consensus on methods of assessment of this disorder, which makes it generally impossible to perform meta-analyses or compare the outcomes of different studies of the same treatment or parameter. Recently, the Vitiligo Area Scoring Index (VASI) tools was proposed to offer more accurate measures of disease severity indexes and treatment evaluation criteria compared to simple clinical photography alone. VASI provides a relatively simple method, analogous to the Psoriasis Area Severity Index (PASI), to measure repigmentation. With the VASI score difference of color of the patch was analysis. On the basis of VASI score and color of the patch overall assessment was analyzed.

### Criteria for the assessment of overall effect of the therapies

For this purpose, following categories were maintained.

- Worsened: Disease condition worsen with the increases in VASI Score.
- Unchanged: No changes in VASI score and color of the patches.
- Mild improvement: Below 25% improvement in VASI score and color of the patches.
- Moderate improvement: 26%-50 % improvement in VASI score and color of the patches.
- Marked improvement: 51%- 75% improvement in VASI score and color of the patches.
- Complete remission: 76%-100% improvement in VASI score and color of the patches.

#### **OBSERVATION**

Total 92 patients were registered in present clinical study i.e.30 in Group A (*Vamana Karma* + *Shamana Karma*) and 31 in Group B (*Virechana Karma* + *Shamana Karma*) and Group C (*Shamana Karma*) respectively. 28 patients in Group A, 30 patients in Group B while 29 patients in Group C had completed the treatment. 2 patients left against the medical advice in Group A and Group C each and 1 patient left against the medical advice in Group B.

Among demographic data, it was found that, Maximum patients i.e. 46.67% were from the group of 16-30 years, 57.61% were females, 26.09% were having chronicity of 2 years, 23.91% were having

positive family history. 43.48% of the patients were of *Vatapittajprakriti*, 38.04% patients were having *Vishama Agni*, 59.78% patients were having *Madhyama Kostha*, 66.30% had *Katu Rasa* dominancy in their diet, 45.65% had *Guru Guna* dominant diet, 56.82% patients were with *Rasavahasroto Dusti*, while 54.34% patients had *Raktavaha Srotodusti*. 19.57% of the patients were observed in taking *Milk+Amla* and 14.13% observed with *Milk+Lavana with* type of *Viruddhahara* as a *Nidana*.

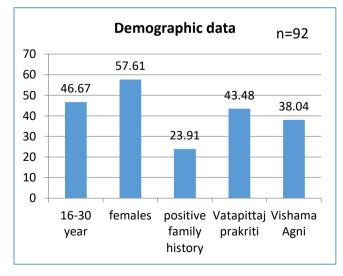
In Group A (*Vamana*) average number of *Vega* was 5, average number of *Upavega* was 10. *Pittantashuddhi* was found in 53.33% of patients, 66.67% of the patients *MadhyamaShuddhi* was achieved.

In Group B Average 16 no. of *Vega* obtained in 31 patients of *Virechana* group. *Kaphanta Lakshana* was observed in 96.77% of the patients. 90.32% of the patients *Madhyama Shuddhi* was achieved.

75% of the patients had white coloured patches of skin observed and 13.04% of the patients had red to whitish coloured patches of skin observed.

44.57% of the patients had more than 4 patches, 18.48% had 2 and 3 patches respectively, 66.30% of the patients had involved 1 percentage areas of the body while 15.22% had more than 4 percentage areas involved, 53.26% of the patients had more than 4cm size of patches.

Figure 1: Demographic data of 92 patients of Shvitra.



#### **RESULTS**

In Group A the initial mean score of VASI of patches was 2.35 which got reduced up to 2.30 and relief was

by 2.16% which was statistically highly significant (p<0.0001). In Group B the initial mean score was 1.02 which has been reduced to 0.97 by 4.61% relief and the result was statistically highly significant (p<0.0001). In Group C the initial mean score was 0.866 which has been reduced to 0.863 by 0.38% relief and the result was statistically insignificant (p<0.0001).

In Group A the initial mean score of color of patches was 4.32 which got reduced up to 3.71 and relief was by 14.32% which was statistically highly significant (p<0.001). In Group B the initial mean score was 4.87 which has been reduced to 4.13 by 15.07% relief and the result was statistically highly significant (p<0.001). While in Group C the initial mean score was 4.55 which has been reduced to 4.07 by 10.60% relief and the result was statistically highly significant (p<0.001).

Table 1: Comparative effect of therapies.

Parameter	Anova (Kruskal- Wallis Statistic)	P	Comparison between groups (Dunn's Test)	Mean diff. of ranks	P
VASI	13.96	<0.05	A-B	-5.83	>0.05
			A-C	16.75	*
			В-С	22.57	***
Colour	1.31	>0.05	A-B	1.44	>0.05
			A-C	6.44	>0.05
			В-С	4.99	>0.05

<sup>\*=</sup> significant, \*\*= highly significant, \*\*\*= highly highly significant

#### **DISCUSSION**

According to modern science it may appear at any age cases have been reported as early as 6 weeks after birth and after 80 years of age. [5] Ayurvedic texts have told Shvitra as Pittapradhana Tridoshaja Vyadhi. This is evident from above data as Shvitra is more prevalent in age group which was Pitta Pradhana. [6] According to modern science male and female both

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are equally affected from this disease.<sup>[7]</sup> So the observed findings are due to smaller sample size or female ratio is more than male may be due to female is more conscious than male about cosmetic values.

Percentage improvement in color of patches of both (*Vamana* and *Virechana*) *Shodhana* therapy show better improvement than *Shamana* therapy. In the classical texts they mentioned that through *Virechana* one can get *Varna Shuddhi,*<sup>[8]</sup> so here *Virechana* Group shows better result in colour of the patches than other groups. However in comparison there is no statistically significant (p>0.05) difference was found between three therapies in the improvement of colour of patches.

On effect of VAS Score comparison between the groups, statistically highly significant difference was seen between groups B and C and in groups A and C statistically significant difference was found. However between group A and B no significant (p>0.05) difference was noted. It means Group A and Group B which is *Shodhana* therapy shows the better result in VASI score than *Shamana*. However in the comparison of *Shodhana* therapy no significant difference was found which means any kind of *Shodhana* either *Vamana* or *Virechan* plays a key role in the management of *Shvitra*. (Table 1)

VASI score is used for main assessment of pigmentation on the skin. In classical texts skin is mentioned as one of the *Indriya*. During the description of the benefits of both *Vamana* and *Virechana Karma our Acharyas* mentioned that both *Karma* make *Indriya Shuddhi*, [9],[10] that's why both *Shodhana* therapies show better result than *Shamana* therapy. In comparison between *Vamana* and *Virechana* groups; *Virechana* group shows better result, it may be due to significant changes were found in *Raktavahasrotodusti through Virechana*[11] and *Rakta* is mentioned as one of main *Dushya* of *Shvitra*.[12]

#### **Overall effect of therapy**

In Group A: 7.14% patients showed moderate improvement and 78.57% showed mild improvement. 10.71% patients reported with unchange, while in 3.57% of the patient observed with worsened

condition of the diseases. None of patient showed complete remission or marked improvement.

In Group B: 3.33% patients showed marked improvement, 10% patients showed moderate improvementand 66.67% showed mild improvement. 20% patients reported with unchanged condition. None of patient showed complete remission or worsened.

In Group C: 3.45% patients showed moderate improvement and 37.93% showed mild improvement. 44.83% patients reported with unchanged, while in 13.79% of the patient observed with worsened condition of the diseases. None of patient showed complete remission or Marked Improvement.

It means though no significant difference was found between Vamana and Virechana therapy. With Virechan Karma one can manage the disease with the good possibilities of getting better result because in Harita Samhita it is mentioned that the vitiation of Vata along with the Pitta Dosha spoil the Rakta Dhatu and create the spot of Pandura Varna that is called Shvitra and has mentioned Pandura as Shvitra. In this way the specific line of treatment Virechana is alone mentioned by Aacharya Harita.[13] According to Acharya Charaka, Svitra has been considered under one of the Rakta Pradoshaja Vikara. So following line of treatment can be taken for consideration.[14] In diseases having blood as causative factor line of treatment is one pacifying Rakta and Pitta. Also, Virechana, Upavasa and Raktamokshana can be given.[15] Acharya Charaka has mentioned that Shamana therapy can be administered to patient after Sodhana therapy. Acharya has praised Virechana Karma as the best modality for Pitta Dosha. Rakta and Pitta are considered as Ashrayiashrita and hence Virechana suits best for Pitta.

#### **CONCLUSION**

The result of both *Shodhana* therapies were statistically highly significant, though no significant difference was found between *Vamana* and *Virechana* therapy. *Virechana* group provided marked improvement and it is easy to perform with less complication and it emphasizes the importance of *Shodhana* in *Shvitra*. Result in color of patches

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indicates that for longer and sustainable effect of the therapy *Shodhana* should be performed priorly.

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