



# NATUROPATHY AND YOGA INTERVENTION ON PSORIASIS- A CASE REPORT

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**Abstract:** Psoriasis is the most common skin disorder of the present day. The purpose of the case study is to show the effectiveness of Naturopathy, Yoga intervention, and altered diet, along with including wheatgrass juice and keeping the other conditions into notice in Psoriasis. A Case Study was with a patient with a history of erythema, scaling, and itching. Since Naturopathic Interventions aimed to improve their quality of life, undergoing treatments such as Neutral Enema, Starch Fortified Turmeric bath, and Yoga Therapy at home as a primary line of medicine—the assessed patient before and after the intervention based on Candle grease and the Koebner phenomenon. Immediately after three days of intervention, itching over the affected areas started to subside. The patient's Naturopathic Intervention of 3 months has shown clinically significant change in the severity of the psoriatic lesion in our case. It can be used as a non-pharmacological intervention to manage Psoriasis and its associated symptoms. This study has investigated the determinants of stock returns in the Karachi Stock Exchange (KSE) using two asset pricing models the classical Capital Asset Pricing Model and the Arbitrage Pricing Theory model. To test the CAPM, market return is used, and macroeconomic variables are used to test the APT. The macroeconomic variables include inflation, oil prices, interest rate and exchange rate. For this very purpose, monthly time series data has been arranged from Jan 2010 to Dec 2014. The analytical framework contains.

**Keywords-** Autoimmune, Naturopathy, Yoga, Psoriasis, Lifestyle, Diet.

## I. INTRODUCTION

Psoriasis is a chronic multifactorial immune-mediated disease (1) that causes a rapid build-up of skin cells. Plaques and scales can manifest over any body part, commonly over elbows, knees, scalp, and lumbosacral area. It affects men and women of all ages, with prevalence ranging between 0.09% and 11.4%, making it a serious global problem.

Our digestive tract and immune system work in homeostasis, as about 70% of our immune system lies in the gut. Environmental and Immunologic factors appear to play a significant role in Psoriasis. Increasing evidence and studies suggest diet being a potent modulator is a link between intestinal dysbiosis and tissue-damaging inflammatory response. Addiction to alcohol, nicotine use, stress(2), faulty diet, and allergies trigger aberrant immune responses, shifting gut microbiota composition to a pro-inflammatory profile. Eggs, Dairy products, gluten, low fiber, high fat and protein in the diet increase the arachidonic acid that exacerbates the inflammatory cytokines(3). Among the above cause, exposure to psychological stressors activates the HPA axis and releases cortisol, expressed over the skin (4) in flushes. Contrariwise, Psoriasis has also led to many psychological impairments that affect daily social activities and work. The prevalence of anger, helplessness, embarrassment, and anxiety is more than 44% of patients(5).

Naturopathy is a drugless, non-invasive, evidence-based healthcare system emphasizing prevention, treatment, and optimal health through therapeutic modalities. (6) Yoga Therapy works on proactive health management by changing the person's general health outlook physically, mentally and emotionally. With Naturopathic dietary Intervention-fresh, Juices and salads diet decreases oxidative stress and treats diseases by triggering the body's natural defenses instead of fighting against them. Adding a vegetarian diet high in fiber, like carrots, tomatoes and fresh fruits, is attributed to the addition of various antioxidants and vitamins(7)(8). Fiber reduces the formation of arachidonic acid and its plasma inflammatory markers in case of autoimmune diseases like Rheumatoid arthritis(9)(10). The antioxidant activity of wheatgrass juice shows in promoting normal cell regrowth and inhibition of free radical-induced membrane damage(9). The high content of chlorophyll and MSM (sulphur-bearing molecules) in wheatgrass juice reduces allergies, detoxifies the body and lessens inflammation(11).

Yoga-based Mind-Body Intervention (MBI) positively impacts disease-specific inflammatory markers(12). The main goals of Yoga and Meditation in the mental health state are to seek the tranquillity of the mind, feelings of relaxation, improved self-confidence, lowered irritability, and an optimistic outlook on life(13). The increased parasympathetic activity during the controlled breathing practices (i.e., Anuloma Villoma Pranayama) helps improve physical and mental health during inflammatory, immunologic-associated conditions.

Starch fortified turmeric bath helps reduce hyperkeratotic plaque formation(14). Curcumin in turmeric has scientifically proven anti-oxidative (15) and pharmacological properties(16)(17). The phenolic compounds (betaine, squalene) in rice boost collagen production and are antiaging and anti-inflammatory. Thus, it shows an improvement in overall skin condition.

## 2. NEED OF THE STUDY.

Establishing large hospitals where hundreds to thousands of patients are treated has created severe problems in biomedical waste management. The seriousness of improper biomedical waste management was highlighted during the summer of 1998. Studies in India have been conducted at local/regional levels in various hospitals, indicating that roughly 1-5 kg/bed/day to waste is generated. All healthcare personnel, ward boys, sweepers, operation theatre & laboratory attendants have come into contact with biomedical waste during segregation, collection, transport, storage & final disposal. The knowledge of medical, paramedical staff & ward boys, and sweepers about biomedical waste management is essential to improve biomedical waste management practices. The biomedical waste requiring special attention includes potentially infectious, sharps, needles, scalpels, objects capable of puncturing the skin, plastic, pharmaceutical & chemically hazardous substances used in laboratories etc.

## 3. CASE

A 49-year-old male patient came with signs and symptoms like-demarcated erythematous scaly plaque over the scalp, arm and forearm, front of the chest, and a lumbosacral area. Severe itching and dryness over them for 4-5 months. The patient reported no major repose to allopathic medications as there was frequent reoccurring—no significant family history of Psoriasis. Personal history of alcoholism and smoking revealed for 7-8 years—no significant previous allergies; Medical history of Stage 1 Hypertension there.

### 3.1 Assessment

Multiple pinks to salmon-coloured hyperkeratotic plaques were present with silvery-white adherent scales. Posterior bilateral arm and forearm, scalp, front of the chest and lumbosacral area on clinical history and examination. Koebner phenomenon and Candle grease sign present. No zero-crusts on the dermatological examination as in the case of dermatitis.

### 3.2 Treatment

The primary line of treatment for the less expensive Naturopathic and Yogic interventions is advised and aimed to improve his quality of life (QOL) by modifying his lifestyle changes.

Diet Intervention	
Intake of fresh fruit juice/ vegetable juice/buttermilk/fresh wheatgrass juice/tender coconut water (300 ml/ serve)	Twice a day.
Intake of Fruits and raw vegetable salad.	Once a day.
A vegetarian meal high in fibre (Vegetables & Millet-based diet)	Once a day.
Therapy	
Neutral Enema	Once a week
Starch Fortified Turmeric pack/bath	Daily for 20min
Coconut oil application (post turmeric pack)	Once a day
Yoga practices	
Meditation and Pranayama	5 Days a week for 10-12 min
Brisk walk (morning & evening)	20 min daily

Table 1. Details of Naturopathy and Yoga Intervention:

### 3.4 Outcome Measures:

- Weight: Assessed in kilograms using the standard weighing scale
- BMI: Calculated using the formula (weight in kilogram/height in meter square)
- B.P.: Systolic and diastolic blood pressure measured using a sphygmomanometer
- Blood Analysis: Done

## IV. RESULTS AND DISCUSSION

### 4.1 Results of Study Variables

Naturopathic and Yogic intervention, proper diet, and natural remedies as advised for home, the itching and flaring over the psoriatic parts healed, and the thickened scaly skin slowly reduced during treatment. The recurrent outbreak stopped post-intervention.

Intake of a good amount of dietary fibre and fresh fruits reduced intestinal microbial dysbiosis, leading to immunological dysfunctions in autoimmune diseases like R.A. The case study shows that adding fresh fruits and vegetables rich in zinc could have helped improve immunity and prevent immune dysfunction. The impact of millet consumption on plasma antioxidant capacity and suppression in stress levels in diabetic and regular individuals have shown results in the case of Psoriasis. They contain bioactive compounds with antioxidant, anti-inflammatory, anti-inflammatory, and anti-hypertensive effects in ageing and everyday individuals. The patient did not take nightshades as solanine is assumed to irritate the intestinal lining and lead to psoriatic outbreaks. Restricted Milk and gluten as KLK6 protein in dairy products is associated with the risk of skin inflammation, thus worsening Psoriasis.

A study has shown that Coconut oil application, with its low linoleic acid content (more anti-inflammatory omega 6), lowers inflammation in contact dermatitis. This effect was observed in Psoriasis, too, as there was a reduction in inflammatory responses after application. Starch-fortified turmeric bath also showed decreased flaring as Phenolic compounds like curcumin in turmeric and betaine in rice carry Anti-inflammatory, antioxidant, and immune-modulatory properties.

As a part of the intervention, Yoga played a role in Mind-Body balance by reducing psycho-somatic symptoms, stress, and anxiety, refining the sleep pattern, slowing the disability quotient, evoking relaxed responses and improving the quality of life. Regular brisk

walking increases the amount of White Blood cells circulating, thus protecting the immune system. So, a suggested daily walk of 20 min helped improve the patient's general health. So Naturopathic diet and Yoga promote overall health.

Pre- and post-assessments showed possible improvements in the specified data compared to baseline assessments. The compliance with the effectiveness of 3 months of Naturopathic and Yogic interventions in reducing the severity of Psoriasis and the associated symptoms was good.

The Pre and Post data are as follows:

**4.2 Objective data:**

Table no.2

Variables	Pre-Assessment	Post-Assessment
Weight(kg)	75 kg	66.6 kg
BMI	27.5	24.4
BP(mmHg)	138/84mmHg	132/80mmHg
Pulse(bpm)	80	76

**4.3 Images of psoriatic patches Before Intervention and After Intervention):**  
**Before** **After**



#### 4.4 Assessment of patches and laboratory report before and after the intervention

Symptoms	Before Intervention	After Intervention
Intensity	+++ (severe)	+
Itching	+++ (severe)	0 (None)
Redness	+++ (severe)	0 (None)
Thickness	++++ (severe)	0 (None)
Scaling	++(moderate)	0 (None)

Table no. 3: Assessment of Psoriatic Patches

Lab Investigation	Before Intervention	After Intervention
Haemoglobin(gm%)	11.8 gm%	13.2gm%
ESR (mm/hr)	51mm/hr	38mm/hr

Table no. 4: Laboratory investigation report before and after interventions

#### Conclusion

This study reports the efficacy of Alternative System therapies like Yoga, Naturopathy, and Diet therapy can effectively cover the multifactorial cause of Psoriasis, such as immune system dysfunction. With a well-planned Nutritional diet and treatment-based daily regimen, a person can alleviate the disease condition and lead a healthy life. The adjuvant therapy was advised for easy practice at home, which is cost-effective and improves an individual's quality of life.

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