World Journal of Pharmaceutical Science and Research
www.wjpsronline.com
Case Report
ISSN: 2583-6579
SJIF Impact Factor: 6.916
Year - 2026
Volume: 5; Issue: 7
Page: 124-135

A CASE REPORT ON THE SUCCESSFUL AYURVEDIC MANAGEMENT OF *SHVITRA* (VITILIGO)

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Article Received: 04 May 2026 | | ***Article Revised: 24 May 2026*** | | ***Article Accepted: 14 June 2026***

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DOI: https://doi.org/10.5281/zenodo.21033880

How to cite this Article: Dr. Swati Goyal (2026) A CASE REPORT ON THE SUCCESSFUL AYURVEDIC MANAGEMENT OF *SHVITRA* (VITILIGO). World Journal of Pharmaceutical Science and Research, 5(7), 124-135.

ABSTRACT

Introduction: Vitiligo is a chronic acquired depigmenting disorder characterized by the loss of functional melanocytes, resulting in well-defined white patches on the skin. Although not life-threatening, it significantly affects the psychological, social, and cosmetic well-being of affected individuals. In Ayurveda, vitiligo is correlated with *Shvitra*, a *Tridoshaja Vyadhi* predominantly involving *Pitta* and *Kapha Dosha* affecting *Twak*, *Rakta*, and *Mamsa Dhatu*. Due to its chronic and recurrent nature, effective management remains challenging. **Aim and Objectives:** To evaluate the efficacy of Ayurvedic management in a case of *Shvitra* (Vitiligo). **Materials and Methods:** A 64-year-old female presented to the OPD of Dravyaguna, Government Ayurveda College and Hospital, Jaipur, with depigmented patches over the posterior neck and upper back for five years. Based on clinical findings, the condition was diagnosed as *Shvitra*. The patient was treated with Ayurvedic internal medications, external applications, dietary modifications, and *Nidana Parivarjana* for three months. Therapeutic outcomes were assessed using the *Vitiligo Area Scoring Index (VASI)*, *Vitiligo Disease Activity Score (VIDA)*, and *Dermatology Life Quality Index (DLQI)*. **Results:** Significant clinical improvement was observed following treatment. Progressive repigmentation and stabilization of lesions were noted. The VASI score decreased from 12.0 to 2.0, VIDA score improved from +3 to 0, and DLQI score reduced from 18 to 2, indicating marked improvement in disease activity and quality of life. **Discussion and Conclusion:** The present case demonstrates that Ayurvedic management based on *Nidana Parivarjana*, *Raktaprasadana*, and *Kushthaghna Chikitsa* can effectively arrest disease progression, promote repigmentation, and improve the quality of life in patients with *Shvitra*. Further clinical studies are warranted to validate these findings.

KEYWORDS: *Shvitra*, Vitiligo, Ayurveda, *Kushtha*, *Raktaprasadana*, VASI, VIDA, DLQI.

INTRODUCTION

Shvitra is a chronic pigmentary disorder described in Ayurveda under the broad spectrum of *Kushtha Roga*. Although it is not included among the eighteen varieties of *Kushtha*, it has been discussed separately because of its distinctive clinical presentation and chronic course. *Acharya Sushruta* describes *Shvitra* as a non-exudative (*Aparisravi*) disorder involving *Twak* and *Rakta Dhatu*.[1,2]

Vitiligo, the contemporary correlate of *Shvitra*, is an acquired depigmenting disorder characterized by selective destruction of melanocytes, resulting in well-defined depigmented macules and patches.[3,4] The worldwide prevalence is estimated to range between 0.5% and 2%, affecting individuals irrespective of age, sex, or ethnicity.[3,5]

According to Ayurveda, *Shvitra* is a *Tridoshaja Vyadhi* with predominant involvement of *Pitta Dosha* and vitiation of *Rakta, Mamsa,* and *Meda Dhatus*.[6,7] The disease not only affects the skin but also has a significant psychological and social impact on affected individuals.[8,9]

AIM AND OBJECTIVES

To evaluate the efficacy of Ayurvedic management in a case of *Shvitra* (Vitiligo).

MATERIALS AND METHODS

A 64-year-old female presented to the OPD of Dravyaguna, Government Ayurveda College and Hospital, Jaipur, with depigmented patches over the posterior neck and upper back for five years. Based on clinical findings, the condition was diagnosed as *Shvitra*. The patient was treated with Ayurvedic internal medications, external applications, dietary modifications, and *Nidana Parivarjana* for three months. Therapeutic outcomes were assessed using the *Vitiligo Area Scoring Index (VASI), Vitiligo Disease Activity Score (VIDA),* and *Dermatology Life Quality Index (DLQI)*.

RESULTS

In Ayurveda, vitiligo is correlated with *Shvitra*, a *Tridoshaja Vyadhi* predominantly involving *Pitta* and *Kapha Dosha* affecting *Twak*, *Rakta*, and *Mamsa Dhatu*.

Nirukti- The term *Shvitra* is derived from the Sanskrit root *"Shvit"*, meaning whiteness (*Shveta Varna*), which denotes the characteristic white discoloration of the skin seen in this disease.[10]

Nidana- The principal etiological factors include *Viruddha Ahara* (incompatible diet), excessive consumption of fish, curd, sour and fermented foods, improper lifestyle practices, suppression of natural urges (*Vegadharana*), psychological stress, hereditary factors (*Beeja Dosha*), and *Prajnaparadha*.[6,7,11]

Acharya Charaka specifically attributes *Shvitra* to unethical conduct, false speech, ingratitude, disrespect towards teachers and deities, and improper dietary habits.[11]

Purvarupa- Specific *Purvarupa* of *Shvitra* have not been described separately in the Ayurvedic classics. However, the prodromal features of *Kushtha* may be considered applicable and include mild discoloration of the skin, dryness, itching (*Kandu*), altered sensation, and changes in skin texture.[6,12]

Rupa- The cardinal feature of *Shvitra* is the appearance of hypopigmented or depigmented patches over the skin.[1,2] Classical descriptions include *Shveta Varna*, *Pandu Varna*, *Aparisravi* lesions, *Kandu*, and involvement of hair follicles in chronic conditions. [1,2]

Based on *Dosha* predominance, *Shvitra* is classified into *Vataja*, *Pittaja*, and *Kaphaja* varieties.[2,7]

a) ***Vataja Shvitra-*** Characterized by reddish discoloration (*Aruna Varna*), dryness, roughness (*Rukshata*), and thin lesions.[2]

b) ***Pittaja Shvitra-*** Characterized by coppery discoloration (*Tamra Varna*), burning sensation (*Daha*), inflammation, and hair loss.[2]

c) ***Kaphaja Shvitra-*** Characterized by milky-white patches, smooth texture, thick lesions, itching, and chronicity.[2]

Samprapti- According to Ayurveda, continuous exposure to etiological factors causes aggravation of *Doshas*, predominantly *Pitta*, which vitiates *Rakta Dhatu*. Subsequently, *Mamsa* and *Meda Dhatus* become affected, leading to impairment of normal skin pigmentation and development of *Shvitra* lesions.[6,7,13]

Modern research suggests that vitiligo is a multifactorial disorder involving autoimmune destruction of melanocytes, oxidative stress, genetic susceptibility, inflammatory cytokines, and neurohumoral factors.[17,18,19,20]

Samprapti Ghataka

- *Dosha – Tridosha* (predominantly *Pitta*)
- *Dushya – Twak, Rakta, Mamsa,* and *Meda*
- *Agni – Dhatvagni Mandya*
- *Srotas – Rasavaha* and *Raktavaha Srotas*
- *Adhisthana – Twak*
- *Rogamarga – Bahya Rogamarga*.[6,13]

Upashaya and Anupashaya

Upashaya- Relief is observed following *Shodhana* procedures such as *Vamana* and *Virechana*, administration of *Kushthaghna* and *Raktaprasadana* drugs, adherence to *Pathya Ahara*, and controlled exposure to sunlight.[1,7,14]

Anupashaya- Continued intake of *Viruddha Ahara*, excessive consumption of curd, fish, fermented foods, *Divaswapna*, stress, and irregular dietary habits aggravate the disease.[6,7,11]

Sadhya-Asadhyata- Lesions that are recent in onset, small, localized, non-confluent, and associated with normal hair pigmentation are considered *Sadhya*.[1,2]

Long-standing lesions, extensive involvement, depigmented hair, lesions involving lips, palms, soles, and genitalia are considered *Kashta-Sadhya* or *Asadhya*.[1,2]

Chikitsa Siddhanta- The treatment of *Shvitra* is based on *Nidana Parivarjana*, *Shodhana*, and *Shamana Chikitsa*.[1,6]

a) ***Nidana Parivarjana-*** Avoidance of causative dietary and lifestyle factors is considered the first principle of treatment.[6,11]

b) ***Shodhana Chikitsa-*** *Vamana*, *Virechana*, and *Raktamokshana* are advocated according to the predominance of *Dosha* and disease severity.[1,2]

c) ***Shamana Chikitsa-*** Various formulations possessing *Kushthaghna*, *Raktaprasadana*, *Varnya*, and *Twachya* properties are prescribed. *Bakuchi* (*Psoralea corylifolia*) is regarded as the most important drug in the management of *Shvitra*.[14,15]

d) ***Bahirparimarjana Chikitsa-*** External therapies such as *Bakuchi Taila*, *Gunja Lepa*, medicated oils, and other topical applications are mentioned in the classical texts.[2,16]

e) ***Satvavajaya Chikitsa-*** Psychological counselling and stress management are important adjuncts because of the significant psychosocial burden associated with vitiligo.[19,21,22]

CASE PRESENTATION / PATIENT INFORMATION

A 64-year-old female presented to the Outpatient Department (OPD) with complaints of gradually progressive depigmented patches over the posterior aspect of the neck and upper back for the past 5 years. The patient reported that the lesions initially appeared as small hypopigmented macules over the nape of the neck and gradually increased in size and extent over time. There was no history of itching, pain, burning sensation, discharge, or scaling associated with the lesions.

The patient had previously consulted a dermatologist and was diagnosed with vitiligo. She received topical medications intermittently for approximately two years, which resulted in minimal improvement. Due to unsatisfactory clinical response and progressive enlargement of lesions, she sought Ayurvedic treatment.

Clinical Findings- On examination, a large, well-defined depigmented patch was observed over the posterior aspect of the neck extending to the upper back region. The lesion was milky white in colour with irregular but distinct margins. No erythema, scaling, induration, or discharge was present. Hair within the lesion showed partial depigmentation (*Leukotrichia*) in some areas. The surrounding skin appeared normal.

Family History- No family history of vitiligo, autoimmune disorders, or other dermatological diseases.

Personal History

- Diet – Mixed diet
- Appetite – Reduced
- Bowel – Irregular, occasional constipation
- Micturition – Normal (5–6 times/day)
- Sleep – Sound
- Addiction – Nil
- Allergic History – Nil

General Examination

- Blood Pressure – 130/80 mmHg
- Pulse Rate – 74/min
- Respiratory Rate – 18/min
- Temperature – 98.4°F

- Pallor – Absent
- Icterus – Absent
- Cyanosis – Absent
- Clubbing – Absent
- Lymphadenopathy – Not palpable
- Oedema – Absent

Ashtasthana Pariksha

- *Nadi – Vata-Pitta*
- *Mala – Vibandha*
- *Mutra – Prakruta*
- *Jihva – Alipta*
- *Drik – Prakruta*
- *Shabda – Prakruta*
- *Sparsha – Ruksha*
- *Aakriti – Madhyama*

Dashavidha Pariksha

- *Prakriti – Vata-Pitta*
- *Vikriti – Pitta-Kapha*
- *Sara – Madhyama*
- *Samhanana – Madhyama*
- *Satmya – Madhyama*
- *Satva – Madhyama*
- *Ahara Shakti – Madhyama*
- *Vyayama Shakti – Avara*
- *Agni – Mandagni*
- *Vaya – Vriddha*

Systemic Examination- Respiratory, cardiovascular, gastrointestinal, and central nervous systems were examined and found to be within normal limits. No associated systemic abnormality was detected.

EXAMINATION OF SKIN

Inspection

- Site – Posterior aspect of neck and upper back
- Number of lesions – Single large patch with few satellite lesions
- Shape – Irregular
- Colour – Milky white
- Margins – Well defined
- Surface – Smooth

- Scaling – Absent
- Discharge – Absent
- Hair changes – Partial *Leukotrichia* present

Palpation

- Temperature – Normal
- Tenderness – Absent
- Texture – Smooth
- Induration – Absent
- Sensation – Intact

ASSESSMENT CRITERIA

The efficacy of the treatment was evaluated using three validated assessment tools: *Vitiligo Area Scoring Index (VASI)*, *Vitiligo Disease Activity Score (VIDA)*, and *Dermatology Life Quality Index (DLQI)*. These parameters were recorded before treatment, after completion of treatment, and during follow-up visits. Serial clinical photographs were also taken to document changes in lesion size and repigmentation.

1. Vitiligo Area Scoring Index (VASI)- The *Vitiligo Area Scoring Index (VASI)* is a widely accepted tool used to assess the extent and severity of vitiligo. It combines the assessment of body surface area involvement with the degree of residual depigmentation within the lesions. The body surface area affected is estimated using the patient's hand unit, where one hand unit (including the palm and volar surface of all digits) approximates 1% of the total body surface area. The percentage of depigmentation is then graded and multiplied by the affected area to obtain the final VASI score. A higher VASI score indicates more extensive disease, whereas a reduction in score reflects clinical improvement and repigmentation.

Table 01: Vitiligo Area Scoring Index (VASI) Score.

Assessment	Before Treatment	After Treatment	Follow-up
VASI Score	12	4.5	2

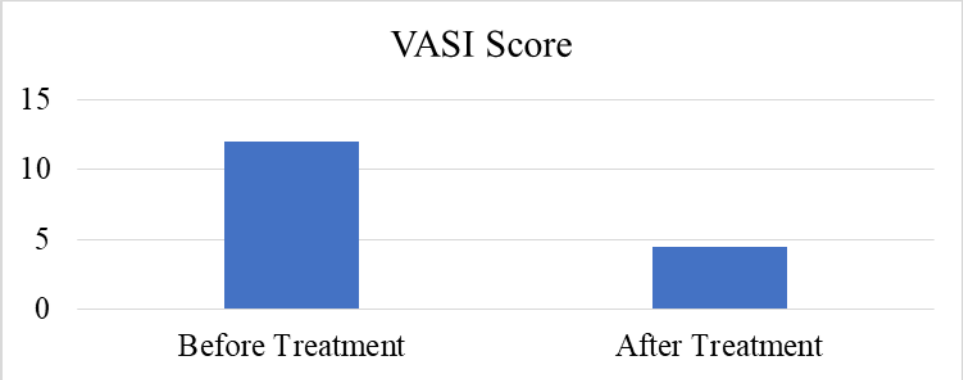

Figure 01: Vitiligo Area Scoring Index (VASI) Score.

2. Vitiligo Disease Activity Score (VIDA)- The *Vitiligo Disease Activity Score (VIDA)* is a six-point scale used to determine disease activity based on the patient's history of progression or stability of lesions. Positive scores indicate active disease, while lower or negative scores indicate stabilization or spontaneous repigmentation. The score ranges

from +4 (activity within the previous six weeks) to –1 (stable disease with spontaneous repigmentation for at least one year). VIDA is a useful tool for monitoring disease progression and treatment response.

Table-02: Vitiligo Disease Activity Score (VIDA) Score.

Assessment	Before Treatment	After Treatment	Follow-up
VIDA Score	+3	+1	0

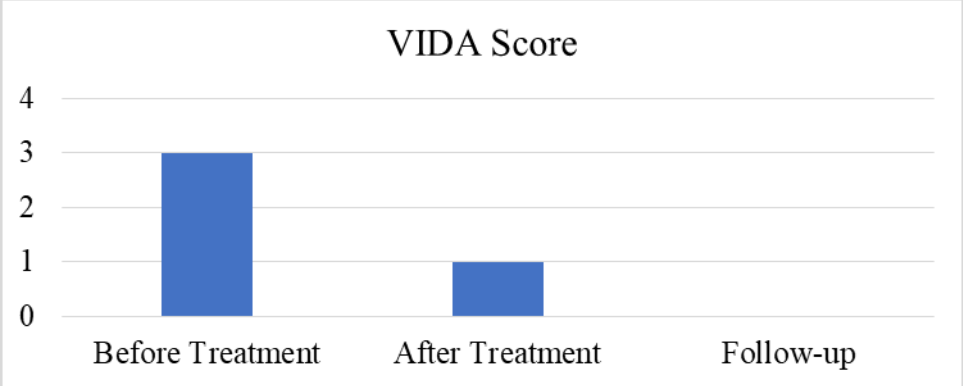

Figure-02: Vitiligo Disease Activity Score (VIDA) Score.

3. Dermatology Life Quality Index (DLQI)- The *Dermatology Life Quality Index (DLQI)* is a validated questionnaire used to assess the impact of dermatological diseases on a patient's quality of life. It consists of ten questions covering symptoms, daily activities, leisure activities, work and school performance, personal relationships, and treatment-related concerns experienced during the previous week. Each question is scored from 0 to 3, giving a total score ranging from 0 to 30. Higher scores indicate greater impairment in quality of life, whereas lower scores reflect improvement in physical, psychological, and social well-being.

Table-03: Dermatology Life Quality Index (DLQI) Score.

Assessment	Before Treatment	After Treatment	Follow-up
DLQI Score	18	7	2

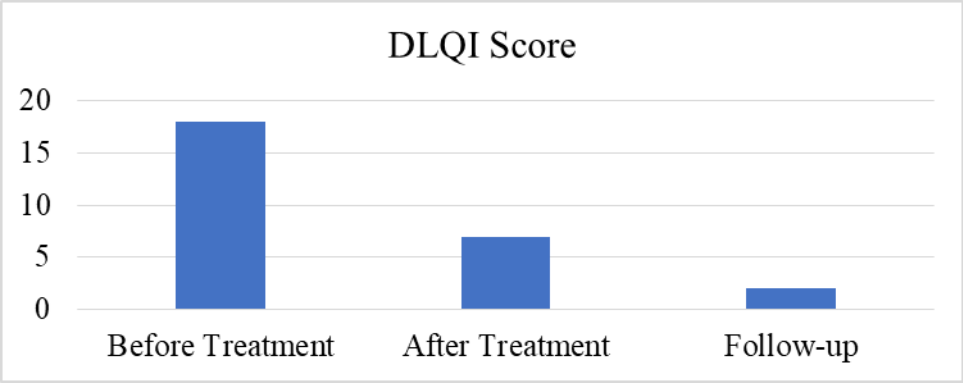

Figure-03: Dermatology Life Quality Index (DLQI) Score

Table-04: Dermatology Life Quality Index (DLQI) Percentage Improvement.

Assessment	Before Treatment	After Treatment	Follow-up
DLQI %	60%	23%	7%

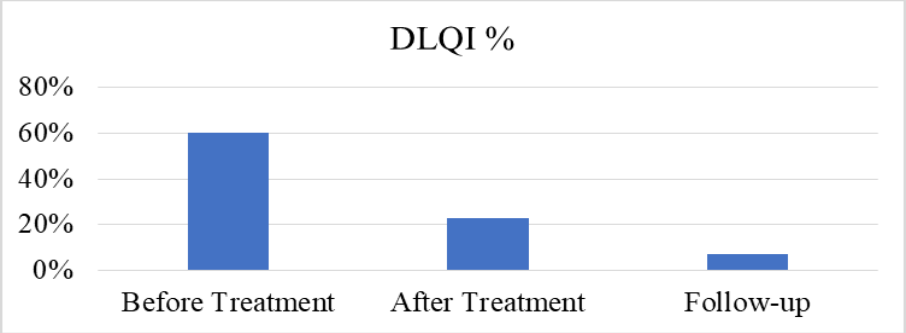

Figure 04: Dermatology Life Quality Index (DLQI) Percentage Improvement.

THERAPEUTIC INTERVENTION

The treatment protocol consisted of *Nidana Parivarjana*, dietary modifications, internal Ayurvedic medications, and external applications. Based on Ayurvedic assessment, the disease was considered a *Tridoshaja Vyadhi* with predominance of *Pitta* and *Kapha Dosha* involving *Twak*, *Rakta*, and *Mamsa Dhatu*.

The patient also exhibited features suggestive of *Mandagni* and mild *Vibandha*, indicating impaired metabolism and chronicity of the disease process. Therefore, treatment was planned with the objectives of *Deepana-Pachana*, *Raktaprasadana*, *Kushthaghna Karma*, correction of *Dosha-Dushya Sammurchana*, and stimulation of repigmentation.

The patient was advised to avoid *Viruddha Ahara*, excessive intake of curd, fermented foods, bakery products, and incompatible food combinations. A wholesome diet rich in fresh vegetables, fruits, and easily digestible foods was recommended throughout the treatment period.

The presence of depigmented patches over the posterior aspect of the neck and upper back, along with features of *Mandagni* and *Vibandha*, indicated vitiation of *Kapha* and *Pitta Dosha* affecting *Twak*, *Rakta*, and *Mamsa Dhatu*. The disease was diagnosed as *Kapha-Pitta Pradhana Tridoshaja Shvitra*. Therefore, the treatment strategy was designed considering *Deepana-Pachana*, *Raktashodhana*, *Raktaprasadana*, *Kushthaghna*, and *Varnya* principles to arrest disease progression and promote repigmentation.

Table-05: Details of Therapeutic Interventions Prescribed.

S. No.	Interventions	Route	Dose	Adjuvant	Duration
1.	*Mahamanjishthadi Kwatha*	Oral	20 mL twice daily before meals	20 mL lukewarm water	3 months
2.	*Khadirarishta*	Oral	20 mL twice daily after meals	20 mL lukewarm water	3 months
3.	• *Bakuchi Churna* 3 g • *Arogyavardhini Vati* 250 mg (2 tablets) • *Gandhaka Rasayana* 250 mg (2 tablets) • *Giloya Satva* 250 mg	Oral	Twice daily after meals	Lukewarm water	3 months
4.	*Avipattikara Churna*	Oral	5 g at bedtime	Lukewarm water	3 months
5.	*Triphala Churna*	Oral	5 g at bedtime	Lukewarm water	3 months
6.	*Bakuchi Taila*	External application	Local application once daily	Mild sunlight exposure (10–15 min)	3 months
7.	*Mahamarichyadi Taila*	External application	Twice daily	—	3 months

Conducive dietary regimen (*Pathya Ahara*) including restriction of curd, fermented foods, fish, excessive salty and sour foods, incompatible food combinations (*Viruddha Ahara*), bakery products and day sleep (*Divaswapna*).

Timeline

In the present case, active Ayurvedic treatment was continued for 3 months. Following completion of active treatment, the patient was advised to continue *Pathya Ahara*, lifestyle modifications, and avoidance of *Viruddha Ahara* for an additional 2 months to prevent recurrence and maintain repigmentation.

Follow-up and Outcomes

Regular follow-up assessments were performed to evaluate treatment compliance and clinical response. Improvement was assessed using *Vitiligo Area Scoring Index (VASI)*, *Vitiligo Disease Activity Score (VIDA)*, *Dermatology Life Quality Index (DLQI)*, and serial clinical photographs. Progressive perifollicular repigmentation and reduction in lesion size were observed during successive visits. Improvement in appetite and bowel habits was also noted. No adverse drug reactions or complications were reported during the treatment period. The patient remained clinically stable throughout the follow-up period, with no appearance of new lesions or progression of existing lesions.

Table-06: Follow-up Details with Timeline and Periodic Clinical Outcome.

Timelines	Clinical Events and Interventions	Clinical Outcome
Since 5 years	Progressive depigmented patch over the posterior neck and upper back. Intermittent conventional treatment was taken with minimal improvement.	Temporary improvement but progressive enlargement of lesions continued.
Baseline Visit-01	Detailed history, clinical examination, and diagnosis of *Shvitra* established. Ayurvedic treatment initiated.	Well-defined depigmented patch over posterior neck and upper back. VASI = 12.0, VIDA = +3, DLQI = 18.
Visit-02 (After 15 days)	Drug compliance assessed. Clinical examination performed. Treatment continued.	Appetite improved. Bowel habits regularized. No new lesions observed.
Visit-03 (After 30 days)	Clinical assessment performed. Treatment continued.	Mild perifollicular pigmentation appeared within depigmented areas.
Visit-04 (After 45 days)	Clinical assessment performed. Treatment continued.	Improvement in lesion margins and early repigmentation noted.
Visit-05 (After 60 days)	Drug compliance and clinical assessment performed. Treatment continued.	Significant reduction in depigmented area and increase in repigmentation observed.
Visit-06 (After 90 days)	Final clinical assessment and outcome evaluation performed.	Marked repigmentation achieved. VASI = 2.0, VIDA = 0, DLQI = 2.
Follow-up (After 30 days)	Only dietary and lifestyle regimen continued.	Stable pigmentation maintained. No new lesions observed.
Follow-up (After 60 days)	Continued *Pathya Ahara* and lifestyle modifications.	No recurrence or disease progression observed.

Figure-04: Photographs of affected areas before and after the treatment.

DISCUSSION

Vitiligo is a chronic acquired depigmenting disorder characterized by the selective destruction of melanocytes, resulting in depigmented macules and patches. Although the exact etiology remains unclear, autoimmune mechanisms, oxidative stress, genetic predisposition, and neurohumoral factors have been implicated in its pathogenesis. In Ayurveda, *Shvitra* is described under *Kushtha Roga* and is considered a *Tridoshaja Vyadhi* with predominance of *Pitta* and *Kapha Dosha*.

In the present case, the predominant *Doshas* were *Kapha* and *Pitta*, while the affected *Dushyas* were *Twak*, *Rakta*, and *Mamsa Dhatu*. The chronicity of the disease, associated *Mandagni*, and *Vibandha* suggested the involvement of impaired metabolic processes and *Dosha-Dushya Sammurchana*. Therefore, the treatment protocol was planned to achieve *Samprapti Vighatana* through *Deepana-Pachana*, *Raktashodhana*, *Raktaprasadana*, *Kushthaghna*, and *Varnya* therapies.

Mode of Action of the Therapeutic Interventions- *Bakuchi Churna* and *Bakuchi Taila* are traditionally indicated in *Shvitra* and promote repigmentation. Modern studies suggest that *Bakuchi* contains psoralens, which stimulate melanocyte activity and melanin synthesis. *Mahamanjishthadi Kwatha* and *Khadirarishta* act as *Raktashodhaka* and *Kushthaghna* formulations, helping to purify *Rakta Dhatu* and improve skin health. *Arogyavardhini Vati*, *Giloya Satva*, and *Gandhaka Rasayana* improve *Agni*, reduce *Ama*, provide immunomodulatory effects, and support tissue regeneration. *Triphala Churna* and *Avipattikara Churna* help regulate digestion and bowel function, thereby preventing further *Dosha* aggravation.

Along with *Nidana Parivarjana* and *Pathya Ahara*, these interventions helped arrest disease progression, promote repigmentation, and improve the patient's quality of life, as evidenced by significant improvement in VASI, VIDA, and DLQI scores.

CONCLUSION

Vitiligo remains a therapeutic challenge because of its chronic and recurrent nature. However, this case demonstrates that a well-planned Ayurvedic treatment regimen combined with dietary and lifestyle modifications can effectively arrest disease progression and promote repigmentation. Significant improvement was observed with reduction in VASI score from 12.0 to 2.0, improvement in VIDA score from +3 to 0, and reduction in DLQI score from 18 to 2 after treatment. The patient also experienced marked cosmetic improvement and enhanced quality of life without any adverse effects. This case highlights the potential role of Ayurvedic management in *Shvitra* and warrants further clinical evaluation through larger studies.

DECLARATION OF PATIENT CONSENT

The patient provided written informed consent for publication of her clinical information, photographs, and relevant medical details for academic and scientific purposes. Every effort has been made to preserve patient anonymity and confidentiality in accordance with ethical guidelines for medical case reporting. The patient understood that personal identifiers would not be disclosed and consented to the publication of this case report.

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