

## MANAGEMENT OF SWITRA WITH VISHRAWAN KARMA - A CASE STUDY

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### ABSTRACT

**Background:** Vitiligo is an acquired idiopathic hypomelanotic disorder which present as localized or widespread areas of depigmentation. It affects approximately 1% of world population. Patient present with milky or chalky white amelanotic macules usually with well demarcated margins. Widespread prejudices, ignorance, taboos, lack of scientific appraisal, and confusion of vitiligo with leprosy all make it a social embarrassment for the patients. This disorder does not result in restriction of capacity to work or expectancy of life, but it causes cosmetic disfigurement leading to psychological trauma to the patients. This condition is compared with *Switra* in Ayurveda. *Vishrawan karma* (Needling) has been mentioned in Ayurveda for treatment of *switra*. In present context it can be correlated with needling.

**Aims & objective:** To evaluate Ayurvedic principles and the efficacy of needling (*Vistravan karma*) in *switra* and to provide better and effective treatment for management of *switra*.

**Material and methods:** Patient was diagnosed with *switra* based on clinical sign and symptoms and *Vishrawan Karma* was performed at interval of 15 days for 3 months. 6 sitting was done.

**Results:** It was observed that patient recovered faster after *vishrawan karma*. There was marked repigmentation on depigmented patch along with reduction in size and number of vitiligo patch.

**Conclusion:** Present case report showed that *Vishrawan Karma* is effective in the management of vitiligo.

**Keywords** *Switra, Vitiligo, Vishrawan karma, Needling*

### INTRODUCTION

Skin is a largest organ of body. Skin has always played an important role in the building of beauty and personality of a person. Skin diseases are among the most common health issues worldwide which results a considerable psychological, social and financial burden on the patients and their families. There is no separate description of dermatology as a branch, in *Ayurveda*. Majority of skin disorders have been described under “*kustarogadhikara*” and “*kshudrarogaahikar*”. Scattered

descriptions are also found under heading of *Vidradhi*, *Prameha Pidika*, *Shotha* etc. *Switra* is exclusively mentioned in chapter of *kustha* but not included in 18 sub types of *kustha*. The word *switra* is derived from word “*shweta*” which means white patch. It is caused due to vitiation of *Tridosha* and *Dhatus* like *Rasa* (lymph), *Rakta* (blood), *Mansa* (muscles), and *Meda*<sup>1</sup> (fats). According to *Harita Samhita*, vitiated *Vata* along with *Pitta* affects the *Rakta Dhatus* manifests *Pandura Varna* (whitish patches) on skin that is called

*Switra*<sup>2</sup>. It can be co-related with vitiligo based on the similarities of sign and symptoms. Vitiligo is characterized by completely depigmented macules and patches of varying sizes and shapes. Beside loss of color, there is no other structural change<sup>3</sup>. Management is done by various types of medications, phototherapy, laser therapy and surgical therapy. Topical steroids, topical calcineurin, inhibitors, and narrow-band ultraviolet (UV)-B phototherapy are widely used and are now considered the mainstays of treatment. Ayurveda classics also explain various treatment modalities for *switra*. Acharya *Vagbhat* has described *Vishrawan karma* in *Switra*. *Vishrawan karma* is one of the surgical techniques used to treat *switra* in ancient time with *kurcha shastra*<sup>4</sup>. According to *yuga-anurupa sandhrbha*<sup>5</sup> this *vishravan karma* for *switra* can be considered as needling. Needling is a procedure in which a needle is inserted into normally pigmented skin on the rim of a vitiligo patch and then is pushed into the center of the patch, theoretically moving healthy pigment skin cells into the vitiligo patch.

### CASE STUDY

A 10 year old boy visited the outpatient department of Skin care unit and derma research lab of R.G.G.P.G Ayurveda College and hospital with O.P.D. no. 215577 having complaints of white patches over skin of right shin, occipital region of head since last 6-7 years. Initially lesions were small discrete, later progressively increased in size and then spread to nape of neck. There were no associated complains confined to lesions like itching or burning sensation and also no history of environment, external trauma and related to contact with harmful dietary substance. He had allopathic medication

history for last five year including corticosteroid, and multivitamins internal and PUVA and external applications. He had found some improvement in starting phase of the treatment, but then there was no progress in that condition for last three years.

### Personal history

Patient was vegetarian and had desire for spicy, sour and fried food. Appetite was good. Time and frequency of intake was regular. Sleep, micturition and bowel habit was normal and regular.

There was no personal history of autoimmune disorders (like Atopic dermatitis, psoriasis, Asthma, etc.), no personal history of trauma, surgery, any psychological disorder, endocrinal disorder (hypothyroidism, hyperthyroidism, diabetes mellitus etc.) or any other major illness.

### Family history

There is no family history of vitiligo.

### Examination

On examination it was found that he had no systemic problem. He had thin body built with weight 32 kg, height 4 feet. All vitals were normal.

### Ashtavidha Pariksha

1. Nadi : 78bpm
2. Mala : regular bowel habit
3. Mutra : 5-7times/day
4. Jivha : not coated
5. Shabda : Prakrit
6. Sparsa : Samsheetoushna
7. Drika : Prakrit
8. Aakriti : Krisha

**On local examination of lesion:** Multiple depigmented discrete macular patch with irregular margin present on right shin, occipital region (present with leucotrichia) and nape of neck. Patch of right shin measured 14\*9 cm initially without perifollicular pigmentation and the largest

lesion of occipital region and nape of neck measured 8\*10 cm with leucotrichia and irregular margin. Also tiny depigmented macular lesions were present in surrounding.

### Investigation

Routine hematological, urine and biochemical parameters were within normal limits.

### Treatment

*Vishrawan karma* (Needling) was selected as treatment option for this particular case as the patient had already taken lot of oral medication. Needling was done on shin and nape of neck.

Pediatric needle of size 28g was used for needling on the margin of the vitiligo patch while dermaroller of needle size 1mm was used over the patch.

**Duration:** Procedure was done at an interval of 15 days. Total 6 sittings were performed for duration of 3 months.

### CRITERIA OF ASSESSMENT:

- Improvement provided by therapy will be assessed on the basis of sign and symptoms of the disease and on the basis of VETI (Vitiligo Extent Tensity Index) score.

**Table 1: Scoring Pattern of lesion**

Score	0	1	2	3
No of Patch	Absent	Single patch	Segmentary	Generalized
Size of patches	1-2 cm	3 cm	4 cm	>4 cm
Hair in patch	Black	Mild grey	Whitish black	White
Color of patch	Normal	Pigment spot on Patch	Pink	Milky white
Chronicity (years)	1	2	3	>3
Re-pigmentation	Fully pigmented	Hypopigmentation with perifollicular pigmentation	Perifollicular pigmentation	No pigmentation

**Table 2: Grade of Tensity**

Stage	Effect on skin
0	Normal skin
1	Hypopigmentation (including trichome and homogenous lighter pigmentation)
2	Complete depigmentation with black hairs and with perifollicular pigmentation
3	Complete depigmentation with black hairs and without perifollicular pigmentation
4	Complete depigmentation with compound of white and black hairs with & without perifollicular pigmentation
5	Complete depigmentation with significant hair whitening

### VETI SCORE:

(Percentage of head involvement  $\times$  grade of tensity) + (Percentage of trunk involvement  $\times$  grade of tensity) 4 + (Percentage of upper limb involvement  $\times$  grade of tensity) 2 + (Percentage of lower limb involvement  $\times$  grade of tensity) 4 +

(Percentage of genitalia involvement  $\times$  grade of tensity) 0.1

= (Ph  $\times$  Th) + (Pt  $\times$  Tt) 4 + (Pu  $\times$  Tu) 2 + (Pl  $\times$  Tl) 4 + (Pg  $\times$  Tg) 0.1

Where,

Percentage of involvement: **P**

Tensity: **T**

## RESULT

There was significant decrease in size of depigmented patch of shin. Almost complete pigmentation on occipital region and nape of neck. Assessing the patient on basis of table 1 showed significant improvement in number, size, color and repigmentation of patches. The finding of VETI score was:

### Before treatment

VETI SCORE:  $(Ph \times Th) + (Pt \times Tt) 4 + (Pu \times Tu) 2 + (Pl \times Tl) 4 + (Pg \times Tg) 0.1 = 5.25$

### After treatment

VETI SCORE:  $(Ph \times Th) + (Pt \times Tt) 4 + (Pu \times Tu) 2 + (Pl \times Tl) 4 + (Pg \times Tg) 0.1 = 3.06$

## DISCUSSION

Discussion is the key part of any scientific & methodical research where in all the actual facts are presented in a combine format. The present clinical study was aimed to evaluate the management of vitiligo with *vishravan karma*.

### Selection of problem

*Vishrava karma* (Needling) in management of *switra* was selected because melanin from normal pigmented skin is pushed into depigmented patch naturally.

### Disease Review

Vitiligo is an acquired depigmentary condition caused by inactivation or destruction of melanocytes in epidermis and hair follicle. It is an idiopathic, acquired, circumscribed hypomelanotic/demelanotic skin disorder, characterized by milky white patches of different sizes and shapes. Although benign, the psychosocial burden can have a profound impact on quality of life for patients. On examination five clinical

types of vitiligo focal, segmental, acrofacial, generalized and universal vitiligo are recognized. Treatment of vitiligo is oral and topical steroids, systemic psoralens, and topical PUVA therapy<sup>6</sup>.

According to *Shusruta* in *switra/ kilaas* there is no exudation and it is limited to the skin only<sup>7</sup>. According to *Charaka* in *switra* whitish discoloration occurs after *doshas* reaches to *meda dhatu*<sup>8</sup>. It is very similar to vitiligo which is characterized by depigmented macule on skin. He has listed the *Switra* under the *Rakta Pradoshaja Vikara*<sup>9</sup>.

### Effect of therapy:

1. With the 1<sup>st</sup> sitting no specific change in the depigmented macule was seen.
2. With 2<sup>nd</sup> and 3<sup>rd</sup> sitting, size of the lesion had decreased along with mild perifollicular pigmentation in the depigmented patch.
3. With the 4<sup>th</sup> sitting there was moderate perifollicular pigmentation in the depigmented patch.
4. With 5<sup>th</sup> and 6<sup>th</sup> sitting there was marked repigmentation on depigmented patch along with reduction in size and number of patch.

### Mechanism of repigmentation

It has been commonly observed that skin trauma or many inflammatory skin diseases induce post inflammatory hyperpigmentation<sup>10</sup>. Needling is a simple technique of inducing repigmentation in the remaining islands of vitiligo<sup>11</sup>. After needling, there occurs multiple, superficial, tiny puncture wounds at the points of penetration of the needle. These then heal through normal wound healing process, which includes an initial inflammatory response to trauma followed by epithelialization of the superficially wounded area. Keratinocyte migration

takes place during the latter process. Melanocytes also migrate along with these keratinocytes and since their population is large at the hyperpigmented border, they give rise to tiny inward pigmentary projections. Repigmentation in stable vitiligo requires proliferation and migration of melanocytes from the reservoir into the depigmented skin. The melanocytes migrate only a few

millimeters from the pigmented edge towards the centre<sup>12</sup>. This way every time one induces a puncture wound, the melanocytes keep migrating inwards and the area of depigmentation keeps narrowing until the whole gets pigmented. Before and after treatment patch change is illustrated in table 2 (figure 1 and figure 2).

**Table 3: Figure of patient before treatment and after treatment**



**CONCLUSION:** *Vishrawan karma* (Needling) was found effective in the treatment of vitiligo. More studies with larger sample size are desirable for

deriving conclusion on the role of needling on vitiligo and to confirm its efficacy. Further study is required to evaluate with the reverse pharmacology and recent

advances with modern medical science. Moreover needling along with topical and oral preparations can be suggested for further study. *Vishrawan karma* (Needling) along with other treatment modalities mentioned in Ayurveda text can stand out to be best for treatment of *switra*.

## REFERENCES

1. Acharya JT, editor. Charak Samhita of Agnivesha, Chikitsa Sthana, chapter 7, Verse.173-74. Reprint. Varanasi Chaukhamba Surbharti Prakashan, 2005; 458.
2. Tripathi H, editor. Harita Samhita of Harita, Tritiya Sthana, chapter 39, Verse 50. Reprint. Varanasi Chaukhamba Krushnadas Academy, 2009; 421.
3. Practice of Dermatology 10<sup>th</sup> edition, 2005, P.N.Behl. A. Aggrawal, Govind Srivastava, CBS PUBLISHERS AND DISTRIBUTORS Pvt. Ltd. (Page no. 304)
4. Astanga-Samgraha (sutrasthana 34/31) Edited with 'Saroj' Hindi Commentary by Dr. Ravi Dutt Tripathi, Chaukhamba Sanskrit Pratishthan, Reprint year, 2006; page no. 594.
5. Astanga-Samgraha (sutrasthana 1/20) Edited with 'Saroj' Hindi Commentary by Dr. Ravi Dutt Tripathi, Chaukhamba Sanskrit Pratishthan, Reprint: year 2006, page no. 8.
6. Essentials In Dermatology, Venereology and Leprology, 1<sup>st</sup> Edition 2015, Ramesh Bansal, page no. 280-284
7. Sushruta samhita Of Maharshi sushruta, Shri Acharya Dalhana Hindi commentary (Sutra evum Nidaan sthana) (part -1) by Dr. Kebal Krishan Thakral, Chaukhamba Publisher. ISBN-978-81- 7637-309-8
8. Charaka samhita Vidyotini Hindi commentary (part -2, chikitsa Sthana 7/174) by Pt. Kasi Natha Sastri, Dr. Gorakha Natha Chaturvedi, Chaukhamba Bharati Academy, Varanasi, Reprint: year, 2013; 274.
9. Charak samhita Vidyotini Hindi commentary (part -1, Sutra Sthana 28/12) Pt. Kasi Natha Sastri, Dr. Gorakha Natha Chaturvedi, Chaukhamba Bharati Academy, Varanasi, Reprint: year, 2019; 502
10. Epstein JH: Post inflammatory hyperpigmentation. Clinic Dermatol, 1989; 7: 55-65.
11. Satish S. Sawant, Radha Atal Shah and Deepak Gore, Surgical Textbook and Atlas of Dematosurgery and Cosmetosurgery, Publishers: ASCAD Mumbai, India, 2<sup>nd</sup> Edition, 3<sup>rd</sup> Reprint 2011, (Page no.375-376)
12. Savant SS: Therapeutic spot and regional dermabrasion in stable vitiligo. Ind J Dermatol Venereol LEPROL, 1996; 62: 139-145.

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