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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/19772

DOI URL: <http://dx.doi.org/10.21474/IJAR01/19772>



RESEARCH ARTICLE

NATUROPATHIC STRATEGIES FOR MANAGING PLAQUE PSORIASIS: INSIGHTS FROM A CASE REPORT

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Manuscript Info

Manuscript History

Received: 28 August 2024

Final Accepted: 30 September 2024

Published: October 2024

Key words:-

Chronic Plaque Psoriasis, Naturopathic Management, Holistic Treatment, Integrative Medicine, Psoriasis Therapy

Abstract

Chronic plaque psoriasis is a common, persistent inflammatory skin disorder characterized by well-demarcated, erythematous plaques covered with silvery scales, affecting 2-3% of the global population. It has a complex etiology involving genetic predisposition, immune dysfunction, and environmental triggers. Conventional treatments focus on symptom management through topical agents, phototherapy, and systemic medications, often leading to adverse effects and failing to address the underlying causes. This case report presents a 63-year-old man with a 20-year history of plaque psoriasis, characterized by redness and scaling on his legs, feet, knees, elbows, forearms, palms, and back. Aggravating factors included stress, cold weather, sun exposure, infections, and a poor diet. Physical examination confirmed erythematous plaques with no other abnormal findings. A 30-day naturopathic treatment regimen was administered, including dietary modifications, stress management, detoxification practices, and natural remedies. Specific therapies involved counseling, fasting, mud baths, buttermilk enemas, rice gruel application, coconut sun exposure, and meditation. The Psoriasis Area and Severity Index (PASI) and Dermatology Life Quality Index (DLQI) were used to monitor progress. The patient showed significant improvement in plaque symptoms, scaling, and itching, with no adverse events reported during a 6-month follow-up. The integrative naturopathic approach positively impacted both physical and psychological aspects of the disease. This case highlights the potential of naturopathic treatments in managing chronic plaque psoriasis. By addressing both symptoms and underlying causes, this holistic approach may offer a viable complementary or alternative strategy to conventional treatments. Further research, including larger randomized controlled trials, is necessary to validate these findings.

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Introduction:-

Chronic plaque psoriasis is a common, persistent inflammatory skin disorder characterized by the presence of well-demarcated, erythematous plaques covered with silvery scales.¹ It affects approximately 2-3% of the global population, manifesting as a lifelong condition with periods of exacerbation and remission.^{1,2} The exact etiology of psoriasis is complex and multifactorial, involving genetic predisposition, immune system dysfunction, and

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environmental triggers.³ Conventional treatments often focus on symptom management through topical agents, phototherapy, and systemic medications,⁴ which may carry the risk of adverse effects and fail to address the underlying causes of the disease .

In recent years, there has been growing interest in the role of Naturopathy in managing chronic conditions like psoriasis. Naturopathy emphasizes a holistic approach, integrating dietary modifications, stress management, detoxification, and the use of natural remedies to restore balance and promote self-healing.⁵ This approach aims to address the root causes of psoriasis by reducing inflammation, enhancing immune function, and improving overall skin health. A similar case report by Tewani et al. suggests that Naturopathic treatments may offer a viable complementary or alternative option for managing palmoplantar psoriasis.⁶ However, there are currently limited studies exploring Naturopathic approaches for plaque psoriasis specifically. This case report details the management of plaque psoriasis using a Naturopathic approach and aims to enhance the understanding of holistic health care strategies in the treatment of psoriasis.

Presenting Complaints

A 63-year-old man presented to our clinic with a 20-year history of redness and silver scaling on various parts of his body, primarily affecting the legs, soles, feet, knees, elbows, forearms, palms, and a few areas on the back. The lesions were reddish and often accompanied by itching and pain. Aggravating factors included stress, dry and cold weather, exposure to hot sun, infections such as fever and sore throat, and consumption of junk food. Relief was achieved through the application of moisturizers, particularly after warm water bathing, as well as steroid creams and exposure to mild sunlight. The patient had been prescribed Althrocin 100 mg, olive oil at bedtime, and Fexodine ointment. He had expressed concern about the progression of his psoriatic lesions, which had significantly impacted his mental health. His family history included psoriatic arthritis in his father and lichen planus in his sister.

Clinical Findings

On examination, the patient was 172 cm tall and weighed 80.86 kg, resulting in a Body Mass Index (BMI) of 27.3, indicating overweight status. He appeared to be normally built and well-nourished. His blood pressure was 120/80 mmHg, pulse rate was 72 beats per minute, and respiratory rate was 16 cycles per minute. Examination of the integumentary system revealed scaly lesions on the legs, soles, feet, knees, elbows, forearms, palms, and a few areas on the back, with no bleeding present. The lesions were well-defined erythematous plaques covered with large, adherent silvery scales. Some lesions were reddish, painful, sharply demarcated, and indurated, particularly on extensor surfaces. No abnormal findings were detected in other systems.

Diagnostic focus and assessments

The diagnosis was based on clinical symptoms and specific diagnostic tests. The patient tested positive for the Grattage test, with the Auspitz sign and Berkley's membrane also observed. Basic vital measurements, including blood pressure, respiratory rate, pulse, and BMI, were recorded as part of the initial assessment. Laboratory tests were conducted to measure ESR, lipid profile, and liver and kidney function. Additionally, the Psoriasis Area and Severity Index⁷ (PASI) and Dermatology Life Quality Index (DLQI) questionnaire⁸ were used to assess psoriasis severity. Evaluations were performed at baseline, after 30 days of treatment, and follow-up data were collected after 6 months.

Methods:-

The treatment protocol was developed by a team of integrative medical practitioners following a comprehensive case evaluation. Patients were thoroughly informed about the holistic nature of the treatment, including expected benefits, potential outcomes, and any associated risks. Written informed consent was obtained from each patient before proceeding with the treatment. The treatment was administered over a 30-day period, during which patients were closely monitored. Following the initial treatment phase, the patient received telephonic consultations for 6 months to monitor the progress. The detailed timeline of events is provided in figure 1.

Therapeutic focus and assessment

The therapeutic care provided to the patients included daily 30-minute counseling sessions, dietary modifications, and a fasting plan (refer to supplemental file). Additional treatments included mud baths (20 minutes, three times a week), buttermilk enemas (once a week), rice gruel application (20 minutes daily), coconut sun exposure (20 minutes, three times a week), and meditation (20 minutes daily). The counseling sessions aimed to provide comfort, alleviate fear associated with the diagnosis, educate patients about their condition, and establish health goals. The

additional therapies were specifically designed to reduce inflammation, manage stress, enhance detoxification, and promote skin health.

Evaluations were conducted at baseline, after 30 days of treatment, and follow-up data were collected after 6 months to assess the long-term effectiveness of the interventions.

Follow up and outcomes

At the time of discharge, the patient was given guidance to continue with specific naturopathy treatments and adhere to the dietary plan. Additionally, he was advised to incorporate pranayama (breath control exercises), regular sun exposure, and ensure adequate, restful sleep into his routine. These recommendations were aimed at sustaining the benefits achieved during the treatment period and promoting overall well-being. Throughout the 6-months follow-up period, the patient did not experience any adverse events. The outcomes of the interventions are detailed in Table 2 and figure 2.

Discussion:-

This case report presents an integrative approach to managing chronic plaque psoriasis through naturopathic interventions. The combination of dietary modifications, stress management, detoxification practices, and natural remedies aimed to address both the symptoms and underlying causes of psoriasis. The therapeutic regimen, which included counseling, fasting, mud baths, buttermilk enemas, rice gruel application, coconut sun exposure, and meditation, demonstrated a positive impact on the patient's condition over a 30-day treatment period followed by a 6-month follow-up.

The patient exhibited notable improvements in plaque psoriasis symptoms, scaling, and itching, aligning with the therapeutic goals of the naturopathic approach. The holistic nature of the treatment, integrating multiple modalities, likely contributed to these positive outcomes. The use of daily counseling sessions and stress management techniques such as meditation may have played a significant role in addressing psychological aspects of the disease, which are known to exacerbate psoriasis.^{9,10} A plant-based diet contributes to skin health and psoriasis by reducing systemic inflammation, promoting gut health and promoting autophagy, which helps clear damaged cells and toxins.¹¹ Intermittent fasting (IMF) provides anti-inflammatory effects, reduces oxidative stress, and promotes circadian rhythm synchronization, all of which are advantageous for managing inflammatory conditions such as psoriasis.¹² Mud therapy improves blood circulation by inducing peripheral vasodilation and reducing inflammatory markers such as interleukin-1 beta and tumor necrosis factor-alpha. It also delivers antioxidant minerals like gallic, vanilic, humic, fulvic, and protocatechuic acids to the skin, which help alleviate inflammation and enhance skin microbial health, leading to improved psoriasis symptoms.¹³ Sun exposure and the resulting increase in vitamin D levels are associated with improved prognosis for psoriasis.¹⁴ As suggested by animal studies, rice gruel may benefit psoriasis by reducing epidermal thickness, inflammation, and apoptosis, while increasing anti-inflammatory cytokines (IL-10, TGF- β) and decreasing pro-inflammatory markers (IL-6, IL-8, IL-20, IL-22, TNF- α), chemokines (CCL-20), and antimicrobial peptides (psoriasin, β -defensin). It also boosts antioxidative properties (Nrf-2) and modulates psoriasis-related gene expression.¹⁵

Traditional psoriasis treatments like topical agents, phototherapy, and systemic medications manage symptoms but often have side effects and don't address the disease's root causes. The naturopathic approach explored in this case report offers a potential complementary or alternative option, aiming to address the disease's multifactorial nature by combining dietary, lifestyle, and natural therapies. This holistic perspective may provide a more comprehensive management strategy for patients with chronic conditions like psoriasis. Previous case reports by Ayda et al.¹⁶ and Nair et al.¹⁷ have similarly demonstrated the effectiveness of Naturopathy in managing Palmoplantar psoriasis. Patient expressed that he is satisfied with the improvement in his skin condition and it has increased his confidence levels.

Several limitations should be acknowledged in this case report. First, the study is based on a single case, which limits the generalizability of the findings. Larger, randomized controlled trials are needed to confirm the efficacy and safety of the naturopathic interventions for psoriasis. Additionally, the absence of a control group in this case report makes it difficult to attribute improvements solely to the naturopathic treatments. Another limitation is the short duration of the initial treatment phase (30 days) and the relatively short follow-up period (6 months). Longer-term studies are necessary to evaluate the sustained effects of naturopathic interventions on psoriasis and to assess the potential for relapse or long-term benefits.

Future research should focus on larger, well-designed clinical trials to validate the findings and explore the specific mechanisms through which naturopathic treatments impact psoriasis.

Additionally, collaborative studies involving both conventional and complementary medicine practitioners could foster a more integrative approach to psoriasis management, potentially leading to improved patient outcomes and a better understanding of how various treatments interact.

Overall, this case report highlights the potential of naturopathic treatments in managing chronic plaque psoriasis and underscores the need for further research to establish evidence-based guidelines for incorporating these approaches into conventional care.

Informed consent:

The patient signed an informed consent to publish his de-identified information.

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