

HOMOEOPATHIC KEYNOTE PRESCRIPTION ON ALLERGIC CONTACT DERMATITIS DUE TO TOPICAL MEDICAMENTS: A CASE REPORT

Ruchi Singh¹, Namrata Singh Kushwaha², Hari Shankar Tiwari*³ and Siddhi Jain⁴

¹Professor, Department of Organon of Medicine and Homoeopathic Philosophy, Dr. M. P. K. Homoeopathic Medical College Hospital and Research Centre, Homoeopathy University, Jaipur, Rajasthan, India.

^{2,3,4}PG Scholar, Department of Organon of Medicine and Homoeopathic Philosophy, Dr. M. P. K. Homoeopathic Medical College Hospital and Research Centre, Homoeopathy University, Jaipur, Rajasthan, India.

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*Corresponding Author

Dr. Hari Shankar Tiwari

PG Scholar, Department of
Organon of Medicine and
Homoeopathic Philosophy,
Dr. M. P. K. Homoeopathic
Medical College Hospital
and Research Centre,
Homoeopathy University,
Jaipur, Rajasthan, India.

ABSTRACT

Introduction: Allergic contact dermatitis (ACD) is an inflammatory reaction due to exposure to topical medicaments such as corticosteroids, antibiotics, antimycotics disinfectants, local anaesthetics or NSAIDs and characterized by pruritus, erythema, swelling, vesicles and scaling of the skin. A case treated with homoeopathy is presented. **Case Summary:** A 35-year female presented with the complaint of macular eruption with redness, burning, itching on face since 4 years, complaints get aggravated in sun and heat. She was using OTC ointments regularly so no lesions were found on examination. After detailed case taking the patient was advised to stop ointment for 1 week and she was kept on placebo to observe the complete symptoms as per Hahnemannian guidelines (§ 91). She was advised to use only coconut oil as local application. On 17.8.2023 the case was retaken. The particular symptoms became more apparent. Homoeopathic medicine *Sulphur 30 CH* potency was given on the basis of keynote, which showed a positive role in the treatment. Causal attribution of changes in her condition to the homoeopathic

treatment depicted “+9” by Modified Naranjo Criteria for Homoeopathy (MONARCH) and treatment response assessed by Dermatology Life Quality Index (DLQI) in which pre score was “14”, during was “6” and after was “0”.

KEYWORDS: Homoeopathy, ACD, Topical Medicament, *Sulphur*, MONARCH, DLQI.

ABBREVIATIONS: ACD- Allergic Contact Dermatitis, MONARCH - Modified Naranjo Criteria for Homoeopathy, DLQI- Dermatology Life Quality Index, OTC – Over the counter, NSAIDs – Non steroidal anti-inflammatory drugs.

INTRODUCTION

Allergic Contact Dermatitis (ACD) is an inflammatory reaction due to exposure with exogenous allergen and responds by delayed type hypersensitivity^[1] and characterized by pruritus, erythema, vesicles and scaling of the skin.^[2] In ACD, a reaction only occurs when a person's immune system is sensitised to the allergen. When exposed to an allergen, a rash typically appears more than 12 hours later and peaks 48 hours later. Symptoms include redness, swelling, intense itching and hive-like breakouts.^[3]

Medication including topical drugs is loosely regulated and can easily be purchased over the counter in India. Most patients still prefer to buy drugs directly from a pharmacy over obtaining prescription from a doctor. Owing to the self-medication habit of the population, a variety of “one cream treats all” formulations are available containing corticosteroid, antibiotics and/or antifungal agents, antivirals, antimycotics, topical NSAIDs and topical anaesthetics. The exposure to such medicaments may induce contact sensitization.^[1]

Epidemiology

Previous studies showed that the prevalence of ACD to topical medicaments varied from 14% to 40% of patients.^[4] Certain groups are at higher risk of developing ACD, which seems to be a result of both genetic tendencies and environmental exposures.^[2] The disorder is more common in women than in men. In the elderly, the condition often correlates with topical medications.^[5]

Pathophysiology^[6]

ACD develops due to involvement of immunological pathway, being a type IV (delayed hypersensitivity) reaction to exogenous contact antigen. Therefore, it develops only in a small proportion of patients exposed to the antigen. It does not develop on the first exposure (unless

there is cross reaction with a closely related chemical) because the patient's immunological pathway has not been sensitized. Sensitization occurs when antigen is presented to the skin, it is processed by antigen presenting cells (Langerhans cells). This processed antigen then interacts with sensitized lymphocytes which are stimulated to multiply and to secrete cytokines which results in skin injury.

Clinical features^[6]

1. Acute ACD

- Progresses from erythema to edema to papulovesiculation.
- However, in some area like eyelids and genitalia, it may manifest as edema.

2. Chronic ACD

- Manifests as itchy lichenified plaques.

Investigation^[6]

- In-depth questioning to evaluate domestic, occupational, and recreational contact.
- Distribution of the skin lesions often gives a clue to (nature of) allergen.
- Patch testing: Patch testing confirms cause of allergic dermatitis.

Differential diagnosis^[6]

- Allergic Contact Dermatitis Due to Topical Medicament
- Topical Steroid Withdrawal Syndrome.
- Rosacea
- Seborrheic dermatitis

CASE REPORT

This report presents a case of 35 year old female patient treated at Dr. M.P.K. Homoeopathic Medical College, Hospital and Research Centre, Homoeopathy University presenting to OPD. She presented in OPD on 10.8.2023 with complaints of macular eruption with redness, burning, itching on face since 4 years. Her complaints get aggravated in sun and heat. She also had headache especially on forehead, vertex region which gets aggravated from strong odour since 15 years.

History of presenting illness- 5 years back patient was apparently well when she developed melasma for which she herself applied OTC ointment for few months. After applying ointment itching, burning and redness with dryness started. Then she applied another

ointment for itching, burning and redness with dryness for 4 years. Now whenever she stops using that ointment her complaints return.

Personal history

Patient is vegetarian.

Gynaecological and Obstetrical history

- Menarche(age): 14 years of age
- LMP: 24/07/23
- Menstrual cycle: 2 days/ 40-60 days since menarche. scanty, black clots, dark red, 1 pad of regular size in 24 hr.
- Discharge per vagina: Scanty, thin watery approx. daily
- GPAL: G₂ P₂ A₀ L₂
- Mode of Delivery: Full term normal delivery

Sexual history- Libido decreased, she felt angry during coition and frequency was once in 2-3 days.

Generals

The patient had anger issue with irritability. The appetite was good with craving of buttermilk and salt; thirstless with clean moist tongue; tendency of profuse sweating which stains the clothes yellow; had constipation with hard stool with straining. She was susceptible to hot and her thermal reaction was hot.

Laboratory findings

- CBC - Hb: 11.2 mg/dl
- ESR - 15 mm/hr

Diagnosis

Allergic Contact Dermatitis Due To Topical Medicament [ICD 11 Criteria-EK00.C].

She was using OTC ointments regularly so no lesions were found on examination. After detailed case taking the patient was advised to stop using ointment for 1 week and she was kept on placebo to observe the complete symptoms as per Hahnemannian guidelines i.e. aphorism 91.^[7] She was advised to use coconut oil only as local application. On 17.8.2023 the case was retaken. The particular symptoms became more apparent.

On 17.8.2023, Complete details of case were recorded, analysed and evaluated for medicine selection.

Case processing

Analysis and Evaluation of symptoms was done using Kentian approach (Table 1)

Table 1: Analysis & Evaluation of the case.		
Mental generals	Physical generals	Particular generals
<ul style="list-style-type: none"> Anger with irritability¹⁺ 	<ul style="list-style-type: none"> THERMAL: HOT, Feels sometimes hot flushes.³⁺ Craving: Buttermilk, salt³⁺ Thirst: desire chilled water; thirstless (does not feel thirst)²⁺ Stool: unsatisfactory, tight, hard has to strain.¹⁺ Perspiration: profuse, yellow stains¹⁺ Menstrual history: scanty, black clots, dark red²⁺ Dreams: mostly happy dreams, remembers dreams, dream comes almost daily.¹⁺ 	<ul style="list-style-type: none"> Macular eruption with redness, burning, itching on face. Itching followed by redness. < sun, heat.³⁺ Headache especially on forehead, vertex region. < strong smell.²⁺

Repertorisation: Repertorial totality was formed and repertorisation was done using synthesis repertory on RADAR software. (Fig. 1)

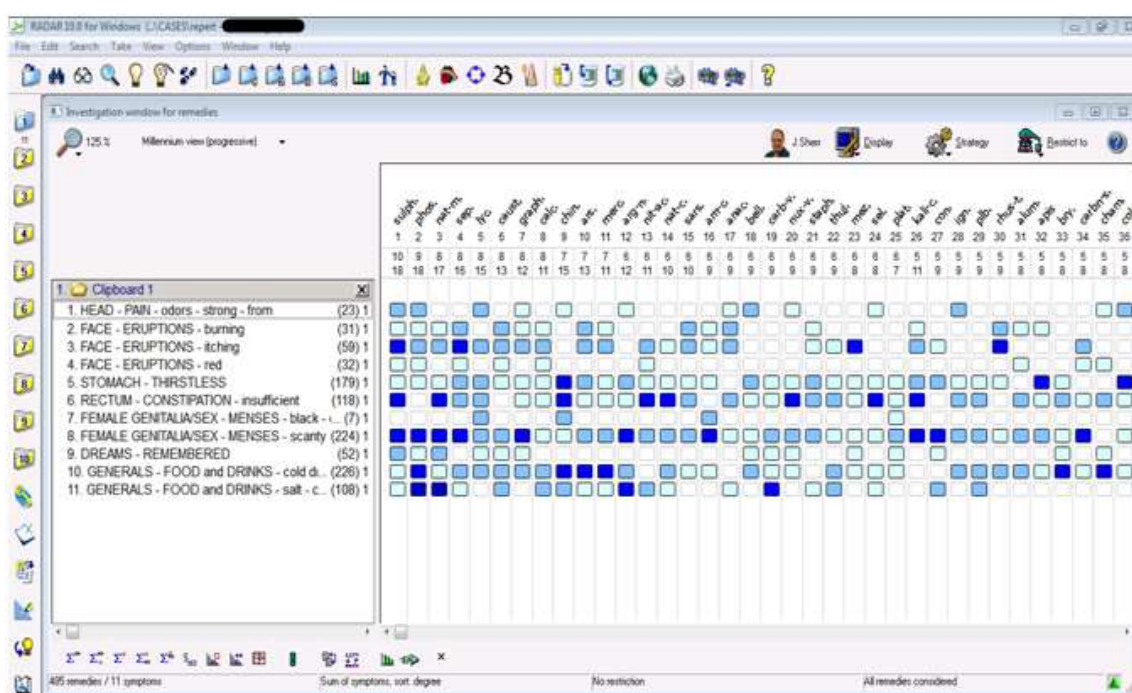


Fig. 1: Repertorisation chart of the case.

Medicine selection: On the basis of repertorisation and after due consultation with materia medica *Sulphur* was selected on basis of following symptom:

(AILMENTS FROM –Prolong application of ointment which is cause)

Keynote

- Allens keynote^[8]: *SULPHUR*: Skin affections that have been treated by medicated soap and washes.
- Boericke's MM^[9]: *SULPHUR*: Skin affections after local medication.

Potency selection: Patient had history of prolonged use of local ointments so 30 CH potency was selected.

Prescription (17.8.2023)

On second visit on 17.8.2023 *Sulphur* 30 1 dose, 2 globules of size 40 to be taken on empty stomach in early morning followed by placebo for 7 days. Baseline DLQI was 14.

General management

- Avoidance of ointment, cream, moisturizer, soap, face wash.
- Apply coconut oil, if needed for itching and dryness

Follow-UPS

The detailed follow-up is mentioned in table 2

Table 2: Follow up of case.		
Date	Symptoms	Prescription
24/08/23	Redness on face- better, Itching and Burning on face-SQ Headache < strong odour- SQ DLQI-14	<i>SULPHUR 30/ 2 DOSES /EMES/ every week</i> <i>PHYTUM 30/TDS for 15 days</i>
9/09/23	Burning on face - better; Itching on face - slight better; Redness on face - slight better. Headache < strong odour- SQ DLQI-6	<i>SULPHUR 30/1DOSE/ EMES</i> <i>PHYTUM 30/TDS for 7 days</i>
19/09/23	Redness, itching, burning on face - better, but < in sun, heat, perspiration. Headache < strong odour- SQ DLQI-6	<i>SULPHUR 30/1 DOSES /EMES</i> <i>PHYTUM 30/TDS for 15 days</i>
7/10/23	Redness, itching, burning on face - better ++ Headache < strong odour- better DLQI-4	<i>SULPHUR 30/1 DOSE/ (SOS)*</i> <i>PHYTUM 30/TDS for 15 days</i>
23/10/23	Redness, itching, burning on face - better	<i>PHYTUM 30/TDS for 15 days</i>

	+++ Headache < strong odour- better SOS not taken DLQI-0	
9/11/23	No complain of redness, itching, burning on face and Headache < strong odour- better SOS not taken DLQI-0	<i>PHYTUM 30/TDS for 21 days</i>
14/12/23	No complain of redness, itching, burning on face and Headache < strong odour- better DLQI-0	<i>PHYTUM 30/TDS for 30 days</i>
No Medicine Was Prescribed Till 21/05/24		
21/05/24	Again burning, itching and redness on face relapsed for 7-8 days < night, sun, perspiration DLQI-4	<i>SULPHUR 200/ 1DOSE/ EMES PHYTUM 30/TDS for 15 days</i>
6/06/24	No itching and burning on face. Better in redness on face DLQI-0	<i>PHYTUM 30/TDS for 7 days</i>
13/06/24	No itching, burning and redness on face DLQI-0	<i>PHYTUM 30/TDS for 21 days</i>
*Since the patient travelled from distance, once the patient started showing significant relief, she was provided with one dose of <i>Sulphur 30</i> to be taken if needed after telephonic consultation only. However, the patient did not need it.		

Outcome assessment

The clinical improvement and outcome of signs and symptoms were assessed by DLQI [10] scores of the case at baseline and every follow-up visit. (Table 3)

DLQI score pre-treatment was 14 which reduced to 0 by October 2023. Patient was asymptomatic and no medicine was needed between Decmeber 2023 and may 2024. Patient experienced slight return of symptom in may 2024 resulting in DLQI score of 4 which was adequately managed by homoeopathic medicine and the score declined to 0 within 2 weeks.

Table 3: Assessment of treatment by DLQI before during and after treatment.

S. No.	Questions	Pre 17/08/23	Mid 9/09/23	Post 14/12/23	Post 21/05/24	Post 13/06/24
1	Over the last week, how itchy, sore, painful or stinging has your skin been?	3	2	0	2	0
2	Over the last week, how embarrassed or self conscious have you been because of your skin?	2	1	0	2	0
3	Over the last week, how much has your skin interfered	2	1	0	0	0

	with you going shopping or looking after your home or garden ?					
4	Over the last week, how much has your skin influenced the clothes you wear?	1	0	0	0	0
5	Over the last week, how much has your skin affected any social or leisure activities?	3	2	0	0	0
6	Over the last week, how much has your skin made it difficult for you to do any sport ?	Not relevant	Not relevant	Not relevant	Not relevant	Not relevant
7	Over the last week, has your skin prevented you from working or studying ? If "No", over the last week how much has your skin been a problem at work or studying ?	Yes 2	No 0	No 0	No 0	No 0
8	Over the last week, how much has your skin created problems with your partner or any of your close friends or relatives ?	1	0	0	0	0
9	Over the last week, how much has your skin caused any sexual difficulties ?	0	0	0	0	0
10	Over the last week, how much of a problem has the treatment for your skin been, for example by making your home messy, or by taking up time?	0	0	0	0	0
Total -		14	6	0	4	0

Scoring instructions:

Very much = 3

A lot = 2

A little = 1

Not at all = 0

Not relevant = 0

The DLQI is calculated by adding the score of each question, resulting in a maximum of 30 and a minimum of 0. The higher the score, the more quality of life is impaired. A score higher than 10 indicates that the patient's life is being severely affected by their skin disease.

The score can be expressed as a percentage of the maximum possible score of 30, but we don't recommend this, because the original score is much easier to understand.

Objective evidence was maintained by photographs. (Fig.2)



Modified Naranjo criteria score^[11] was used for assessing causal relationship of homeopathic medicine to treatment response in this case. The MONARCH^[11] score of the patient was “+8,” which shows there is a possible causal relationship between the result observed and the prescribed medication. [Table 4]

Table 4: Assessment after 4 months of treatment by Modified Naranjo criteria for homoeopathy.

Domains	Yes	No	Not sure or N/A
1. Was there an improvement in the main symptom or condition for which the homeopathic medicine was prescribed?	+2		
2. Did the clinical improvement occur within a plausible timeframe relative to the drug intake?	+1		
3. Was there an initial aggravation of symptoms?		0	
4. Did the effect encompass more than the main symptom or condition (i.e., were other symptoms ultimately improved or changed)?	+1		
5. Did overall well-being improve? (suggest using validated scale)	+1		
6. A <i>Direction of cure</i> : did some symptoms improve in the opposite order of the development of symptoms of the disease?		0	
7. B <i>Direction of cure</i> : did at least two of the following aspects apply to the order of improvement of symptoms: ✓ from organs of more importance to those of less importance? ✓ from deeper to more superficial aspects of the individual? ✓ from the top downwards?			0
8. Did “old symptoms” (defined as non-seasonal and non-cyclical symptoms that were previously thought to have resolved) reappear temporarily during the course of improvement?	+1	0	
9. Are there alternate causes (other than the medicine) that—with a high probability—could have caused the improvement? (Consider known course of disease, other forms of treatment, and other clinically relevant interventions)		+1	
10. Was the health improvement confirmed by any objective evidence? (e.g., laboratory test, clinical observation, etc.)	+2		
11. Did repeat dosing, if conducted, create similar clinical improvement?	+1		
Total	+9		
Note: Maximum score = 13, minimum score = -6.			

Intervention Adherence and Tolerability

The patient was advised to report every 7 to 15 days and communication was also made by phone call, to check the intervention's tolerability and adherence.

Adverse or unanticipated events

Patient had aggravation of symptoms in first week due to stoppage of ointments. No unanticipated event in the form of aggravation or worsening of symptoms was reported by the patient throughout treatment, i.e., 'adverse event.'

Homeopathic aggravation^[7]

There was no increase in the intensity of present complaints throughout treatment, i.e., "homeopathic aggravations".

DISCUSSION

According to **Organon § 91 Fifth Edition^[7]** The symptoms and sensations a patient experiences while on a previous medication do not accurately reflect the disease itself. Instead, the symptoms and problems that occurred before the medication was taken or several days after stopping it provide a clearer understanding of the disease's original form. These are the symptoms that the physician should focus on. In cases where the disease is chronic and the patient has been on medication until the consultation, it may be helpful for the physician to allow the patient a few days without medication. During this time, they might give something non-medicinal and wait until later to examine the symptoms in more detail. This strategy enables the physician to observe the enduring and unchanged symptoms of the initial condition and develop a reliable picture of the disease. In this case with patients consent the patient was kept without medicine for 1 week and was advised to minimize use of local application. She was also advised to contact in case of any troublesome aggravation. With patients cooperation, after one week complete case taking medicine was selected.

Previous case reports show potential benefit effect of homoeopathic medicines in cases of contact dermatitis. In a case report by Choudhary et.al (2022) on irritant contact dermatitis treated prescribed on basis of constitutional homoeopathic medicine, i.e. *Sepia* the dose and the potency were modified as per the patient's requirements.^[12] Another case report by Dr. Ajay Vishwakarma (2022) on atopic dermatitis on basis of individualized homoeopathic treatment, i.e., *Sulphur 200/1 dose* with gradual and steady recovery.^[13]

It is also seen in previous studies and case reports^[14,15,16] that *Sulphur* acts brilliantly in cases of skin disorders such as eczema, psoriasis, leprosy, contact dermatitis etc. In a case study by Chakraborty D et.al (January 2015) on *Sulphur* with the Multidrug therapy in the treatment of paucibacillary leprosy found benefecial effect of sulphur.^[14] In a case report by Maiti (2023)

on Eczema treated with *Sulphur* and the potency were modified as per the patient's requirements.^[15] Another case report by Shukla and Bansal. (2023) on Plantar psoriasis treated with *Sulphur 30/ 2 Doses* at a 1-month interval, followed by *Sulphur 200/1 Dose* at a 4-month interval. Notably, there was no relapse for over 2 years, indicating that the benefits of the therapy persisted long after the treatment concluded.^[16]

Sulphur for drug diseases

“As mentioned on text of materia medica; sulphur is the greatest general psoric remedy for almost every kind of itch, sore, ulcer etc, troubles of very long standing resulting from suppressed eruptions”.^[17] “Skin affections that have been treated by medicated soap and washes”.^[8] “Skin affections after local medication”.^[9]

CONCLUSION

This case reports shows beneficial effect of homoeopathy when prescribed on basis of symptom similarity.

Consent

The written consent of the patient was obtained.

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