

Management of Switra (Vitiligo) in Children through Ayurveda - A Case Study

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ABSTRACT

Introduction: In Ayurveda, Switra is a skin disorder characterized by whitish patches on the body which is classified under kushta. According to Acharya Vagbhata, Shwitra is a *Tridoshaja Vyadhi*—a disease involving all three dosha: though it is primarily driven by an imbalance in *Pitta Dosha*, particularly *Bhrajaka Pitta*, which governs skin pigmentation. with the involvement of Twak, Rakta, Mamsa, and Meda. In modern medicine, Switra can be correlated with vitiligo, a disorder characterized by the hypopigmentation of the skin. Although Shwitra (vitiligo) does not cause any systemic dysfunctions, it can lead to significant psychological distress and social challenges for patients.

Method: The present case study involves a 14-year-old male who reported whitish patches on his bilateral legs, palms, and lips. He was effectively treated with Virechana as shodhana karma and Shamanaushadas are Switarahara churna for external application and Bakuchi capsule internally. The subjective criteria were evaluated using the scoring method, while the VETI scoring method determined the objective criteria.

Result: The patient showed significant positive results after Virechana and Shamanaushadi administration.

Discussion: The initial treatment of Shodhana, coupled with Shamanaushada, led to the appearance of pigmentation on hypopigmented patches. Thus, the present case study elucidates the effectiveness of Ayurveda treatment in Shwitra, emphasizing the significance mentioned in Ayurveda classics.

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KEYWORDS: Switra, Vitiligo, Virechana

INTRODUCTION

The prevalence of vitiligo in India has been reported between 0.25% and 4%.¹ Although vitiligo is a non-life-threatening condition, the visible nature of vitiligo often leads to feelings of embarrassment, shame, or frustration. Individuals may struggle with anxiety, depression, or low self-esteem due to the altered appearance of their skin can have profound and far-reaching impacts on an individual's life, affecting their psychological, social, and emotional well-being.²

In Ayurveda, Shwitra is a skin disorder characterized by whitish patches on the body which is classified under kushta. According to the *Kashyapa Samhita*, it is stated, “Shweta Bhava Michanti Shwitram.”¹

According to Acharya Vagbhata, Shwitra is a *Tridoshaja Vyadhi*—a disease involving all three dosha: though it is primarily driven by an imbalance in *Pitta Dosha*, particularly *Bhrajaka Pitta*, which governs skin pigmentation. with the involvement of Twak, Rakta, Mamsa, and Meda.²

Acharya Charaka mentioned three types of Shwitra based on the involvement of dhatu, classified by the color: if it is found in Rakta (blood), it appears red; if in Mamsa (muscle tissue), it has a coppery hue; and if located in Medas (fat tissue), it is white.³

Due to the similarity in signs and symptoms, Shwitra can be correlated with vitiligo. Vitiligo is an acquired condition characterized by loss of melanocytes,

leading to patches of hypopigmentation on the skin. It is believed to result from the autoimmune destruction of melanocytes. Generalized vitiligo often appears symmetrically and affects areas such as the hands, wrists, feet, knees, neck, and regions around body orifices. In contrast, segmental vitiligo is confined to one area of the body but not necessarily aligned with a dermatome, and the patches of depigmentation are sharply defined.⁴

Brief history:

The case study concerns a 14-year-old boy who presented with complaints of milky lesions on his bilateral lower limbs, palms, and lips. Accompanying these symptoms were mild pruritus and a burning sensation, which had persisted for three years. These lesions first appeared on his lips and fingers, for which he received six months of allopathic treatment. The lesions had faded during the treatment period but resurfaced once he discontinued the medication,

Materials and Methods

Assessment Criteria:

Subjective Criteria

The patient was observed for improvement in Hypopigmented patches, itching, and improvement in general condition.

manifesting on his feet and palms, too. As the patches continued to spread gradually, he sought treatment at the SDM College of Ayurveda & Hospital, Hassan.

Clinical observations

Integumentary system

Examination of Skin

- Location of the lesion – lips, bilateral palms, fingers, and soles
- Category of lesion - Epidermal
- Pattern of distribution - Asymmetrical
- Nature of lesion - Macules
- Colour - White;
- Pruritus - Mild
- Exudation – Absent

Superficial sensation on the lesion

- Pain - Absent
- Swelling - Absent
- Paresthesia - Absent

Table: grading assessment for subjective criteria⁵

Scores	0	1	2	3
Number of patches depending on % area involved	Absent	1-29%	30-69%	70-100%
Color	Normal intensity	>50% filling with normal intensity	< 50% filling with pinkish discoloration	White patches
Itching	Absent	Mild	Moderate	Severe

Objective criteria -VETI scoring⁶

Five sites affected are, head (h), upper limbs (u), trunk (t) lower limbs (l), and genitalia (g) are separately scored by using five stages of disease intensity (T):

- Stage 0: Normal skin
- Stage 1: Hypopigmentation (including trichrome and homogeneous lighter pigmentation)
- Stage 2: Complete depigmentation with black hair and with perifollicular pigmentation
- Stage 3: Complete depigmentation with black hair and without perifollicular pigmentation
- Stage 4: Complete depigmentation with compound of white and black hair with/without perifollicular pigmentation
- Stage 5: Complete depigmentation plus significant hair whitening

VETI score calculation is done as below [8]

VETI score formula: (Percentage of head involvement x grade of intensity) + (Percentage of trunk involvement x grade of intensity) 4+ (Percentage of upper limbs involvement x grade of intensity) 2+ (Percentage of lower limbs involvement x grade of intensity) 4+ (Percentage of genitalia involvement x grade of intensity) 0.1

**Treatment Plan
shodhana karma**

SL.no	Treatment	Medicines/yogas	Dose/duration
1	Deepana and pachana	Chitrakadi vati and panchakola phanta	1tab TID A/F 40ml TID B/F
2.	Snehapana	Mahatikthaka gritha 1 st day 2 nd day 3 rd day 4 th day	Arohana matra (increasing dose) 30ml 60ml 100ml 150ml
3	Vishrama kala Sravanga abhyanga + swedana	Abhyanga with	For 3 days
4	Virechana	Trivrith leha	50gm
6	Samsarjana krama	Peyadi preparations	For 5 days

Oral medicines:(shamanaushadha)

1. Switrahara churna for e/a then exposing to sun light
2. Bakuchi capsule 1 BD

Results:

VETI score:

Before treatment: $(Ph*Th) + (Pt*Tt)4+(Pu*Tu)2+(Pl*TI)4+(Pg*Tg)0.1=$
 $(1*2) + (0*0)4+(2*3)2+(1*3)4+(0*0)0.1=26$

After treatment: $(1*2) + (0*0)4+(1*3)2+(1*2)4+(0*0)0.1= 16$

With the veti scoring we can clearly say that there is significant changes after the treatment

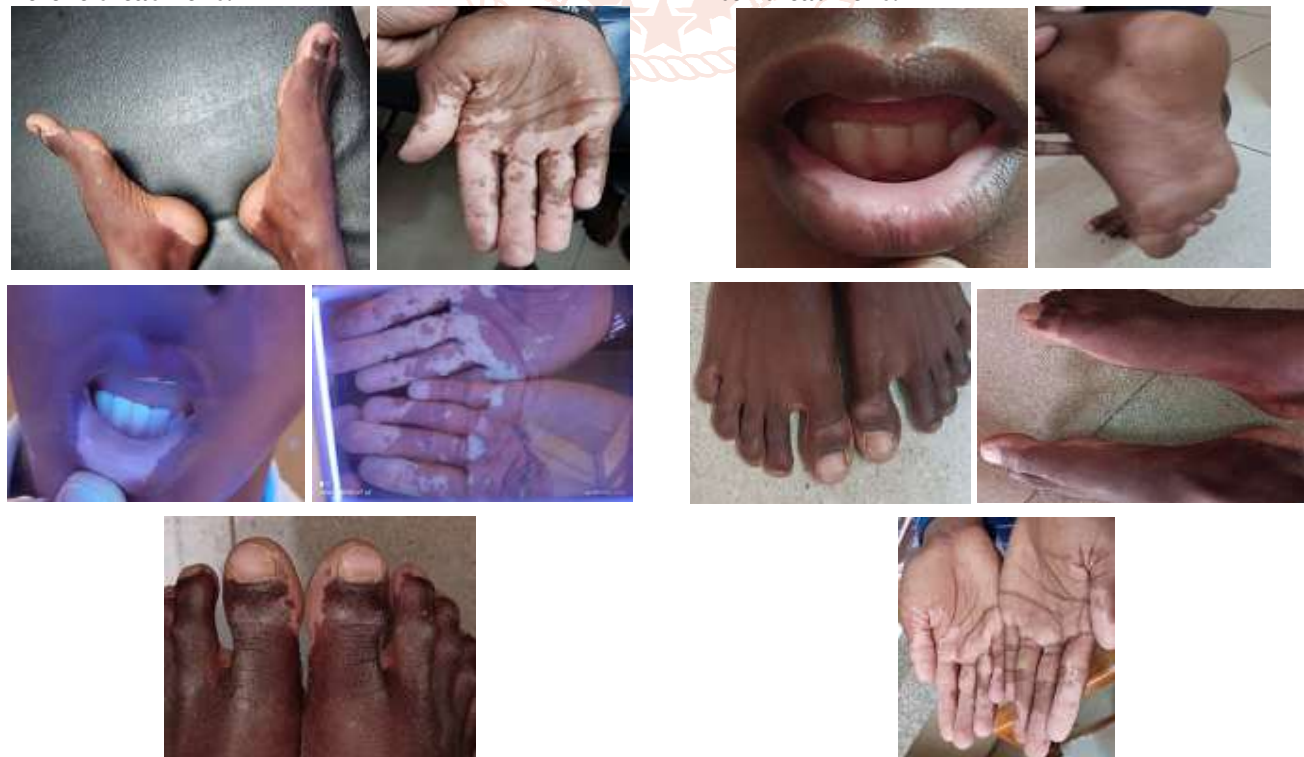
Subjective criteria:

Criteria's	scores	
	Before treatment	After treatment
No. of patches	5	5
Color	3	2
Itching	1	0

Before treatment:



After treatment:



Discussion:

Switra (vitiligo) is a challenging condition characterized by skin depigmentation due to the loss of melanocytes. Ayurveda offers an integrative approach to treating Switra through Shodhana and Shamana therapies, aiming to correct the body's internal imbalances while improving skin pigmentation.

Modern lifestyle factors contribute to the rising prevalence of vitiligo, and addressing the root causes using Ayurvedic principles is essential. The treatment outlined in Switra Chikitsa has been shown to restore pigmentation in most patients, preventing recurrence by targeting the underlying imbalances of doshas.⁷ Vitiligo causes physical and psychological distress, but Ayurvedic therapies provide a holistic approach, addressing both external symptoms and internal imbalances. By neutralizing aggravated doshas and detoxifying the body, Ayurvedic treatments lead to significant improvement in lesion size and skin pigmentation.⁸ This comprehensive approach results in both physical recovery and mental well-being for patients suffering from vitiligo.⁹

Efficacy of Shodhana and Shamana Therapies

The combination of Shodhana (purification) followed by Shamana (pacification) has shown significant efficacy in this case. The patient's treatment began with Shamana Aushadis, which are milder in their action, aiming to balance the body's doshas. With Shamana therapy, noticeable clinical changes were observed, as the white patches on both palms, and limbs. This change suggests an initial response.

Shodhana works by removing deep-seated doshas from the body,¹⁰ creating an optimal internal environment for healing and it may help in the regeneration of melanocytes. After the Shodhana, the process of re-pigmentation was visibly accelerated, as normal skin texture and tone started to fill the depigmented areas.

A key component of the Shamana treatment protocol was Bakuchi (*Psoralea corylifolia*), and kaka udumbara (*Ficus hispida L.F*). Bakuchi has long been known for its effectiveness in skin disorders, particularly vitiligo. The bioactive compounds in Bakuchi, Psoralen, a well-researched compound, is particularly effective in stimulating melanocytes to enhance melanin synthesis. By doing so, it helps restore pigmentation in the affected areas.¹¹

The theory of oxidative stress proposes that many diseases, including skin disorders like vitiligo (Switra), originate from an imbalance between free radicals (reactive oxygen species) and antioxidants in

the body. This imbalance leads to cellular damage and contributes to disease development.¹²

In addition to Bakuchi, Kaka Udumbara also plays a significant role in managing vitiligo (Switra) due to its therapeutic properties. Kaka Udumbara has antioxidant and anti-inflammatory effects,¹³ of which may help in reducing oxidative stress and cellular inflammation associated with the condition. Its ability to neutralize free radical aids in protecting the skin cells, from damage.

Conclusion:

The gradual but notable improvement in this case demonstrates the potential of Ayurvedic treatment in addressing vitiligo. By combining *Shodhana* and *Shamana* therapies, the patient experienced a significant recovery in terms of pigmentation and skin texture, with an overall improvement quantified by the VETI score.

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