Ayurvedic Approch in the Management of Shwitra (Vitiligo): A Case Report

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***Abstract*—Vitiligo is a chronic acquired depigmentary disorder characterized by well-defined depigmented patches due to melanocyte dysfunction or destruction. In Ayurveda, it can be correlated with Shwitra (vitiligo), a subtype of Kushtha Roga (skin disorders). A 41-year-old female presented to the Skin Outpatient Department of Government Ayurved College and Hospital, Nagpur, with five asymptomatic depigmented lesions over the lower back. The baseline Assessment Score Chart (ASC) score was 14, and Ayurvedic assessment indicated Tridosha (three bodily regulatory factors) involvement with vitiation of Rasa (plasma/lymph), Rakta (blood), Mamsa (muscle tissue), and Meda Dhatus (adipose tissue). The patient underwent 200 days of integrated Shamana Chikitsa (palliative therapy) and Shodhana Chikitsa (purificatory therapy), including Bakuchi Ghanavati, Avipattikara Choorna, Krumikuthar Rasa, Khadirarishta, Arogyavardhini Vati, and Mahamanjishtadi Kashayam, along with topical Bakuchi Choorna (Bakuchi powder) with Gomutra (cow urine), Vidha Karma (therapeutic needling), and Jaloukavacharana (leech therapy). The patient was followed up at 15-day intervals, and progressive repigmentation was observed. Complete repigmentation of all five lesions was achieved by the 200th day, with no development of new lesions and progression from an active to a stationary stage. This case suggests that an integrated Ayurvedic approach may help arrest disease progression and promote repigmentation in Shwitra.**

***Index Terms*—Shwitra, Vitiligo, Ayurveda, Shamana Chikitsa, Shodhana Chikitsa, Jaloukavacharana, Bakuchi, Repigmentation.**

I. INTRODUCTION

Vitiligo is a chronic acquired depigmentary disorder characterized by the progressive loss of functional melanocytes from the epidermis, resulting in well-demarcated depigmented macules and patches. It is considered one of the most common pigmentary disorders worldwide, with an estimated prevalence ranging from 0.5% to 2% of the global population, affecting individuals irrespective of age, sex, or ethnicity. Higher prevalence rates have been reported in certain populations, including the Indian subcontinent. Beyond its dermatological manifestations, vitiligo is associated with considerable psychosocial morbidity, negatively influencing self-esteem, social interaction, and quality of life.

The etiopathogenesis of vitiligo is complex and multifactorial. Current evidence suggests the involvement of autoimmune mechanisms, genetic susceptibility, oxidative stress, inflammatory cytokine dysregulation, and neurohumoral factors, leading to selective melanocyte destruction and subsequent depigmentation. Despite advances in understanding disease pathogenesis, available therapeutic modalities such as topical corticosteroids, calcineurin inhibitors, phototherapy, and surgical interventions often demonstrate variable efficacy, prolonged treatment duration, and frequent recurrence.

In Ayurveda, vitiligo can be correlated with Shwitra, a subtype of Kushtha Roga, primarily characterized by Vaivarnya (discoloration of the skin). Classical Ayurvedic texts including Charaka Samhita, Sushruta Samhita, and Harita Samhita describe Shwitra as a

distinct disease entity resulting from the vitiation of Tridosha, predominantly Vata and Pitta Dosha, along with the involvement of Rasa, Rakta, Mamsa, and Meda Dhatus. The pathogenesis is explained through Dosha–Dushya Sammurchana, wherein the interaction of vitiated Doshas with susceptible Dhatus leads to impairment of Bhrajaka Pitta, the functional component responsible for maintaining normal skin pigmentation and complexion. This pathological process ultimately manifests as hypopigmented or depigmented skin lesions.

Acharya Charaka has classified Shwitra under Raktapradoshaja Vikara, emphasizing the significant role of Rakta Dushti (vitiated blood) in disease manifestation. Based on this pathophysiological understanding, Ayurvedic management focuses on both Shodhana and Shamana Chikitsa. Among the bio-purificatory procedures, Virechana Karma and Raktamokshana are specifically indicated for the elimination of vitiated Doshas and purification of Rakta, thereby restoring physiological homeostasis. These interventions are often complemented with internal medications and external therapeutic measures aimed at arresting disease progression and promoting repigmentation.

Considering the chronic, recurrent, and therapeutically challenging nature of vitiligo, documentation of clinical outcomes following Ayurvedic interventions is important for evaluating their potential role in disease management. Therefore, the present case report describes the clinical outcome of a comprehensive Ayurvedic treatment protocol comprising Shodhana and Shamana therapies in the management of Shwitra (Vitiligo).

II. PATIENT INFORMATION

A 41-year-old female patient attended the Skin Outpatient Department (OPD) of Government Ayurved College and Hospital, Nagpur, with complaints of hypopigmented patches over the lower back region. The lesions were asymptomatic, with no associated burning sensation, itching, pain, or discharge.

III. CLINICAL FINDINGS

On clinical examination, well-defined hypopigmented patches were observed over the lower back region. The lesions were asymptomatic, with no associated itching, burning sensation, pain, or discharge. There were no signs of inflammation such as erythema, tenderness, swelling, or scaling. The surrounding skin appeared normal, and no sensory abnormalities were detected. General examination revealed a moderately nourished female with a lean body build and mild anxiety. Vital signs were within normal limits, with a blood pressure of 110/80 mmHg. No pallor, icterus, cyanosis, clubbing, lymphadenopathy, or pedal edema was present, and systemic examination was unremarkable.

Past History:

The patient had no significant past medical or surgical history. There was no history of prolonged medication intake, including allopathic treatment for the present condition. Family history was non-contributory. Psychosocial assessment revealed no significant abnormalities.

General Examination:

The patient was moderately nourished with a lean body build and appeared physically fit. Mild anxiety was noted during examination. No pallor, icterus, cyanosis, clubbing, lymphadenopathy, or pedal edema was observed. Vital parameters were within normal limits, with blood pressure recorded at 110/80 mmHg.

Personal History:

A detailed assessment of the patient's personal history, Ashtavidha Pariksha findings, Samprapti Ghataka, and Nidana (etiological factors) was carried out to understand the disease condition and its pathogenesis. The observations are summarized in Table 1.

Table 1: Summary of Personal History, Ashtavidha Pariksha Findings, Samprapti Ghataka, and Etiological Factors

Category	Parameter	Findings
Personal History	Kshudha (Appetite)	Alpa
	Bowel Habit	Irregular
	Micturition	Normal
	Blood Pressure	110/80 mmHg
Ashtavidha Pariksha	Nadi	Samyaka (76 beats/minute, regular)
	Mala	Baddha Koshta
	Mutra	Samyaka (4–6 times/day)
	Jihwa	Sama
	Shabda	Prakruta

	Sparsha	Ruksha
	Drik	Prakruta
	Akruti	Madhyama
Samprapti Ghataka	Dosha	Tridosha
	Dushya	Rasa, Rakta, Mamsa, Meda
	Agni	Jatharagni Mandya, Dhatvagni Mandya
	Srotas	Rasavaha, Raktavaha, Mamsavaha, Medovaha
	Srotodushti Prakara	Sanga
	Rogamarga	Bahya
	Udbhava Sthana	Amashaya
	Vyakta Sthana	Twacha
	Roga Swabhava	Chirakari
	Sadhyasadhyata	Yapya
Nidana	Aharaja Nidana	Viruddhahara, Ati Snigdha Guru Ahara Sevana, Ati Lavana Rasa Sevana, Ati Amla Rasa Sevana
	Viharaja Nidana	Divaswapna

IV. TIMELINE

The patient underwent a comprehensive Ayurvedic treatment protocol for a duration of 200 days. Management consisted of a combination of Shamana Chikitsa and Shodhana Chikitsa, including internal medications, external application of Bakuchi Choorna with Gomutra, weekly Vidha Karma, and Raktamokshana by Jaloukavacharana at 15-day intervals. Regular follow-up assessments were performed throughout the treatment period to evaluate disease progression and therapeutic response.

During the initial phase of treatment (0–15 days), improvement in bowel habits and general well-being was observed. Between 15 and 40 days, the lesions showed early changes in colour, with transformation from milky white to a faint pinkish appearance, suggesting the initiation of depigmentation. Continued administration of medicines along with local procedures resulted in further clinical improvement.

From 40 to 80 days, disease activity gradually stabilized, and the patient experienced regular bowel habits and relief from associated symptoms. Perifollicular pigmentation became evident within the lesions, indicating activation of melanocytes and a favourable response to therapy. No increase in the number or size of lesions was noted during this period.

Between 80 and 160 days, progressive repigmentation and restoration of skin colour were observed. The lesions became progressively smaller, and the contrast between the affected and surrounding skin diminished. The patient remained symptomatically stable, and no new lesions appeared.

By the end of the 200-day treatment period, complete repigmentation of all five patches had been achieved, with restoration of normal skin colour and texture. The disease had changed from an active progressive stage to a stationary stage, as evidenced by the reduction in the Assessment Score Chart (ASC) score. No recurrence or appearance of new lesions was observed during follow-up. After completion of treatment, the patient was advised to continue Pathyahara (dietary regimen) and appropriate lifestyle modifications to maintain the therapeutic benefits and reduce the likelihood of recurrence of Shwitra.

V. DIAGNOSTIC ASSESSMENT

Clinical assessment of the patient was performed using the Assessment Score Chart (ASC) (Table 2), which evaluates the severity and progression of Shwitra (Vitiligo) based on seven parameters including type of lesion, site, number of patches, hair colour within the lesion, margin characteristics, colour of patches, and degree of depigmentation.

Table 2: Assessment Score Chart (ASC)

Parameter	Score 0	Score 1	Score 2	Score 3
Type	No improvement	Stationary	Resistant	Progressive
Site of lesion	–	Follicular	Mucosal	Acral
Number of patches	Absent	Single patch	Segmental	Generalized
Hair in patch	Black	Mild black	White	–
Margin of patch	–	Normal	Inflamed	–
Colour of patches	Normal	Pigment spots on patch	Pink	Milky white
Re-pigmentation	Fully pigmented	Perifollicular pigmentation	Hyperpigmentation of margins	No pigmentation

At the first visit, the patient exhibited a progressive disease pattern with segmental distribution of lesions. The lesions were located over the follicular region and were characterized by milky-white patches without any evidence of depigmentation. Hair within the lesions showed mild black pigmentation and the margins were normal. The baseline ASC findings are summarized in Table 3.

Table 3: Baseline Assessment Score of the Patient

Parameter	Observation	Score
Type	Progressive	3
Site of lesion	Follicular	1
Number of patches	Segmental	2
Hair in patch	Mild black	1
Margin of patches	Normal	1
Colour of patches	Milky white	3
Re-pigmentation	No pigmentation	3
Total ASC score at baseline: 14		

The findings indicated active and progressive disease with absence of spontaneous repigmentation, necessitating intervention with Shodhana and Shamana Chikitsa.

VI. THERAPEUTIC INTERVENTION

The treatment protocol adopted in the present case comprised a combination of Shamana Chikitsa and Shodhana Chikitsa, and was individualized according to the patient's clinical condition and response to therapy. The therapeutic approach included both internal administration of medicines and external procedures aimed at correcting the underlying doshic imbalance, purifying vitiated Rakta, and facilitating repigmentation.

Internal therapy (Abhyantara Chikitsa) consisted of the oral administration of Bakuchi Ghanavati, Avipattikara Choorna, Krumikuthar Rasa, Khadirarishta, Arogyavardhini Vati, and Mahamanjishtadi Kashayam. These formulations were prescribed and modified periodically during follow-up visits in accordance with the patient's clinical response and disease progression (Table 3). The selected medications were intended to achieve Deepana-Pachana, Krumighna, Rakta Prasadana, and Kushtaghna actions, thereby addressing the pathogenesis of Shwitra.

External therapy (Bahya Chikitsa) included the topical application of Bakuchi Choorna mixed with Gomutra over the depigmented lesions. In addition, Vidha Karma was performed at weekly intervals throughout the treatment period with the objective of providing local stimulation and enhancing repigmentation.

As a part of Shodhana Chikitsa, Raktamokshana by Jaloukavacharana was carried out at an interval of 15 days, and a total of five sittings were completed during the course of treatment. This procedure was employed to eliminate vitiated Rakta and Pitta and to facilitate restoration of normal skin pigmentation. Regular follow-up evaluations were undertaken, and therapeutic modifications were made whenever required based on the patient's clinical response. The integrated administration of internal medications along with local and purification therapies contributed to the observed clinical improvement.

Table 4: Drugs Prescribed Along with Their Dosage and Duration

Sr. No.	Drug	Dose
1	Bakuchi Ghanavati (250 mg)	2 Vati BD
2	Avipattikara Choorna	1 tsp at bedtime daily
3	Bakuchi Choorna + Gomutra	For local application
4	Krumikuthar Rasa (125 mg)	2 Vati BD for 15 days
5	Khadirarishta	3 tsp BD for 1 month
6	Arogyavardhini Vati (250 mg)	2 Vati BD
7	Mahamanjishtadi Kashayam	3 tsp BD

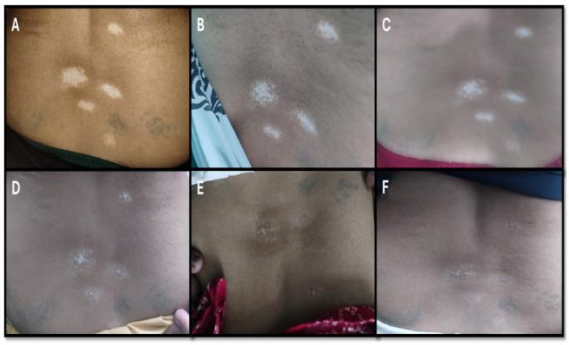


Figure 1: Before Treatment on 1st Day; B: After 40 days; C: After 60 days; D: After 120 days; E: After 170 days; F: After 200 days

VII. FOLLOW-UP AND OUTCOMES

The patient was followed for a period of 200 days, during which gradual and sustained improvement was observed. Initially, the patient presented with five hypopigmented patches over the lower back region along with irregular bowel habits. During the first 15 days of treatment, slight improvement in bowel activity was noted. Subsequently, bowel habits became regular, and the lesions exhibited a gradual change in colour from milky white to pinkish. Further continuation of Shamana and Shodhana therapies resulted in progressive reduction of symptoms and restoration of normal skin colour. By the end of the treatment period, complete repigmentation of all five patches was achieved, with no recurrence of symptoms observed during follow-up.

Over the subsequent 22 days, the patient experienced occasional acidity; however, bowel habits improved compared to the previous follow-up. With continued treatment comprising Bakuchi Ghanavati, Arogyavardhini Vati, Mahamanjishtadi Kashayam, and weekly Vidha Karma, the lesions gradually changed from milky white to a pinkish colour, indicating the initiation of repigmentation.

During the next 33 days, bowel habits became regular and a marked reduction in symptoms was observed. Perifollicular repigmentation appeared in the lesions, suggesting a favourable response to therapy. Continued administration of Shamana medicines along with Vidha Karma further enhanced the repigmentation process.

Over the following 32 days, progressive improvement in the appearance of the lesions was noted, accompanied by relief in associated symptoms. No increase in the number or size of the patches was observed. During the subsequent 31 days, disease activity stabilized and the lesions showed substantial repigmentation with improvement in skin colour and texture.

In the final 40 days of treatment, almost complete restoration of normal skin tone was achieved in all five patches. No new lesions appeared, and the patient remained symptomatically stable. Thus, over the entire 200-day treatment period, combined Shamana and Shodhana Chikitsa produced marked clinical improvement with complete repigmentation and restoration of normal skin colour.

Clinical response was assessed using the Assessment Score Chart (ASC). After seven months of treatment, the disease changed from a progressive stage (score 3) to a stationary stage (score 1). Segmental lesions present at baseline (score 2) showed complete resolution (score 0). The colour of the patches changed from milky white (score 3) to normal skin colour (score 0), accompanied by complete repigmentation of all lesions. Hair pigmentation within the affected area also improved from mildly black (score 1) to normal black hair (score 0). These findings demonstrate significant clinical improvement following combined Shamana and Shodhana Chikitsa.

Table 5: Clinical Outcome Following Treatment

Parameter	Before Treatment	After 7 Months of Treatment
Type	Progressive (Score 3)	Stationary (Score 1)
Number of Patches	Segmental (Score 2)	Absent (Score 0)
Colour of Patches	Milky white (Score 3)	Normal skin colour in all five patches (Score 0)
Re-pigmentation	No pigmentation (Score 3)	Complete depigmentation in all five patches (Score 0)
Hair in Patch	Mild black (Score 1)	Black hair (Score 0)

Overall, the patient exhibited marked clinical improvement with complete depigmentation and restoration of normal skin colour following seven months of combined Ayurvedic management.

VIII. DISCUSSION

Shwitra is considered a Pitta-predominant Tridoshaja Vyadhi involving the vitiation of Rasa, Rakta, Mamsa, and Meda Dhatus, ultimately resulting in Bhrajaka Pitta dysfunction and impairment of normal skin pigmentation. From a contemporary perspective, vitiligo is characterized by the destruction or dysfunction of melanocytes due to autoimmune, oxidative, and neurogenic mechanisms. Therefore, the therapeutic approach in the present case was aimed at correcting the underlying Dosha-Dushya imbalance, purifying Rakta Dhatu, and promoting melanogenesis through a combination of Shamana and Shodhana Chikitsa.

Bakuchi Ghanavati constituted the principal therapeutic intervention in the present case. Bakuchi (Psoralea corylifolia) contains furocoumarins, particularly psoralen, which possess photosensitizing activity. Upon exposure to ultraviolet radiation, psoralens stimulate melanocyte proliferation, migration, and melanin synthesis, thereby facilitating repigmentation. In addition to its Kushthaghna and Rasayana properties, Bakuchi has been reported to exhibit antioxidant and immunomodulatory activities that may protect melanocytes from oxidative stress and immune-mediated destruction. Similar findings have been reported by a study, who employed a multimodality Ayurvedic regimen consisting of Bakuchi Ghanavati, Mahamanjishthadi Kadha, and Krumikuthar Rasa along with topical Bakuchi Taila, and observed excellent repigmentation following prolonged treatment.

Mahamanjishthadi Kashayam was prescribed because of its Rakta-prasadana, Varnya, Shothahara, and Kushthaghna properties. Manjishtha and other ingredients such as Nimba and Guduchi are known to improve microcirculation, purify Rakta Dhatu, and exert antioxidant and anti-inflammatory actions. A study described Mahamanjishthadi Kadha as a Twak-prasadaka and Raktaprasadaka formulation that promotes healing of damaged skin tissues and improves discoloration through its Rakta-shodhana and Vranaropana properties.

Krumikuthar Rasa was administered to address Kleda and Krumi-associated pathology. According to Ayurvedic principles, excessive Kleda and Krumi contribute to Rakta Dushti and aggravation of Kushta. Therefore, correction of metabolic disturbances and reduction of Kleda may have aided in arresting disease progression and enhancing therapeutic responsiveness. Similar observations regarding the Krumighna and Rakta-shodhaka effects of Krumikuthar Rasa have been reported by similar study in a case of childhood Shwitra.

Khadirarishta was incorporated owing to its established Kushthaghna and Rakta-shodhana actions. Khadira (Acacia catechu) possesses antioxidant, anti-inflammatory, and immunomodulatory properties and is traditionally indicated in various dermatological disorders. They attributed the favorable outcome partly to the blood-purifying and immunomodulatory properties of Khadira and the melanogenesis-promoting effect of Bakuchi present in Khadirarishta.

Arogyavardhini Vati was included in the treatment protocol to improve Agni and facilitate Ama Pachana. Owing to its Deepana-Pachana and antioxidant properties, it helps in correcting metabolic disturbances and eliminating accumulated toxins. Similar observations were reported by another author, who emphasized the role of Arogyavardhini Vati in improving digestion and removing Ama, thereby supporting tissue homeostasis and recovery

Jalaukavacharana (Raktamokshana) was used as an adjuvant therapy considering Shwitra as a Raktapradoshaja Vikara. It is believed to facilitate the elimination of vitiated Rakta and restore normal skin complexion. Bioactive components of leech saliva, including hirudin, eglins, and hyaluronidase, possess anti-inflammatory and microcirculatory effects that may enhance tissue repair and create favourable conditions for melanocyte proliferation and migration, thereby promoting repigmentation. Previous case reports have demonstrated that Jalaukavacharana, when combined with internal Shamana therapy and dietary modifications, resulted in reduction in lesion size and progressive restoration of pigmentation. Similar findings have also been observed with other bloodletting procedures, such as Prachhana Karma, where improved local circulation was associated with perifollicular repigmentation and normalization of skin color.

Vidha Karma, performed periodically, may have played a role in the gradual perifollicular repigmentation observed in the present case. The procedure is presumed to improve local microcirculation and promote tissue repair, thereby creating favourable conditions for melanocyte activation and migration from hair follicles to depigmented regions. Similar observations have been reported with bloodletting procedures such as Prachhana Karma and Jalaukavacharana, which are considered to enhance vascularity and remove vitiated blood (Rakta Dushti). Furthermore, biologically active substances associated with these procedures possess anti-inflammatory and tissue-healing properties that may indirectly support melanocyte function and repigmentation. These mechanisms could collectively contribute to the progressive restoration of normal skin pigmentation seen during treatment.

The sequence of clinical changes observed during follow-up, characterized by initial pinkish discoloration followed by perifollicular pigmentation

and eventual complete repigmentation, is suggestive of gradual melanocyte activation and migration from follicular reservoirs. Similar observations were documented by study, where lesions progressively changed from white to pinkish and subsequently attained normal skin colour after continued administration of internal medicines and topical therapy. Likewise, another study reported transformation of depigmented lesions from white to reddish and eventually to normal skin colour following six months of Ayurvedic treatment. These similarities suggest that the process of repigmentation observed in the present case follows a pattern consistent with previous clinical experiences and may represent gradual restoration of melanocyte function.

The favorable outcome observed in the present case, including conversion of active disease into a stationary stage and complete repigmentation of all lesions, corroborates the findings of earlier case reports employing multimodal Ayurvedic interventions. A study reported encouraging results with combined Dravya Chikitsa and Adravya Chikitsa and emphasized the lower likelihood of recurrence following Ayurvedic management. Similarly, another study demonstrated complete recovery of lesions after six months of treatment and concluded that significant improvement can be achieved when intervention is initiated in the early stages of Shwitra.

IX. CONCLUSION

The present case demonstrates that an integrated Ayurvedic approach comprising Shamana Chikitsa and Shodhana Chikitsa can effectively arrest disease progression and promote repigmentation in Shwitra (vitiligo). The combination of internal medications (Abhyantara Chikitsa), external applications (Bahya Chikitsa), and purification procedures including Jaloukavacharana and Vidha Karma resulted in gradual and sustained clinical improvement, culminating in complete repigmentation of all lesions after 200 days of treatment. A marked reduction in the Assessment Score Chart (ASC) score, conversion of progressive disease into a stationary stage, and absence of new lesions further substantiated the therapeutic response. The sequential appearance of pinkish discoloration followed by perifollicular pigmentation and restoration of normal skin colour indicated progressive melanocyte activation and recovery. The favorable outcome observed in this case suggests that a multimodal Ayurvedic regimen may serve as a safe and effective therapeutic option for the management of Shwitra. However, further well-designed clinical studies involving larger sample sizes and longer follow-up periods are warranted to validate these findings and establish their therapeutic significance.

X. PATIENT PERSPECTIVE

"I was worried about the increasing white patches on my lower back and was concerned about their progression. During treatment, I noticed gradual changes in the colour of the patches, which encouraged me to continue the therapy. My bowel habits also improved. Over time, the patches regained their normal colour, and I did not experience any major side effects. After completion of treatment, I felt more confident and satisfied with the results. The improvement in my skin condition positively affected my overall well-being, and I intend to continue the recommended diet and lifestyle measures to prevent recurrence."

XI. INFORMED CONSENT

Verbal informed consent was obtained from the patient before the preparation of this case report. The patient was informed about the purpose of publication and agreed to the use of her clinical information and photographs for scientific and academic purposes. Patient confidentiality and anonymity have been maintained, and no identifying information has been disclosed in this article.

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