

## Case Report

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# Ayurvedic Management of chronic Vitiligo (Shvitra): A case study

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## ABSTRACT

Vitiligo is a common autoimmune pigmentary disorder of great socio-medical importance. It is characterized by white spots appeared on the skin due to melanocytes deficiency. It can be correlated with *Shvitra* in Ayurveda. Due to side effects and limitation of the contemporary science, some harmless and effective medicines are expected from Alternative medical sciences. Ayurveda has great potential to treat such autoimmune skin diseases. Here a case of chronic vitiligo treated with Ayurvedic management is recorded.

Keywords: Autoimmune, Kanakabindwarishta, Savarnakara Yoga, Skin diseases.

## INTRODUCTION

Vitiligo is a chronic disfiguring disease involved with systemic autoimmune process. It is characterised by constrained, idiopathic, progressive, hypo-pigmented or white patches of skin.<sup>[1]</sup> Prevalence of Vitiligo is 1% all over the world, while its incidence ranges from 0.1 to > 8.8%.<sup>[2]</sup> It can be co-related with *Shvitra* disease in Ayurveda due to the identical signs and symptoms which are; non exudative white, red or coppery-red colored patches, roughness, dryness, itching, burning sensation of the patches, loss and discoloration of the hair. Generally it is found that Vitiligo develops with unknown causes. Several environmental factors affect the melanocytes of the patient and initiate the processes of malenocytosis. This leads to melanocytes deficiency and ultimately white coloured patches appears on the body.<sup>[3]</sup> In modern science, mainstream treatment of disease is PUVA (Psoralen + Ultra Voilet A exposure) therapy and corticosteroids which have many harmful side effects like skin cancer, photo aging, ultraviolet light burns and nausea.<sup>[4]</sup> Traditional medicines may be alternative of these unsatisfactory and harmful approaches and may provide some safe, easier, less complicating, cost effective and fruitful natural remedies for the disease. Ayurveda comprise so many potent formulations for the treatment of such autoimmune disease with chronic nature.<sup>[5]</sup> Here a case of female patient suffering from chronic Vitligo was treated with Ayurvedic therapy along with Diet restriction and psychological counselling.

## CASE REPORT

50 years old married female was presented with history of white patches on hands, abdomen, back and chest, with mild itching over affected area and gradual increment since 10 years. The disease was in active stage and new spots were increasing gradually. Family history in first degree relation was negative. There was no personal history of autoimmune disorders (like Atopic dermatitis, psoriasis, Asthma, etc). There was no personal history of trauma or surgery, any major psychological disorder, endocrinal disorder (Diabetes), or any history of treatment from psychiatrist. She had menopausal history for last 3 years. She had allopathic medication history for last five year including corticosteroid, and multivitamins internal and PUVA and external applications. She had found some improvement in starting phase of the treatment, but then there was no progress in that condition for last three years. Hence, on the advice of her neighbor, she had come

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There were white patch measuring about 3x2 cm, 3x2 cm and 4x3 cm on left arm posterior region, left forearm posterior region and left carpus anterior region respectively. There were multiple small spots on hands, neck, abdomen and back. The spots and patches were asymmetric, well defined whitish and without scaling. Routine urine, haematological and biochemical parameters were also carried out. S. Triglyceride was 203 mg/dl. Rest of all parameters were found within the normal limit. (Table 1) The patient was clinically diagnosed as case of Shvitra (Vitiligo) and planned to enroll in clinical trial of Savarnkara yoga ointment.<sup>[6]</sup> The patient was taking faulty diet in form of milk with meal containing salt at morning and at night regularly which was stopped during the study. She was taking excessive sweet, sour and food which was heavy to digest. It was advised to avoid these things. Patient was having the habits of day sleep (2 and 1/2 hrs after 30 minutes after meal) and night awakening. Mental affliction was found inform of anxiety and depression. Proper psychological counselling was carried out and advised for Yoga and Pranayam.

The patient was prescribed *Savarnakara Yoga* <sup>[7]</sup> in ointment form once in a morning followed by sun exposure for 15 to 30 minutes. Internally, *Kanakabindwarishta* <sup>[8]</sup> was prescribed in dose of 10ml twice a day after meal with equal quantity of water. On 14<sup>th</sup> day of treatment (10<sup>th</sup> day of

Table 1: Haematological and Bio- chemical Parameters of the patient

local application), Patient had complaint of slight itching and burning after application of Savarnakara Yoga. Slight redness was observed over applied area. Sarjarasa Malahara was prescribed for local application followed by Savaranakara Yoga and found relief in itching and burning. After two months, skinny spots were found appeared between the white patches of hands, back and abdomen and small spots were become slight pink. Savaranakara Yoga and Kanakabindwarishta was stopped and Rasayana Churna (2gm) was started for one month as follow up period. No recurrent patches were observed in this period and pink colour was persisting in the spots and patches. After completion of three month study period of clinical trial, it was planned to continue the medication for getting complete relief. Hence, Savaranakara Yoga was started again for local application and internally, combination of Arogyavardhini rasa [9] (250mg), Rasayana Churna (2gm) and Vindanga Churna (Embelia ribes Burm. F) [10] (1gm) was prescribed with honey before meal twice a day. Manjishthadi Kwatha (20ml) was prescribed twice a day. After six months, patches decreased to almost half of the initial and some of the spots found disappeared. After 10 months, patches of left arm and forearm decreased to 1x1 cm and on corpus, it was found decreased to 2x1 cm. After 12 months, small spots were found almost decreased, while after 16 month, patches of left arm and forearm disappeared and patches of left corpus remained 1x1 cm. (Figure 1) Patient was followed for next six months and found no any recurrence.

Haematological Parameters	Before treatment	After treatment	<b>Bio- chemical Parameters</b>	Before treatment	After treatment
TLC	9,500/Cumm	8,400/Cumm	FBS	94 mg/dl	94 mg/dl
Neutrophils	63%	65%	S. Cholesterol	188 mg/dl	167 mg/dl
Lymphocytes	33%	34%	S. Triglyceride	203 mg/dl	145 mg/dl
Eosinophils	02%	01%	HDL Cholesterol	56 mg/dl	69 mg/dl
Monocytes	02%	02%	Blood Urea	24 mg/dl	20 mg/dl
Basophils	-	-	S. Creatinine	0.8 mg/dl	0.9 mg/dl
Haemoglobin	12.9 gms%	13.1 gms%	S.G.P.T.	14 IU/L	14 IU/L
P.C.V.	37.8%	37.8%	S.G.O.T.	22 IU/L	20 IU/L
E.S.R.	42 mm/hr	32 mm/hr	Total Protein	7.5 gm/dl	7.5 mg/dl
Total RBC Count	4.78 mil/Cumm	4.87 mil/Cumm	Albumin	3.8 gm/dl	3.5 mg/dl
Platelet Count	356×10³/ul	340×10³/ul	Globulin	4.0 gm/dl	3.7 mg/dl

Table 2: Prescribed Medicines and their Pharmacological actions and therapeutic indications

No Medicines Do		Dose with Anupana	Pharmacological actions	Therapeutic indications	
1	Savarnakara Yoga (Bakuchi, Haratala and Gomutra)	Quantity sufficient for local application in morning followed by sun exposure for 30 minutes	-	Shvitra (Vitiligo)	
2	Kanakabindwarishta	10 ml twice a day after meal	Immunomodulatory, Anti-inflammatory	Kushtha (Skin dissorders), Shvitra	
3	Rasayana Churna	2gm twice a day before meal with honey	Anti-depressant and anxiolytic activity	Anxiety, Depression	
4	Manjishthadi Kwatha	20 ml twice a day (early morning empty stomach, at night before meal)	Rakta shodhaka (Blood purifier)	<i>Vartarakta</i> (Gout) <i>, Pama</i> (Eczema), <i>Kapalika, Kushtha, Rakta mandala</i> (Skin dissorders)	
5	Arogyavardhini Rasa	125 mg twice a day before meal with honey	Antioxidant, Antihyperlipidemic, hepatoprotective	Jirna Jwara (Chronic fever), Medodosha (Disorder of adipose tissue), Kushtha, Yakrutvikara (Disorder of liver)	
6	Vidanga Churna	1 g twice a day before meal with honey	Antioxidant, Neuroprotective, Cosmetic agent, Wound healing, Antigenotoxicity, Antifungal, Antidepressant	Krimi, Adhmana	

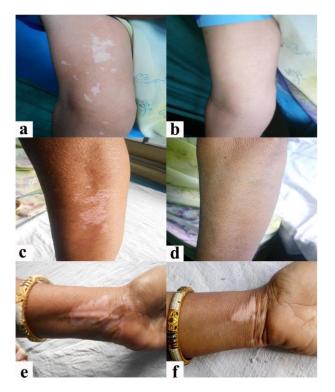


Figure 1: a,c,e shows before treatment and b,d,f shows after treatment

## DISCUSSION

Among the main ingredients of *Savarnakara Yoga*, *Bakuchi (Psoralea corylifolia* Linn.) is a renowned herb with many therapeutic properties.<sup>[11]</sup> It contains psoralens, which on exposure to the sun bring out melanin in the depigmented lesions.<sup>[12]</sup> *Haratala* (Orpiment), an arsenic compound, was used in the *yoga* along with *Bakuchi. Haratala* is best owed with immune modulating properties. Its formulations are widely used for some autoimmune disorders like psoriasis, allergic bronchial asthma, etc. in which the etiopathogenesis is deranged immunity.<sup>[13]</sup> Arsenic is absorbed through skin in addition to other routes. In *Shvitra*, the deranged immune system destroys the pigment synthesizing melanocytes. *Haratala* breaks this pathogenesis and prevents the self-destruction of melanocytes.<sup>[12]</sup> Thus the effect of the formations may be due to increased immunostimulation, hepatic function and photo reaction.

Kanakabindvarishta is a self generated alcoholic medicinal formulation. These typeof formulations have been reported to be effective in many diseases including Skin disorders.<sup>[14]</sup> By their properties they help the drug to reach the site quickly and remove the obstruction of *Srotasa*.<sup>[15]</sup> *Manjisthadi kashaya* is mainly blood purifier. It detoxifies blood and aids to eliminate toxins accumulated in the body. It increases skin glow.

Combination of *Arogyavardhini Rasa, Rasayana Churna* and *Vidanga* causes *Apatarpan*, which helps in opening the blockage of *strotasa. Guduchi* and *Amalaki* are *rasayana* drugs which help in rejuvenation process. This combination is helpful in removal of excessive fat and reduces the amassed cholesterol in the body. It is also helpful to flush out various toxins from the body. It corrects digestive fire (*Agni*), unblocks Obody channels for the nutrients to reach to the tissues (*Strotasa*), and balances three fundamental bodily bio-elements (*Tridosha*). Psychological involvement has been found in pathogenesis and aggravation of *Shvitra*.<sup>[16]</sup> Hence, diet restriction and psychological counselling were also found helpful in the management of the disease.

## CONCLUSION

The patient suffering from chronic active Vitiligo was treated with Ayurvedic management. Diet restriction and psychological counselling

was also a necessary part of the treatment. This treatment protocol should be clinically evaluated on large number of patients to confirm their efficacy.

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