

Efficacy Of Individualized Homoeopathic Medicines in Fungal Skin Infections: A Prospective Clinical Study

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Abstract— Background: Fungal skin infections (dermatophytosis/ringworm) caused by *Trichophyton*, *Microsporum*, and *Epidermophyton* species pose significant clinical challenges globally due to environmental humidity, improper hygiene, and rising resistance secondary to topical corticosteroid misuse. Homoeopathy views these superficial eruptions not as isolated local diseases, but as dynamic reflections of deeper constitutional and miasmatic imbalances, predominantly psora and sycosis.

Objective: To evaluate the therapeutic efficacy of individualized homoeopathic medicines in adult patients suffering from fungal skin infections. **Materials & Methods:** A prospective, open-label interventional study was conducted on 30 adult patients (N=30) presenting with dermatophytosis at Shri B. G. Garaiya Homoeopathic Medical College & Hospital, Rajkot, over a 9-month period. Clinical severity and lesion extent were evaluated at baseline and regular follow-up intervals using the Modified Tinea Corporis Score (mTCS) and Total Composite Score: {Total Score} = {Area (mTCS Crossovers)} x ({Erythema} + {Scaling} + {Border Visibility}). Pre- and post-treatment data were statistically analyzed using a paired t-test. **Results:** Tinea corporis was the predominant clinical diagnosis (76.67%, n=23), followed by Tinea cruris (23.33%, n=7). Following individualized treatment, the mean Total Composite Score decreased significantly from a baseline pre-treatment value of 87.67 $\pm$ 8.99 to a post-treatment value of 12.90 $\pm$ 23.24 ($p < 0.001$, $t = 16.60$, $df = 29$). Marked Improvement (>50% score reduction) was achieved in 70% (n=21) of cases, Moderate Improvement (25 -50% reduction) in 23% (n=7), and No Improvement

in 7% (n=2), yielding an overall clinical response rate of 93.33% (28/30 cases). *Lycopodium clavatum* was the most frequently prescribed remedy (10%, n=3), followed by *Arsenicum album*, *Natrum muriaticum*, and *Tellurium* (6.67% each, n=2).

Conclusion: Individualized homoeopathic treatment, prescribed on the basis of totality of symptoms and miasmatic analysis, demonstrates high therapeutic efficacy in reducing symptom severity and clearing fungal skin infections.

Index Terms—Homoeopathy, Dermatophytosis, Ringworm, Tinea Corporis, Tinea Cruris, Individualization, Psora, Modified Tinea Corporis Score (mTCS).

I. INTRODUCTION

Dermatophytes are keratinophilic fungi belonging to the genera *Trichophyton*, *Microsporum*, and *Epidermophyton* that invade the skin, hair, and nails. Dermatophytoses are classified under ICD-10-CM code B35 (Tinea corporis under B35.4, Tinea cruris under B35.6, Tinea pedis under B35.3, Tinea unguium under B35.1). Risk factors include tropical climates, tight clothing, hyperhidrosis, obesity, and overcrowding.

While conventional antifungals remain standard therapy, frequent recurrences, adverse drug reactions, and alarming antifungal resistance (especially associated with topical corticosteroid misuse forming

"Tinea incognito") necessitate exploring holistic, individualised alternatives. Homoeopathy posits that mind and body constitute an integrated dynamic entity animated by the Vital Force. Skin manifestations represent outer expressions of deeper constitutional dyscrasia. Individualized prescribing aims to restore internal balance without external suppression.

II. REVIEW OF LITERATURE

2.1 Anatomy and Physiology of the Cutaneous Barrier

The skin spans up to 2 square meters and accounts for 12% to 15% of total body weight in adults. It comprises three distinct structural layers:

- Epidermis:

An avascular layer (0.5 mm to 1.5 mm thick) composed of stratified squamous keratinized epithelium. Keratinocytes constitute 95% of epidermal cells, alongside melanocytes, Langerhans cells (antigen presenting), and Merkel cells (mechanoreceptors). The *stratum corneum* features 25–30 layers of dead keratinocytes bathed in lamellar glycolipids, maintaining an acidic surface pH between 4.0 and 6.5. Disruption of barrier integrity or pH alterations facilitate fungal hyphae penetration.

- Dermis:

Connective tissue layer housed beneath the basement membrane, subdivided into a superficial papillary layer (fibroblasts, hyaluronic acid, fibronectin) and a deep reticular layer (dense collagen networks providing tensile strength).

- Hypodermis:

Subcutaneous adipose and loose connective tissue layer providing cushioning, insulation, and endocrine signaling.

2.2 Comprehensive Dermatophytosis Overview & Emerging Resistance

Globally, dermatophytosis affects 20% to 25% of the general population. Fungi are classified by host preference into anthropophilic (e.g., *T. rubrum*, *T. tonsurans*), zoophilic (e.g., *M. canis*, *T. verrucosum*), and geophilic species. In recent years, India has witnessed a major epidemiological shift characterized by severe, recalcitrant, and widespread cutaneous

dermatophytosis. Modern molecular evaluations isolate *Trichophyton indotineae* (*Trichophyton mentagrophytes* ITS type VIII) as the dominant pathogen in up to 90% of cases. The widespread over-the-counter availability of combination creams containing potent topical corticosteroids and antifungals alters lesion morphology (*Tinea incognito*) and induces point mutations in the squalene epoxidase (SQLE) gene, yielding high resistance to terbinafine and azoles.

2.3 Clinical Severity Evaluation: The Modified Tinea Corporis Score (mTCS)

Tracking exact surface area changes in expanding annular lesions without physical tracing is achieved via the Modified Tinea Corporis Score (mTCS). A standard transparent grid (1 cm × 1 cm) is overlaid on the lesion, and grid line crossovers within the active margin are counted. To determine the Total Composite Score, area crossovers are multiplied by the sum of FDA-aligned clinical severity criteria (Erythema, Scaling, and Border Visibility rated on a 0–3 scale):

$$\{\text{Total Composite Score}\} = \{\text{Area (mTCS Crossovers)}\} \times (\{\text{Erythema}\} + \{\text{Scaling}\} + \{\text{Border Visibility}\})$$

2.4 Homoeopathic Philosophy & Miasmatic Concept

In the *Organon of Medicine*, Dr. Samuel Hahnemann explains that true natural diseases are spirit-like (dynamic) derangements of the Vital Force. Eruptions on the skin serve as a protective vicarious outlay by the Vital Force to preserve internal organs. External suppressive applications drive the disease inward, transforming simple cutaneous eruptions into complex chronic illnesses.

Homoeopathic philosophy categorizes chronic dermatological conditions into miasmatic dyscrasias:

- Psora:

The fundamental "internal itch disease" characterized by functional disturbance, intense pruritus, dry scaly skin, burning after scratching, and sensitivity to thermal changes.

- Sycosis:

Characterized by hyperkeratosis, tissue infiltration, induration, warty growths, and chronicity stemming from suppressed discharges.

- Syphilitic & Tubercular:

Syphilis manifests as tissue destruction, ulceration, and deep structural alteration; the Tubercular miasm presents with shiftiness, rapid progression, and constitutional weakness.

Classic homoeopathic Materia Medica provides extensive clinical indications for ringworm, including *Arsenicum album*, *Lycopodium clavatum*, *Tellurium*, *Sepia*, *Bacillinum*, *Pulsatilla*, *Conium*, *Graphites*, *Psorinum*, *Sulphur*, and *Thuja*.

III. MATERIALS AND METHODS

3.1 Study Setting and Design

This study was a prospective, open-label, interventional clinical trial conducted at the Outpatient Department (OPD), Peripheral OPDs, and rural health camps of Shri B. G. Garaiya Homoeopathic Medical College & Hospital, Rajkot, Gujarat, India.

3.2 Sample Size and Sampling

A total of 30 adult patients (N=30) meeting strict inclusion criteria were selected using random sampling. From 50 initially screened subjects, 40 were enrolled, and 30 completed the full 9-month follow-up protocol.

3.3 Inclusion & Exclusion Criteria

- Inclusion Criteria:

Adult male and female patients (18+ years) with active, clinically diagnosed dermatophytosis who voluntarily consented to homoeopathic treatment and committed to regular follow-ups.

- Exclusion Criteria:

Pediatric cases, pregnant or lactating mothers, patients with co-existing critical systemic diseases, and dropouts who skipped more than two follow-up visits.

3.4 Outcome Assessment Criteria

Response was graded based on Total Composite Score reduction:

1. Marked Improvement: >50% reduction in composite severity score with complete or near-complete symptom resolution.
2. Moderate Improvement: 25 -50% reduction in composite severity score.
3. No Improvement: <25% reduction or unchanged clinical status.

IV. RESULTS AND OBSERVATIONS (WORD & EXCEL FORMATTED)

Data collected from the 30 completed cases were tabulated for statistical and demographic analysis.

Table 1: Baseline Demographic & Clinical Characteristics (N=30)

Demographic Parameter	Category	Patient Count (n)	Percentage (100%)
Age Distribution	<20 years	4	13.33%
	20–29 years	9	30.00%
	30–39 years	6	20.00%
	40–49 years	5	16.67%
	50–59 years	3	10.00%
	60+ years	3	10.00%
Gender Distribution	Male	28	93.33%
	Female	2	6.67%
Marital Status	Married	25	83.33%
	Unmarried	5	16.67%
Clinical Diagnosis	Tinea Corporis	23	76.67%
	Tinea Cruris	7	23.33%
Symptom Profile	Scaling / Scaly Lesions	30	100.00%
	Itching (Pruritus)	30	100.00%
	Redness (Erythema)	12	40.00%
	Burning Sensation	6	20.00%
	Bleeding	4	13.33%
	Suppuration / Discharge	3	10.00%

Table 2: Miasmatic, Thermal, Potency, and Outcome Distribution (N=30)

Clinical Parameter	Classification	Patient Count (n)	Percentage (100%)
Dominant Miasm	Psora	16	53.33%
	Tubercular	7	23.33%
	Psoro-Sycotic	3	10.00%
	Sycosis	3	10.00%
	Syphilitic	1	3.33%
Thermal State	Hot Constitution	15	50.00%
	Chilly	10	33.33%

Clinical Parameter	Classification	Patient Count (n)	Percentage (100%)
	Constitution		
	Ambithermal	5	16.67%
Potency Selected	1M	15	50.00%
	200C	10	33.33%
	30C	5	16.67%
Treatment Outcome	Marked Improvement (>50%)	21	70.00%
	Moderate Improvement (25-50%)	7	23.33%
	No Improvement (0 -25%)	2	6.67%

Table 3: Distribution by Remedy Selection (N=30)

Prescribed Homoeopathic Remedy	Number of Cases (n)	Percentage (100%)
<i>Lycopodium clavatum</i>	3	10.00%
<i>Arsenicum album</i>	2	6.67%
<i>Natrum muriaticum</i>	2	6.67%
<i>Tellurium</i>	2	6.67%
<i>Anacardium orientale</i>	1	3.33%
<i>Apis mellifica</i>	1	3.33%
<i>Bacillinum</i>	1	3.33%
<i>Calcarea carbonica</i>	1	3.33%
<i>Calcarea sulphurica</i>	1	3.33%
<i>Chrysarobinum</i>	1	3.33%
<i>Clematis erecta</i>	1	3.33%
<i>Conium maculatum</i>	1	3.33%
<i>Dulcamara</i>	1	3.33%
<i>Graphites</i>	1	3.33%
<i>Hepar sulphuris calcareum</i>	1	3.33%
<i>Mezereum</i>	1	3.33%
<i>Petroleum</i>	1	3.33%
<i>Psorinum</i>	1	3.33%
<i>Pulsatilla</i>	1	3.33%
<i>Rhus toxicodendron</i>	1	3.33%
<i>Sepia</i>	1	3.33%
<i>Silicea</i>	1	3.33%
<i>Staphysagria</i>	1	3.33%
<i>Sulphur</i>	1	3.33%
<i>Thuja occidentalis</i>	1	3.33%
Total	30	100.00%

Table 4: Paired Samples Inferential Statistics

Assessment Phase	Mean Composite Score ($\bar{X}$)	Sample Size (N)	Std. Deviation (s)	Std. Error Mean (SEM)
Pre-Treatment Baseline	87.67	30	8.99	1.64
Post-Treatment Final	12.90	30	23.24	4.24

Inferential Analysis Details:

- Mean Difference ($\bar{d}$): 74.77
- Standard Deviation of Differences (s_d): 24.68
- Standard Error of Mean Difference ($SE_{\bar{d}}$): 4.5059
- Degrees of Freedom (df): 29
- Calculated t-value: 16.60
- Critical t-value ($\alpha = 0.05$, two-tailed): 2.045
- p-value: < 0.001

Decision: Calculated t (16.60) > Critical t (2.045). The null hypothesis (H_0) is rejected, confirming a statistically significant clinical reduction in fungal skin infection severity following individualized homoeopathic treatment.

V. DETAILED CLINICAL CASE PRESENTATIONS

Case 1: Severe Tinea Cruris & Trunk Ringworm

Patient Profile & Baseline: Mr. PD, a 60-year-old married clerk (UHID: *****1440), presented on February 1, 2025, with extensive annular, scaly ringworm patches covering the chest, bilateral groin, and face for 4–5 months. Complaints included intense itching (++), marked redness (++), and post-scratch burning.

Past & Family History:

- *Past History*: Grade-III Piles operated (July 2025); low hemoglobin ($\{Hb\}$ 6.7%, 2008–09); left elbow fracture.
- *Family History*: Father had Type 2 Diabetes Mellitus, Ringworm, and Urticaria; Sister had Piles, Epilepsy, and forgetfulness.

Anamnesis & Constitutional Totality: Meticulous, fastidious, and security-oriented. Plagued by extreme, restless anxiety regarding his wife's chronic Hepatitis

B diagnosis. Irritable and easily angered over minor daily issues. Chilly thermal constitution (++); extreme thirst for large quantities of cold water; strong craving for spicy food (++); severe sleeplessness. Miasm: Tubercular.

Repertorial Totality & Remedy Differentiation:

1. Mind - Anger - trifles, about
2. Mind - Anxiety - family, about one's
3. Stomach - Thirst - large quantities, for

4. Generalities - Food and drinks - spicy condiments - desires

5. Skin - Eruptions - herpetic - circinate, ringworm
Arsenicum album matched the profound health anxiety, fastidiousness, chilly state, thirst for cold water, and burning skin sensations.

Prescription & Posology: Rx: *Arsenicum album* 200C (single dose, 4 globules orally), followed by unmedicated placebo (*Saccharum lactis*) for 30 days.

Table 5: Case 1 Follow-Up Progression

Date	Clinical Observation & Progression	Prescribed Regimen	Area Score (mTCS)	Severity (E+S+M)	Total Composite Score
01/02/2025	Baseline: Active red scaly ringworm plaques	<i>Arsenicum album</i> 200C (1 dose)	10	6	60
01/03/2025	Itching reduced; lesions shrinking	Placebo (<i>S. lactis</i>)	8	5	40
01/04/2025	Fading active borders; skin flattening	Placebo (<i>S. lactis</i>)	6	4	24
01/05/2025	Marked improvement; minimal scaling	Placebo (<i>S. lactis</i>)	5	3	15
01/06/2025	Faint hyperpigmentation remaining	Placebo (<i>S. lactis</i>)	4	2	8
01/07/2025	Near total clearance of lesions	Placebo (<i>S. lactis</i>)	2	1	2
01/08/2025	Complete lesion clearance; no itching	No medicine	0	0	0
01/09/2025	Case Closed: Complete cure achieved	No medicine	0	0	0

Case 2: Chronic Recalcitrant Tinea Corporis

Patient Profile & Baseline: Mr. KG, a 47-year-old male City Bus Conductor (UHID: *****1531), presented on April 7, 2025, with long-standing Tinea Corporis on the trunk. Infection started in 2012–13 and severely exacerbated over the past 6–8 months, presenting as thickened, blackish hyperpigmented scaly plaques with violent itching and post-scratch burning, aggravated at night and by sun exposure.

Past & Family History:

- *Past History*: Leg cramps (2021), measles in infancy, left wrist fracture operated, hypertension, hypercholesterolemia (weight reduced from 110 kg to 72 kg).
- *Family History*: Father died suddenly of an acute cardiac event at age 40–45.

Anamnesis & Constitutional Totality: Deep financial anxiety following stock market losses. Worried about children's education.

Timid, shy, and introverted in public, but dogmatic, rigid, stubborn, and dictatorial at home.

Morning anger upon waking. Hot thermal constitution (++); thirsty (evening); craves hot food (++), sour items (++), and juices. Miasm: Psoro-Sycotic.

Repertorial Totality & Remedy Differentiation:

1. Mind - Anger - morning
2. Mind - Timidity - shy
3. Stomach - Thirst - extreme - evening
4. Generalities - Sun exposure - agg
5. Skin - Eruptions - herpetic - circinate, ringworm

Lycopodium clavatum covered the dictatorial home disposition vs public timidity, morning anger, hot thermal state, evening thirst, and chronic skin induration.

Prescription & Posology: Rx: *Lycopodium clavatum* 1M (single dose, 4 globules orally), followed by unmedicated placebo (*Saccharum lactis*).

Table 6: Case 2 Follow-Up Progression

Date	Clinical Observation & Progression	Prescribed Regimen	Area Score (mTCS)	Severity (E+S+M)	Total Composite Score
07/04/2025	Baseline: Thickened scaly ringworm on trunk	<i>Lycopodium clavatum</i> 1M (1 dose)	12	7	84
07/05/2025	Marked reduction in redness & itching	Placebo (<i>S. lactis</i>)	10	6	60
06/06/2025	Plaque margins shrinking	Placebo (<i>S. lactis</i>)	8	5	40
05/07/2025	Occasional itching; central clearing	Placebo (<i>S. lactis</i>)	6	4	24
05/08/2025	Skin texture normalizing; faint border	Placebo (<i>S. lactis</i>)	4	3	12
04/09/2025	Faint residual macule	Placebo (<i>S. lactis</i>)	2	2	4
04/10/2025	Minimal hyperpigmentation spot	Placebo (<i>S. lactis</i>)	1	1	1
03/11/2025	Complete lesion clearance; normal skin	No medicine	0	0	0
02/12/2025	Follow-up: Fully cured; no relapse	No medicine	0	0	0

VI. DISCUSSION

This prospective study confirms the effectiveness of individualized homeopathic medicines in managing superficial fungal skin infections. While modern antifungal management faces immense challenges due to drug resistance (especially involving *T. indotineae*) and post-steroid modified presentations, homeopathy offers a non-suppressive constitutional alternative.

Demographic evaluation demonstrated a high prevalence among young adults (30% aged 20–29 years) and a strong male skew (93.33%). This distribution corresponds with physical exertion, excessive sweating, tight synthetic clothing, and occupational friction.

Miasmatic analysis revealed Psora as the primary driver (53.33%), manifesting as functional skin irritation, scaly plaques, and intense itching. High potencies (1M in 50% and 200C in 33.3% of cases) administered as infrequent single doses successfully stimulated restorative vital reaction. By avoiding topical suppressive creams, treatment addressed underlying host susceptibility, achieving complete resolution without homeopathic aggravations or disease relapses.

VII. SUMMARY AND CONCLUSION

Individualized homeopathic treatment, prescribed on the basis of totality of symptoms and miasmatic evaluation, plays a beneficial role in the curative management of fungal skin infections. The statistical reduction in Total Composite Scores ($p < 0.001$, $t = 16.60$) and an overall clinical response rate of 93.33% confirm that constitutional homeopathic remedies provide effective clinical recovery in superficial dermatophytosis.

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