



Role of Natrum Muriaticum in the Management of Tinea Corporis – A Case Report

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ABSTRACT

Tinea corporis is superficial fungal skin infection but number of patients suffering from this severely itchy condition is unimaginable. Such chronic recurring dermatological condition has huge psychological and social impact on patient. Majority cases are in sexually active age group, hence impact of disease on sexual life and overall quality of life are profound. This article illustrates a case of Tinea corporis having chief complains of eruptions on extremities with excessive pruritis, successfully treated with single homoeopathic medicine. The case was repertorised using Synthesis repertory and Natrum Muriaticum 200 was prescribed on basis of symptom similarity followed by its repetition when few symptoms were left. Patient showed improvement evidenced by relief in itching and disappearance of all skin lesions completely without any relapses for a period of 6 months. The treatment outcome was assessed by comparing before-and-after-treatment photographs. Dermatology Life Quality Index (DLQI) score was used at every follow-up in order to find out the changes in the quality of life of the patient. The follow up analysis was done with help of MONARCH criteria. The case report has been prepared as per HOM-CASE guidelines. This case report shows usefulness of Natrum Muriaticum 200 in treatment of tinea corporis.

KEYWORDS: Tinea corporis, Homoeopathy, Natrum muraticum, Case report, Dermatophytes

INTRODUCTION

Tinea corporis is a superficial fungal skin infection caused by several different fungi known as dermatophytes and classified by location on the body. In various parts of country, recurrent and resistant dermatophytosis are increasing at an alarming rate due to use and abuse of topical steroid preparations, poor personal hygiene, irrational use of antifungal agents, etc. It mainly affects keratinized structures like skin hairs and even nails. These fungal infections are common in tropical and humid countries. ^[1] dermatophytes are the specialized fungi that cause variety of lesions of skin and its appendages. In Kashmir, the incidence of tinea is very high. ^[2] Dermatophytes infect skin, nails, or hair. Infections are transmitted indirectly through skin scales or shed hair. Fungi can be isolated from contaminated hairbrushes, clothing, carpets, or bed linen. ^[3] Trichophyton, Microsporon and Epidermophyton species are responsible for this group of dermatophyte infections. Trichophyton rubrum, T. Mentagrophytes and epidermophyton floccosum are the most common causes of dermatophyte infection in humans. Microsporon canis caught from dogs, cats or children causes tinea capitis in children and, uncommonly, other types of ringworm infection. Occasionally, quite inflammatory ringworm can be caught from cattle (T. Verrucosum) and horses (T. Equinum). ^[4]

Tinea corporis typically presents as a circumscribed mildly erythematous, scaly plaque with well-demarcated edges or vesicular. The patch spreads towards the periphery which is much inflamed and tend to be clear in the centre. Lesions expand slowly, often with some central clearing (ring-like). Scale is most marked on the outer edge of the ring. ^[4] Rarely, tinea corporis may present as erythroderma. The centre is clear to form a characteristic annular lesion. The lesion appears as a flat scaly spot, spreads centrifugally. The varying degree of pruritus is commonly associated with Tinea corporis. Anthropophilic fungal infections tend to be less inflamed than those caused by zoophilic fungi, which may have raised pustular borders. ^[4] The diagnosis is confirmed by microscopy of skin scrapings, hair or nail clippings treated with 20 per cent potassium hydroxide for 20 minutes and identification of fungal hyphae. Use of the cyanoacrylate 'skin surface biopsy technique' described above makes identification quite easy. Culture may be positive when direct microscopy is not, but it takes 2–3 weeks or longer before the culture is ready to read. ^[3] Tinea corporis is ringworm of the skin of the body or limbs. Pruritic, round or annular, red, scaling, well-margined patches are typical. It must be distinguished from patches of eczema or psoriasis by history and the presence of mycelium in the scales. Any of the species may cause this condition. When an animal species is responsible (e.g. T. Verrucosum), the affected skin is very inflamed and pustular and heals spontaneously after a few weeks. ^[3] Dermatophytes are the commonest cause of onychomycosis. Moulds and Candida species may infect nails, particularly in the elderly or immune-compromised or if other nail damage or peripheral vascular disease.

Dermatophyte infections are classified on basis of site of infection.

- Tinea corporis - body—typically occurs in ring-like patterns.
- Tinea cruris- groin—common, usually spares the scrotum. May be unilateral.
- Tinea pedis - foot (athlete's foot)—macerated scale between fourth and fifth toes or diffuse dry scale of the soles (moccasin-like).
- Tinea manuum - hand—usually one palm. Dry scale with little inflammation.
- Tinea unguium - nail.
- Tinea capitis - scalp—primarily seen in children. Fungus causes hair loss, unlike psoriasis or eczema. Inflammatory lesions are known as kerions.
- Tinea faciei -face—uncommon but may develop a kerion in the beard area. ^[4]

CLINICAL PRESENTATION

A 10-year-old male child presented to College OPD for first time on 09.07.2022 with chief complaints of dry reddish lesions on elbow and popliteal region of both legs & around the mouth since 2 years. Eruptions were also present on right side of face and neck. Severe itching was present throughout the day being unaffected by any atmospheric changes or lifestyle alterations. Itching aggravation in night and afternoon. Better after oil application. He was taking various oral tablets and was applying steroid ointments, but nothing seemed to work. His condition only found slight disappearance during allopathic treatment with reoccurrence after certain fixed duration after which the parents of the child decided to opt for homoeopathic treatment in order to find a permanent cure for his continuously increasing complaints. No family history was known for the same. Apart from this patient also complained of generalized weakness. Parents of the patient were concerned about recent skin changes and decided to seek medical attention.

Physical generals

Diet – Vegetarian

Desire - Patient had desire of salty things.

Aversion – N/S

Appetite – Good

Thirst – 1-2 lt/day of normal water

Thermal reaction –Hot patient, does not like to cover

Habit – For Chocolates

Perspiration - Perspiration is profuse, on face and calf muscles. Offensive

Sleep- Disturbed sleep due to itching.

Urine - D7N2

Stool - Satisfactory and once/day

Dreams- About daily routine

Medical history

Tinea corporis was treated with ointments and allopathic oral medications and patient had no relief after taking this treatment.

Family history

Mother- Healthy and alive

Father- Hypertension

Psychosocial history

On asking parents they revealed that, the patient generally has an irritable nature, and gets irritated very easily on trifle things, he is very close to his family and is attached to them. Quite secretive, does not like to share his emotions much. Less talkative. Is responsible towards his routine work. Keeps his things tidy and well arranged in proper order. His milestones were normal. He remains constantly under anxiety of performing well at all activities in school with intense fear of scolding and punishment. Due to eruptions on face and other exposed parts he feels great discomfort and embarrassment especially when it comes to socializing with his friends and family members. Sometimes he feels not going to school due to fear of being bullied for his appearance and skin condition. He is very emotional and sensitive and weeps on being scolded and feels neglected and hurt easily on slightest rude behavior.

Clinical findings

Physical examination

B.P: 120/80 mmHg

Pulse: 110 beats per minute

Respiratory rate: 18/min

Other findings: no lymphadenopathy seen.

On examination: dark red circular eruptions on extremities with excessive dryness.

Personal history

He had a history of jaundice at time of birth. Since childhood he was prone to recurrent upper respiratory tract infection and is allergic to dust and change of weather. In 2016 he was diagnosed with bronchial asthma for which he took allopathic medicines. After 3-4 years of taking allopathic treatment, his asthmatic symptoms disappeared. In 2020 he was diagnosed with tinea corporis for which he again took allopathic treatment and applied multiple ointments for 2 years, which however provided no relief.

Diagnostic assessment

The diagnosis of the case was done based on appearance of eruptions which were red, circular scaly, pruritic patches with central clearing and an active border. [Figure 2]

Therapeutic intervention

After referring to Materia Medica^[5] the most appropriate medicine was selected. Most of the symptoms of case matched with Natrum muriaticum and so medicine was prescribed in single dose in 200 potency followed by phytum 30 thrice daily for 1 month and repetition of same medicine was done as per response of the case.

Materials and methods

Synthesis Repertory was selected, and RADAR Software was used to repertories the case [Table 1].

Table 1: Rubrics selected for repertorisation

Repertory used

Synthesis Repertory

Rubrics selected

[Extremities] – Eruptions – Elbow – bend of
 [Extremities] – Eruptions – joints bend of
 [Extremities] – Eruptions – Leg – calf
 [Skin] – Eruptions – Herpetic – circinate
 [Perspiration] – Profuse
 [Generals] – Warm- agg.
 [Mind] – Irritability – children in
 [Mind] – Secretive
 [Generals] – Food & drinks – salt - desire

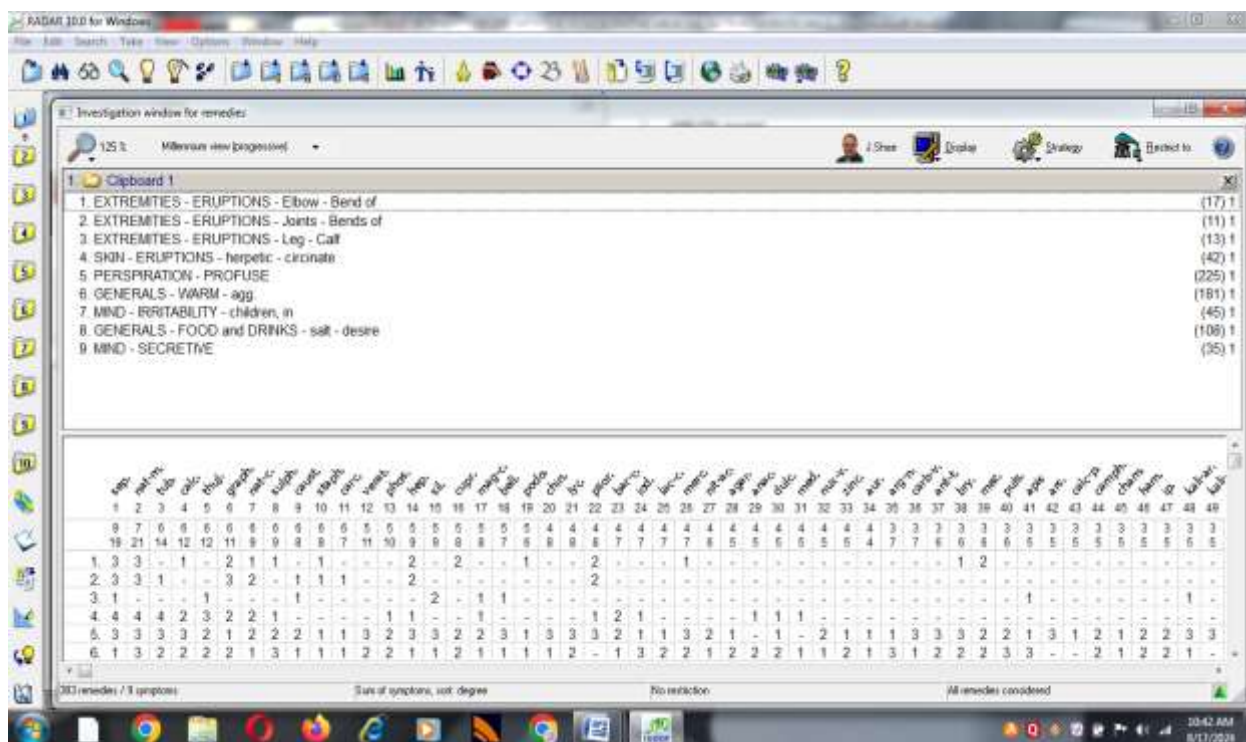


Figure 1: Repertorisation sheet showing rubrics taken for purpose of repertorisation along with list of probable medicines with grading. (Case analysis: Repertorial totality)

Discussion

Homoeopathy is a holistic system of therapeutics which focuses on individualization which is done through detailed case taking of the patient and selection of remedy is based on totality of symptoms. In This Case, Important Mental, Physical Generals and Particulars, were included for repertorisation purpose. [Table1]. After repertorisation, many medicines were competing with each other, namely, Calcarea Carb, Sepia, Natrum muriaticum, Tuberculinum, Thuja, Graphites, Sulphur etc. [Figure1] After Consultation with Materia Medica, Natrum muriaticum was prescribed which remained unchanged in the subsequent follow-ups as the patient was responding well to the medicine. [Table 2]. The follow-up analysis of the case under homoeopathic treatment was done by MONARCH criteria, the total score of which was +9, which shows the positive attribution towards the given treatment, Table 3. [9] The DLQI score was also seen to reduce from 25 to 2 within nine months.

Natrum muriaticum was found to be most specific for this case as most peculiar symptom observed in the patient was severe eruptions on bends of joints with reserved nature and desire for salty things which are also one of the important symptoms of Natrum muriaticum as found in the Materia Medica. The case reports published earlier have shown the effectiveness of individualised homoeopathy in the treatment of tinea corporis. [7,8]

Table 2: Progress and follow up			
Date	Progress and status	Prescription	DLQI Score
09.07.2022	Dry reddish lesions on elbow and popliteal region of both legs & around the mouth. Eruptions also present on right side of face and neck. Severe itching, Aggravation during night. Mentally irritable. Reference [Figure 2]	Natrum Muraticum 200 1 dose Phytum 30 TDS. For 30 Days	25
9.08.2022	Dry reddish lesions on elbow and popliteal region of both legs & around the mouth. Eruptions also present on right side of face and neck. Intensity of itching slightly reduced itching. Patient was feeling better mentally. No new complaints occurred.	Phytum 30 TDS. For 30Days	25
13.09.2022	Older lesions started disappearing but few new eruptions appeared at same location with slight itching	Natrum Muraticum 200 1 dose	21

		Phytum 30 TDS. For 30 Days	
18.10.2022	No itching was present. Eruptions reduced, but slight spots were still present. Only few were present on face	Phytum 30 TDS. For 30 Days	13
28.11.2022	No itching was present. Eruptions reduced but slight spots were still present. No new complains present.	Phytum 30 TDS. For 30 Days	13
9.01.2023	All eruptions disappeared Few spots left with occasional itching.	Phytum 30 TDS. For 30 Days	6
11.02.2023	Relief in complaints with no recurrence Reference [Figure 3]	Phytum 30 TDS. For 30 Days	3
20.03.2023	Relief in complaints with no recurrence	Phytum 30 TDS. For 30 Days	2
26.04.2023	Relief in complaints with no recurrence	Phytum 30 TDS. For 30 Days	2
25.5.2023	Relief in complaints with no recurrence	Phytum 30 TDS. For 30 Days	
26.06. 2023	Relief in complaints with no recurrence	Phytum 30 TDS. For 30 Days	2
24.07.2023	Relief in complaints with no recurrence. Patient is doing well with no recurrence for last 6 months.	Phytum 30 TDS. For 30 Days	2

Table 3: The Modified Naranjo Criteria for Homoeopathy (MONARCH)

S. No.	Domains	Yes	No	Not sure or N/A	Justification
1	Was there an improvement in the main symptom or condition for which the homeopathic medicine was prescribed?	+2			Tinea corporis was chief complaint and that improved after treatment
2	Did the clinical improvement occur within a plausible timeframe relative to the drug intake?	+1			He was suffering from Tinea corporis since 2 years and showed improvement within 9 months.
3	Was there an initial aggravation of symptoms?		0		Nothing was observed.
4	Did the effect encompass more than the main symptom or condition (i.e., were other symptoms ultimately improved or changed	+1			Yes, mental irritation was also reduced
5	Did overall well-being improve?(suggest using validated scale)	+1			Overall well-being improved with respect to physiological and social aspects assessed by the DLQI scale.
6a	Direction of cure: did some symptoms improve in the opposite order of the development of symptoms of the disease?		0		Not observed
6b	Direction of cure: did at least two of the following aspects apply to the order of improvement of symptoms:	+1			Yes

	–from organs of more importance to those of less importance? –from deeper to more superficial aspects of the individual? –from the top downwards?				
7	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?		0		no recurrence of old symptoms were observed
8	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		During the homoeopathic treatment, he had not taken any other medications or topical ointments for tinea corporis
9	Was the health improvement confirmed by any objective evidence? (e.g., laboratory test, clinical observation, etc.)	+2			Yes, through photographs and DLQI score
10	Did repeat dosing, if conducted, create similar clinical improvement?		0		No
Total Score +9					

Conclusion

Constitutional homoeopathic medicine given on symptom similarity is effective in the treatment of fungal infections of skin, such as tinea corporis, prevents relapse of symptoms even after discontinuation of medicine and thus improves quality of life of the patient.





Figure 2: Before treatment images of male child aged 10 years with complains of severe itchy dark red circular eruptions on elbow, popliteal region, around mouth having tinea corporis (09.07.2022)



Figure 3: After treatment images of male child aged 10 years showing complete disappearance of all eruptions from all sites (11.02.2023)

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