

Homoeopathic Management Of Irritant Contact Dermatitis – Case Report

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Abstract:

Skin being the most exterior part of the body, is one of the important sense organs and come with it a great deal of aesthetic /cosmetic problems. Asian type of skin is more prone to present with post-inflammatory hyperpigmentation, melasma, lentigines and freckles. The main skin diseases reported are acne, atopic dermatitis and viral infections.

Among the hypersensitivity diseases, dermatitis as a subgroup stands first with a rate of 24.50% of the total. Among the dermatitis group, contact dermatitis (17.54% of the total) is the most commonly reported skin disease.

Key words: Homoeopathy, Irritant Contact Dermatitis, Case Reports.

INTRODUCTION:

Contact dermatitis is an inflammatory eczematous skin disease. It is caused by chemicals or metal ions that exert toxic effects without inducing a T-cell response (contact irritants) or by small reactive chemicals that modify proteins and induce innate and adaptive immune responses (contact allergens).

Contact dermatitis is divided into irritant contact dermatitis and allergic contact dermatitis. Irritant contact dermatitis is a nonspecific response of the skin to direct chemical damage that releases mediators of inflammation predominantly from epidermal cells while allergic contact dermatitis is a delayed (type 4) hypersensitivity reaction to exogenous contact antigens.

ETIOLOGY:

Irritant contact dermatitis:

Chemical or physical agents and micro trauma may produce skin irritation thus causing Irritant contact dermatitis. Physical irritants like friction, abrasions, occlusion, and detergents like sodium lauryl sulfate produce more irritant contact dermatitis in combination than alone.

Allergic contact dermatitis:

Common etiological allergens for allergic contact dermatitis are nickel, balsam of Peru, chromium, neomycin, formaldehyde, thiomersal, fragrance mix, cobalt, and parthenium. Poison Ivy (Toxicodendron, formerly known as Rhus).

EPIDEMIOLOGY:

Females, infants, elderly, and individuals with atopic tendencies are more susceptible to irritant contact dermatitis. Risk factors for allergic contact dermatitis include age, occupation, and history of atopic dermatitis. Overall contact dermatitis is most common in people with red hair and

fair skin. Women are more likely to develop contact dermatitis because of the use of jewellery and fragrances.

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PATHOPHYSIOLOGY:

Irritant contact dermatitis:

It is due to inflammation from the release of pro inflammatory cytokines from keratinocytes, usually in response to chemical stimuli which leads to skin barrier disruption, epidermal cellular changes, and cytokine release.

Irritants can be classified as :

- cumulatively toxic (e.g., hand soap causing irritant dermatitis in a hospital employee).
- subtoxic
- degenerative
- toxic (e.g., hydrofluoric acid exposure at a chemical plant).

Allergic contact dermatitis:

Repeated skin exposure to allergens in a sensitized individual causes T cell mediated inflammatory changes. Allergic contact dermatitis has two phases:

- The sensitization phase in which antigen-specific effector T cells are induced in the draining lymph nodes by antigen-captured cutaneous dendritic cells that migrate from the skin.
- The elicitation phase includes effector T cells that are activated in the skin by antigen captured cutaneous dendritic cells and produce various chemical mediators, which create antigen-specific inflammation.

Both irritant contact dermatitis and allergic contact dermatitis can present with three morphological patterns.

- Acute phase: erythema, oedema, oozing, crusting, tenderness, vesicles or pustules
- Subacute phase: crusts, scales, and hyperpigmentation
- Chronic phase: Lichenification.

CASE 1: PRELIMINARY DATA:

Patient name: Mrs. ABC

Age: 38yrs

Sex: Female Religion: Hindu Occupation:

Teacher Marital status: married

Residence: Vijayanagar

Date of case taking: (01/11/2019)

Presenting complaints:

Presented with the complaints of itching, burning sensation and blackish discoloration on dorsum of feet bilaterally since 3 months.

LOCATION	SENSATION	MODALITY	CONCOMITANT
Integumentary system Skin Bilateral dorsum of feet since 3 months Gradual onset and gradual progression	Itching Burning sensation Blackish discoloration	Ailments leather contact (chappal) Aggravated at night Ameliorated by hot application	

(Table No.1)

HISTORY OF PRESENTING COMPLAINTS:

Patient was apparently well 3 months ago, gradually developed itching on the dorsum of feet bilaterally which was after contact with leather (chappal), developed redness and rashes on the area in contact with skin surface and also had itching and burning sensation for which patient consulted dermatologist and was prescribed external application (steroid) following which redness and rashes was better but the discoloration remained thereafter along with itching and burning sensation. Itching worse at night and better by hot water application.

PAST-HISTORY:

Medical history - Allopathic medication for the presenting complaint. Allergic history – Not allergic to drug, dust and diet.

FAMILY HISTORY:

Father - diabetic and hypertensive

Mother – bronchial asthma

Elder sister – urticaria

PERSONAL HISTORY:

Diet: veg/non-veg

Appetite: Increased
Hunger: Tolerable
Thirst: Thirsty, 3 l/day
Desires: sweets
Aversion: nil
Bowel habit: Regular, 1t/day, no difficulty. Diarrhoea when anxious
Urine: 4-5t/day, no difficulty.
Perspiration: Generalised
Sleep: Good. Refreshing
Dreams: Un remembered
Thermals: Ambithermal
Menstrual history:
LMP-19/10/2023
Cycles-Regular Duration – 5 days
Associated complaints – Nil

OBSTRETICAL HISTORY:
G2P2A0L2D0G1P1-FTNHDG2P2-FTNHD

LIFE SPACE INVESTIGATION:

Patient hails from lower middle socio-economic status. Father's occupation is carpenter, mother worked as a house maid. Has 3 siblings, 1 elder sister and 2 younger brothers. Completed her degree and now working as a teacher. At academics she was an average student. Is extroverted. Had many friends. Childhood was uneventful. Got married at the age of 23, no strained relationships. Like things to be tidy, in place. Adulthood also uneventful. As a person, she is Anxious about health (enquired many questions related to the condition) Fastidious Fear of being alone, of darkness.

GENERAL PHYSICAL EXAMINATION:

Well oriented with time, place and person. Moderately built and nourished. No pallor, cyanosis, icterus, oedema and lymphadenopathy.

Vitals:

Temperature: afebrile at the time of examination
BP: 110/70 mm hg
PULSE: 72 beats/min

SYSTEMIC EXAMINATION:

Respiratory system:

Normal vesicular breath sounds heard
No added sounds

Cardiovascular system:

S1 S2 heard.
No murmur

Skin:

Blackish discoloration present on the dorsum of feet bilaterally.
No redness, no bleeding, no discharge.

Blood investigation:

CBC- normal study FBS-
98mg/dlPPBS-109mg/dl

CLINICAL DIAGNOSIS:

Irritant contact dermatitis ANALYSIS OF CASE :

Common symptoms Itching Burning	Uncommon symptoms Itching aggravated at night Itching ameliorated by hot application
Blackish discoloration of skin	Appetite increased Thirst increased Diarrhoea on becoming anxious Fastidious Anxious about health Fear of being alone

(Table No.2)

EVALUATION OF SYMPTOMS:

Mental generals •Fastidious •Fastidious •Anxious about health •Fear of being alone	Physical generals • Appetite diminished • Thirst increased • Thermal-chilly pt	Characteristic particulars • Itching of skin <night • >hot application
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(Table No.3)

TOTALITY OF SYMPTOMS:

Anxiety about health
 Fastidious
 Fear to be alone
 Appetite increased
 Thirst increased
 Thermal-chilly
 Itching aggravated at night
 Amelioration by hot application
 Burning sensation
 Blackish discoloration of skin

REPERTORIAL APPROACH:

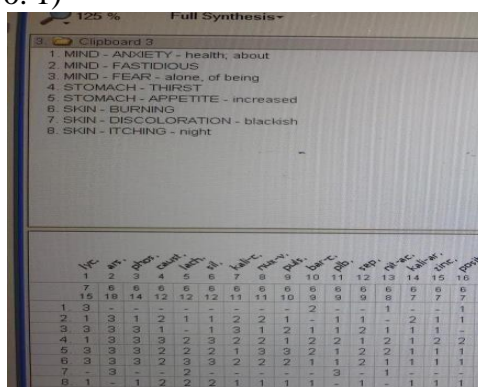
Kent's repertory

REPERTORIAL TOTALITY:

Mind, anxious health about
 Mind, fastidious Mind, fear

(apprehension, dread), alone of being
 Stomach, Thirst
 Stomach, Appetite, increased
 Skin, burning Skin, discoloration, blackish
 Skin, itching, night

REPERTORY SHEET: (Image No. 1)



REPERTORIAL PROPER:

Lycopodium 15/7 Arsenicum album 18/6 Phosphorus 14/6 Causticum
 12/6 Lachesis 12/6 Silicea 12/6

PRESCRIPTION:

Ars alb 200 / OD x 3 days (10/01/2020) Followed by Sac Lac (6-0-6) / 2 weeks

FOLLOW UP: (Table No.4)

<u>DATE</u>	<u>SYMPTOMS</u>	<u>PRESCRIPTION</u>
26/01/2020	Complaints of itching and burning of skin persists Blackish discoloration present	Sac Lac (6-0-6) / 2 weeks
11/02/2020	C/o of itching and burning increased Blackish discoloration persists	Ars alb 200 / OD x 3 days Sac Lac (6-0-6) / 4 weeks
09/03/2020	C/o itching and burning of skin better by 40% Blackish discoloration better	Sac Lac (6-0-6) / 4 weeks
13/04/2020	C/o itching and burning of skin better by 90% No Blackish discoloration, patient felt better	Sac Lac (6-0-6) / 2 weeks

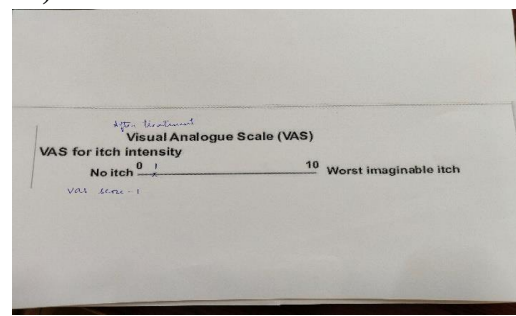
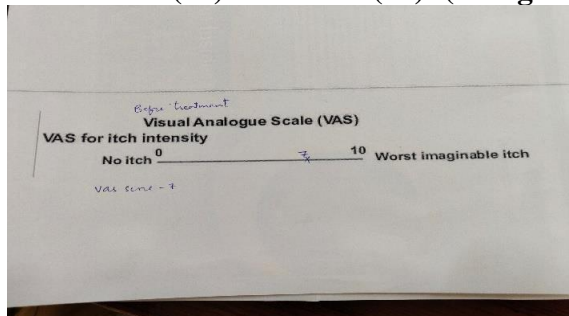


Before treatment (10/01/2020)



After treatment (13/04/2020)
 (Image No. 2)

VAS Score before (07) and After (01): (Image No.3)



	Modified Naranjo Criteria	Yes	No	Notsu re	Case
1.	Was there an improvement in the main symptom or condition for which the homoeopathic medicine was prescribed?	+2	-1	0	+2
2.	Did the clinical improvement occur within a plausible timeframe relative to the drug intake?	+1	-1	0	+1
3.	Was there an initial aggravation of symptoms?	0	0	0	0
4.	Did the effect encompass more than the main symptom or condition (i.e., were other symptoms ultimately improved or changed)?	+1	0	0	0
5.	Did overall well-being improve?(suggest using validated scale)	+1	0	0	+1

6.	Direction of cure: did some symptoms improve in the opposite order of the development of symptoms of the disease?	0	0	0	0
		+1	0	0	
	Direction of cure: 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 the Top downward.				+1
7.	Did old symptoms (defined as non seasonal and non-cyclical that were previously thought to have resolved) reappear temporarily during the course of improvements?	+1	0	0	0
8.	Are there alternate causes (other than the medicine) that—with a high probability—could have caused the improvement? (Consider the known course of the disease, other forms of treatment, and other clinically relevant interventions).	-3	+1	0	0
9.	Was the health improvement confirmed by any objective evidence? (e.g., lab test, clinical observation, etc.)	+2	0	0	+2
10.	Did repeat dosing, if conducted, create similar clinical improvement?	+1	0	0	0
	Total score (Maximum score = +13; Minimum score = -3)				+7

TableNo.5 - Assessment of Modified Naranjo Criteria Score

CASE 2:

A female patient named Mrs. XYZ, aged 45 years, House wife residing in the outskirts Bengaluru presented with the complaints of persistent rash on her hands, which is causing itching, redness, and discomfort.

Patient was apparently healthy doing her house hold works, she regularly handles various cleaning agents and detergents and pesticides in her house and farms. She primarily noticed the rash after using a new pesticides solution in her farm two weeks ago. Initially, the rash was mild, but it has since spread and become increasingly bothersome. She has tried using over-the-counter hydrocortisone cream, but it provided only temporary relief.

Past history:

She has tried using over-the-counter hydrocortisone cream, but it provided only

temporary relief.No history of any other systemic illness.

Family history:

Father- died of old age

Mother- living healthy

Brother- 2 brothers Apparently
healthy

Personal history:

Diet- Mixed Appetite- Reduced
Thirst- Thirstless (1L/day)
Desire- Nothing specific
Aversion- Nothing specific
Bladder habits- 4-5 times/ day; 1time/ night
Bowel habits- Regular, Satisfactory.
Sleep- Refreshing
Dreams- Falling from height
Perspiration- Generalized, No odour, no staining
Thermals- Hot

Life Space Investigation:

Patient belongs to low socioeconomic status. She was the eldest child of the family; she had 2 brothers working as a farmer. Her father died because of old age and her mother living healthy. She studied till 7th standard. She was hardworking and wants to do everything fast and perfect. She got married when she was too young. As her husband is also a farmer, she used to go with him and work in her own farm. She always wants to be occupied by some work, also wants to be with people and cannot stay alone. She usually maintains the house very neatly; she is religious and have her own principles and belief. If other family members don't follow her beliefs, she gets very angry and shouts at them. But, later on will feel bad about that. Always thinks regarding health of family members and pray for them. Recently she had a financial loss, was difficult to even arrange a day's meal. All these miseries made her cry most of the time and think of ending her life. She attributes her symptoms to be developed after the use of new pesticide solution in her farm which gradually led to severe itching and dryness of hands.

General Physical examination:

No signs of pallor, cyanosis, clubbing, icterus, lymphadenopathy, oedema.
Nails- Pink. Height-5 feet 7 inch.
Weight -60kg.
Tongue-Clean, moist.
Skin- Red, cracks on both hands with discharge of pus Hair- Hair was dry and rough in texture.

Vital signs:

Temperature- Afebrile at the time of examination.
Pulse- 72 beats /min.
Respiratory rate- 18 cycles/ min.
Blood pressure- 122/80 mm Hg.

Systemic examination:

Respiratory system- NVBS audible, no

added sounds Cardiovascular system- S1, S2
heard, no murmur
GIT- Bowel sounds heard, per abdomen soft and tender

Local examination of skin:

Blisters+++Redness+ Itching+++
Sticky discharge + Occasional bleeding +

Evaluation of the case:

MENTAL GENERALS	PHYSICAL GENE RALS	CHARACTERI STIC PARTICULA RS
Suicidal thoughts Weeping Angered easily Reproaching oneself	Appetite reduced Thirstless Hot	Severe itching of skin Discharge sticky+ Bleeding occasionally > warm application

Table 6 - Evaluation of
the case

With the help of “The Chronic disease by Dr Samuel Hahnemann” miasmatic evaluation for the presenting symptoms was done, which showed the predominance of Psoro-Syphilitic miasm. Considering the above symptomatology.

Repertorial totality:

1. Mind: Suicidal disposition
2. Mind: Weeping, tearful mood etc, Alone, when
3. Sleep: Dreams: Falling: From high places:
4. Skin: Cracks: Deep, bloody:
5. Skin: Eruption: Discharge: Glutinous
6. Skin: Itching: Voluptuous:
7. Skin: Itching: Ameliorated from: Warmth
8. Skin: Swelling: Crawling:

Repertorial sheet:

Image4- Repertorial sheet

Repertorial analysis:

1. Sulphur: 11/6
2. Mercurius Solubilis – 9/5
3. Pulsatilla 6/4
4. Sepia – 6/4
5. Petroleum – 5/2

Prescription:RX: -

Sulphur 1M × 1 dose (early morning empty stomach on 20.01.2020) Followed by Sac Lac (5-0-5) x 1 month

Auxiliary management:

- Avoiding Direct contact of pesticides and detergent
- Maintain hygiene
- Applying coconut oil

Before treatment (20.01.2020)



Image 5 - Before

treatment

Follow up: 1 (After treatment) Date: 22. 02. 2020

C/o Itching was better up to 40%, Blisters were slightly reduced, Pus discharge was reduced, appetite improved, sleep sound

Prescription:

Rx Sac Lac (5-0-5) x 1 month



Image 6 – 1st follow up

Follow up: 2 (After treatment)

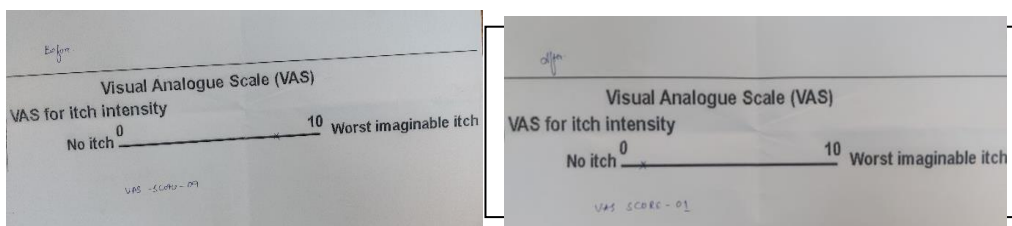
Date: 25. 03. 2020

C/o itching was better up to 90%, cracks were also reduced up to 90%, no blisters, no discharges, appetite adequate, sleep refreshing.



Image 7 – 2nd follow up

VAS Score before (09) and After (01): (Image 8)



					Case
	Modified Naranjo Criteria	Yes	No	Not sure	
1.	Was there an improvement in the main symptom or condition for which the homoeopathic medicine was prescribed?	+2	-1	0	+2
2.	Did the clinical improvement occur within a plausible timeframe relative to the drug intake?	+1	-1	0	+1
3.	Was there an initial aggravation of symptoms?	0	0	0	0
4.	Did the effect encompass more than the main symptom or condition (i.e., were other symptoms ultimately improved or changed)?	+1	0	0	+1

5.	Did overall well-being improve?(suggest using validated scale)	+1	0	0	+1
6.	Direction of cure: did some symptoms improve in the opposite order of the development of symptoms of the disease?	0	0	0	0
	Direction of cure: 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 downward.	+1	0	0	+1
7.	Did old symptoms (defined as non seasonal and non-cyclical that were previously thought to have resolved)reappear temporarily during the course of improvements?	+1	0	0	0
8.	Are there alternate causes (other than the medicine) that—with a high probability— could have caused the improvement? (Consider the known course of the disease, other forms of treatment, and other clinically relevant interventions).	-3	+1	0	+1
9.	Was the health improvement confirmed by any objective evidence? (e.g., lab test, clinical observation, etc.)	+2	0	0	+2
10.	Did repeat dosing, if conducted, create similar clinical improvement?	+1	0	0	0
	Total score (Maximum score= +13;Minimum score = -3)				+9

Table 7 - Assessment of Modified Naranjo Criteria Score

DISCUSSION:

Homoeopathy is a holistic system of medicine and here the treatment plan is based on individualization through the detailed case taking. It is essential to elucidate the constitutional makeup of the subject to select the single remedy with the help of totality of symptoms. This case report of irritant contact dermatitis treated with constitutional homoeopathic medicine is an attempt to show the efficacy of constitutional homoeopathic approach in the treatment of irritant contact dermatitis without requiring medicated external application. In this cases Arsenicum album 200 and Sulphur 1M chosen based on totality of symptoms has contributed to the overall improvement of the subject.

Improvement status was assessed with the help of visual analogue scale (VAS), VAS commonly used tool to measure the intensity of itch, it used in most of clinical trials as it featured with high reliability and validity. The left end point represents “no itch” and right end represents “worst imaginable itch”. Also, here the changes in the casual attribution were assessed using

Modified Naranjo Criteria (Table 5 & 7). Total score as per the criteria in this case No. 1 is (+7) and case No. 2 is (+9) which is relatively close to the total of +13 which signifies the positive causal attribution of individualized homeopathic remedy to the clinical outcome.

CONCLUSION:

This case study provides valid evidence of the successful treatment of irritant contact dermatitis with the help of constitutional homeopathic medicine based on an individuality of the subject. And it also signifies the importance of holistic approach of treatment in homeopathy. The single simple minimum dose of carefully selected constitutional homeopathic remedy plays an important role in the treatment to cure irritant contact dermatitis.

CONFLICT OF INTEREST: None

FINANCIAL SUPPORT: Not available

DECLARATION OF PATIENT CONSENT: Patient voluntarily gave consent for pictures as well as case details to be published as an article.

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