

Yoga and Naturopathy Intervention in the Management of Chronic Eczema- A Case Report

Indiradevi S, ^{1*} Dhanushya Devi G, ² Prashanth S ³

¹ HOD, Reader, Department of Yoga Philosophy, ² PG Scholar, Department of Acupuncture and Energy medicine, ³ Assistant Medical officer cum Lecturer Grade II, Department of Yoga Philosophy. Government Yoga and Naturopathy Medical College and Hospital, Arumbakkam, Chennai - 600106, Tamil Nadu, India

ABSTRACT:

Atopic dermatitis, commonly known as eczema, is a common chronic, relapsing skin disease characterized by pruritus and disrupted epidermal barrier function. The exact cause of the disease is unknown. Controlling eczema in an effective way can promote the patient's quality of life. This case study was done to find the effectiveness of Yoga and Naturopathic interventions in treating chronic eczema. A case report of a 40-year-old male patient was admitted to our inpatient ward with complaints of intense itching, scarring, and raised dark skin lesions in both feet, particularly around the ankles, for the past 7 years. He is diagnosed as a case of chronic eczema. The Naturopathy and Yoga treatments were given for 14 days during the stay of the Patient in a hospital ward. Based on the parameters observed, the EASI score (Eczema Area and Severity Index) and DLQI score (Dermatology Life Quality Index Score) showed there is a decrease in the score which indicate positive improvements in the condition. This result has proven the efficacy of Yoga and Naturopathic interventions in treating chronic eczema.

KEYWORDS: Atopic dermatitis, Eczema, Yoga and Naturopathy, EASI, DLQI

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*Corresponding Author:

Dr. Indiradevi S

HOD, Reader, Department of Yoga Philosophy,
Government Yoga and Naturopathy Medical College
and Hospital, Arumbakkam, Chennai, Tamil Nadu,
India

Email: indirabarani.lokshitha@gmail.com

INTRODUCTION:

Eczema is sometimes also called "atopic dermatitis" or "atopic eczema." Chronic inflammatory skin disease known as atopic eczema is characterized by severe itching and recurrent eczematous lesions. Although it most often starts in infancy and affects two of every ten children it is also highly prevalent in adults. ^[1] The exact cause of the disease is unknown. ^[1-2]

Environmental triggers such as heat, humidity, detergents or soaps, abrasive clothing, chemicals, smoke, and stress are the inducing factors for eczema. It is usually associated with the genetic variation that reduces the skin's natural ability to protect itself from infections and irritants. Some other factors are also found to be aggravating the conditions, such as contact allergies, digestive

problems, nutritional deficiency, stress, food intolerance, and immune system problems. Symptoms include reddish patches or lesions, thick and rough skin, an itching sensation, especially at night, dry and cracked skin around the affected area, and chronic rashes. [3] Drug-induced eczematous eruptions can occur in elderly people, mainly with antihypertensive medication. [4] Yoga and Naturopathy is a drug-free medical system that employs non-invasive techniques of interventions to create an environment that is conducive to the body's healing. It advocates the inherent healing power of nature and also recommends proper skin moisturizing, control over diet, proper bathing techniques, herbal therapies, and acupuncture. [5]

CASE REPORT:

A 40-year-old patient was admitted to our inpatient ward with complaints of intense itching, scarring, and raised dark skin lesions in both feet, particularly around the ankles, for the past 7 years, along with a history of hypertension for the past year. The patient was not currently under any medication. The patient took aspirin often in his childhood without the advice of a physician for cold issues and sinusitis. He had disturbed sleep and irregular bowel patterns. He had a history of incomplete voiding of urine for the past

three months and had no relevance to any medical or surgical history. He was already diagnosed with chronic eczema in 2015.

THERAPEUTIC INTERVENTION:

The treatment protocol was mainly based on the elimination of suppressed symptoms. A pre-assessment was taken on day 1, the EASI score was 16 (moderate) and the DLQI score was 6 (moderate). Treatment started with an enema on the first day, followed by a full plantain leaf bath on the 7th and 10th days, a steam bath on the 4th and 13th days, and *Laghu shanka prakshalana* on the 6th and 9th days. Partial plantain leaf packs to both legs, mud packs to the abdomen and eyes on every day, Acupuncture was given for 10 days [Table-1], and Asana and Pranayama practices were given daily [Table-2]. A raw diet was given during his whole 14-day stay in the Hospital, and the juice diet was given on the 11th, 12th, and 13th days [Table-3].

The EASI scores were reduced from 16 (moderate) to 7.2 (mild). Itching and dark lesions were reduced after 14 days of intervention [Table-4] and the DLQI score was reduced from 6 (moderate) to 1 (Good) which showed improvement in the patient's Quality of life [Table-5].

Table-1: Naturopathy Treatment Protocol for the Patient during the Stay in Hospital

Days	Naturopathy Modalities	Acupuncture Points used:
Day 1 – Day 14	Morning <ul style="list-style-type: none"> • Enema (on Day 1 only) • Mud pack – Abdomen and eyes – 20mins • Partial Plantain leaf bath –both legs – 20mins 	Acupuncture is given for 10 days – 20mins each day at the same time. Bilaterally the points given are:- <ul style="list-style-type: none"> • Governing vessel 20 (GV 20) • Lung 5 (LU 5) • Large intestine 11 (LI 11) • Large intestine 4 (LI 4) • Spleen 10 (SP 10)

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	Evening <ul style="list-style-type: none"> • Neutral Hip bath - 20mins 	Stomach 36 (ST 36)
Day 4 & Day 13	Whole body oil application with Full Steam bath for 5mins	
Day 7 & Day 10	Full plantain leaf bath - 15mins	
Day 6 & Day 9	Laghoo Shankaprakshalana	

Table-2: Yoga practices are given to the patient 45mins per day during the stay in the hospital

Yogasana - 25mins	Pranayama - 10mins	Relaxation - 10mins
<ul style="list-style-type: none"> • Pavanmuktasana series 1 • Tadasana • Triyeka Tadasana • Vakrasana • Ardha Pavanmuktasana • Uttanapadasana • Bujangasana 	<ul style="list-style-type: none"> • Nadishudhi pranayama • Bhramari pranayama • Kapalabhati pranayama • Sectional breathing 	<ul style="list-style-type: none"> • Deep relaxation technique

Table-3: A diet plan is given to the patient during his stay the in hospital

DAY	7 am	9.30 am	12 pm	1.30 pm	4 pm	7 pm
Day 1	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Guava juice	Fruit salad + sprouts	Lemon juice	Veg salad + fruit salad
Day 2	Ash gourd juice	Veg salad + fruit salad+ sprouts	Curry leaf coriander mint juice	Fruit salad + sprouts	Amla juice	Veg salad + fruit salad
Day 3	Plantain pith juice	Veg salad + fruit salad+ sprouts	Guava juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad
Ash gourd	Ash gourd juice	Veg salad + fruit salad+ sprouts	Muskmelon juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad

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Day 5	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Beetroot juice	Fruit salad + sprouts	Curry leaf coriander mint juice	Veg salad + fruit salad
Day 6	Plantain pith juice	Veg salad + fruit salad+ sprouts	Amla juice	Fruit salad + sprouts	Amla juice	Veg salad + fruit salad
Day 7	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Curry leaf coriander mint juice	Fruit salad + sprouts	Lemon juice	Veg salad + fruit salad
Day 8	Ash gourd juice	Veg salad + fruit salad+ sprouts	Amla juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad
Day 9	Plantain pith juice	Veg salad + fruit salad+ sprouts	Curry leaf coriander mint juice	Fruit salad + sprouts	Guava juice	Veg salad + fruit salad
Day 10	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Ragi milk	Fruit salad + sprouts	Amla juice	Veg salad + fruit salad
Day 11	Ash gourd juice	Lemon juice	Beetroot juice	Beetroot juice	Lemon juice	Watermelon juice
Day 12	Plantain pith juice	Amla juice	Ragi milk	Muskmelon juice	Grape juice	Papaya juice
Day 13	Bottle gourd juice	Curry leaf juice	Guava juice	Carrot juice	Beetroot juice	Amla juice
Day 14	Plantain pith juice	Veg salad + fruit salad+ sprouts	Muskmelon juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad

Table-4: EASI (Eczema area and severity index score) before and after treatment

Pre Score	Post Score
16 (moderate)	7.2 (mild)

Table-5: DLQI (Dermatology life quality index score) before and after treatment

Pre Score	Post Score
6 (Moderate)	1 (Good)

Table-6: the Parameters assessed before and after the treatment

Parameters	Pre	Post
Height (m)	1.58	1.58
Weight (kg)	61.3	56.1
Body mass index (kg/m ²)	24.5	22.5
Systolic blood pressure (mm/Hg)	133	100
Diastolic blood pressure (mm/Hg)	93	80
Pulse rate (bpm)	76	76
Hip circumference (cm)	92	88
Waist circumference (cm)	87.5	79
Waist hip ratio	0.95	0.89
Right mid-arm circumference (cm)	30	28
Left mid-arm circumference (cm)	31	30
Right mid-thigh circumference (cm)	47	46
Left mid-thigh circumference (cm)	46.5	45.5
Fasting blood glucose level (mg/dL)	64	74
Postprandial blood glucose level (mg/dL)	89	86
Total cholesterol (mg/dL)	152	136
Haemoglobin (gms%)	16.6	16.7

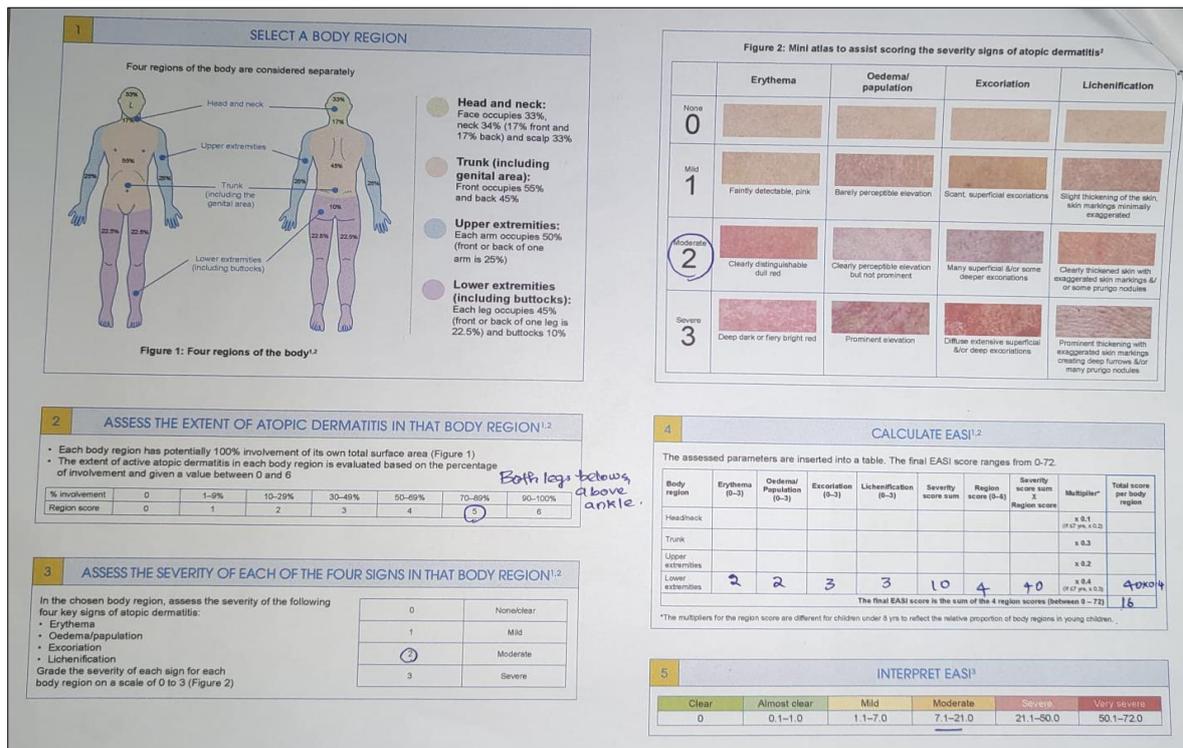


Figure-1: EASI score before the treatment

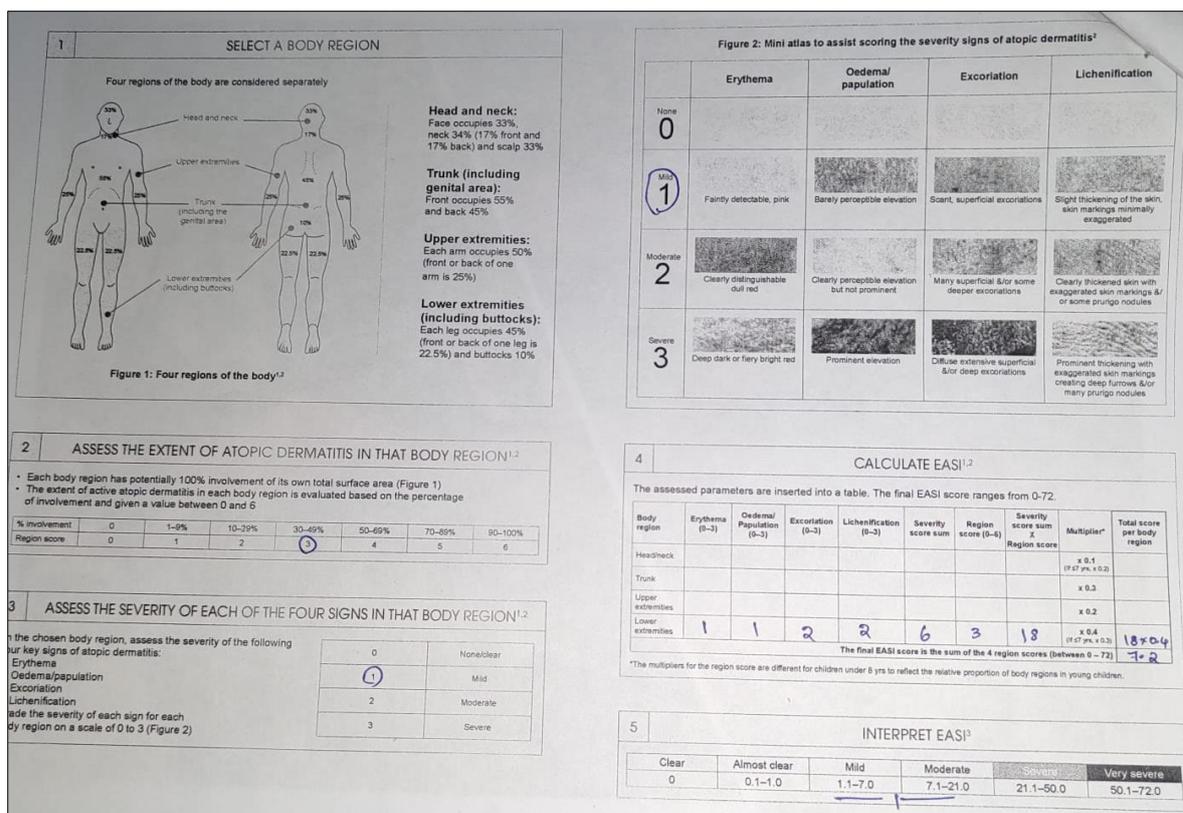


Figure-2: EASI Score after the treatment

**Figure-3: Before treatment - Eczema****Figure-4: After treatment - Eczema****Figure-5: During Treatment - Plantain leaf pack to both legs****DISCUSSION:**

During raw juice therapy, plantain leaf bath, and steam bath, the eliminative and cleansing capacity of the organs of elimination, namely the lungs, liver, kidneys, and skin, is greatly increased, and masses of accumulated metabolic waste and toxins are quickly eliminated. Mudpack has shown improvement in microcirculation and vasomotion score, as reported by Poensin et al [6]. Pranayama activates the body's lymphatic system, which is responsible for the removal of waste. Yoga and pranayama also help in reducing stress levels, blood pressure, and itching. [7] Acupuncture reduces the pro-inflammatory cytokines IL-4, IL-8,

and TNF- alpha and reduces itching. [8, 9] Atopic eczema arises due to interactions between a leaky skin barrier and an immune response that occurs both in the skin and systemic circulation. Higher consumption of green and yellow vegetables, beta-carotene, and citrus fruits may be protective against the development of eczema and its reduction in severity. A diet rich in vitamins C, E, and minerals helped reduce inflammation and repair the skin barrier at inflamed and dry skin sites. [10] Plantain leaf aids in facilitating the movement of green rays present in the sun, directly into the body. These rays are found to serve as a good antiseptic agent and have excellent

healing properties. This process is regarded as one detoxification process involving profuse sweating. These banana leaves convert the harmful ultraviolet sun rays into healthy rays. It could be due to the presence of polyphenol, Epigallocatechin Gallate (EGCG – a very beneficial ingredient in the skin rejuvenation treatment) in its leaf. ^[11] Plantain leaf bath is being used clinically for various conditions such as skin diseases, obesity, and other metabolic disorders thus this study has shown there is an effect on chronic eczema. ^[12]

CONCLUSION:

The purpose of this study is to find out the effectiveness of Yoga and Naturopathy intervention in the management of chronic eczema. This study showed an improvement in the result, as there was a reduction in itching and lightening of dark lesions, which ameliorated the patient's quality of life. Studies with large sample sizes are required in the future to prove further effectiveness.

Consent of patient:

The authors certify that the consent was obtained by giving him clear instructions that this going to be a clinical observation and the pre-data and post-data were collected for future reference and the participant undersigned, given the consent to include photograph(s) and/or case history and/or other details to get published in the journal and it has been informed that his name or initials will not be included for publication.

Limitation of the study:

There may be variations in results as this is a single case study. Hence, further well-

planned clinical trials are suggested with a large sample size to validate our results.

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