



ORIGINAL RESEARCH PAPER

Dermatology

THERAPEUTIC EVALUATION OF A TOPICAL UNANI FORMULATION MARHAME-HINA IN MANAGEMENT OF NAR-E-FARSI (ECZEMA)

KEY WORDS: Dermatitis, Itching, Nar-e- Farsi, Marham-e-Hina, Unani formulation.

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ABSTRACT

Eczema, also known as atopic dermatitis, is a chronic inflammatory skin condition that affects a significant proportion of global population. Despite various treatment options available, the search for natural remedies with fewer side effects remains ongoing. Marhame Hina, a herbal formulation prepared from Lawsonia inermis (henna), sat-e-kafoor, sat-e-podina, ajwain, mom-khalis has been traditionally used in unani medicine for its therapeutic properties. This abstract aims to explore the role of Marhame Hina in management of eczema. The research recruits patients who presented in Skin OPD of Ajmal Khan Tibbiya College AMU from September 2021 to September 2022 diagnosed with eczema based on the established diagnostic criteria. The patients were treated with local application of Marhame Hina for a period of 8 weeks. The result demonstrated significant improvement on subjective parameters both clinically and statistically suggesting that Marhame Hina possesses several pharmacological properties including anti-inflammatory, anti-pruritic (anti-itching) and antimicrobial due to the presence of its active chemical constituents like Lawsone, tannins and flavonoids which may contribute to its potential therapeutic benefits in eczema management. However, despite of cultivating promising results, more comprehensive clinical trials with large sample size are required to be conducted to validate the efficacy and safety of Marhame Hina in treating eczema. Therefore, it has been concluded from the trial that Marhame Hina may be used effectively in the management of eczema due to its anti-inflammatory, anti-pruritic, antimicrobial, antioxidant and hygroscopic properties. However, more researches are needed on large sample size to substantiate its clinical efficacy and safety on the above disease.

INTRODUCTION

Eczema, also known as Nar-e- Farsi, is a chronic inflammatory skin condition that affects 2-10% people worldwide¹. It is characterized by red, itchy and inflamed patches on the skin which can cause significant discomfort and distress to the affected individual¹. It is non-contiguous inflammatory diseases. Eczema, is a prevalent and ancient skin condition characterized by intense itching and burning. The term Narfarsi likely originated in Persia, specifically used by a native of Persia². In the Unani system of medicine, various single and compound drugs and treatment regimens have been employed for managing Narfarsi since the Greco-Arabic period^{3,4}. The Ebers Papyrus (1550 BC), an ancient Egyptian document, discussed remedies for skin itching, dedicating a significant portion to dermatological disorders. Greek physicians, aside from emphasizing hygiene, followed similar approaches to treating skin diseases as the Egyptians⁵. Hippocrates (around 400 BC) detailed that dermatological variations result from internal humoral imbalances. Although the term Atopy is derived from Greek, it is relatively new. The first documented case of Eczema was in Emperor Octavianus Augustus (63 BC - 14 AD), experiencing features like itchy skin and seasonal rhinitis. Emperor Claudius and great-grandnephew Britannicus in the Claudian family of Emperors also suffered from this problem, marking the first family history of Atopy⁶. Modern physicians describe a notable alteration in the skin involving edema within the epidermal cells, referred to as spongiosis, leading to the development of vesicles. The entire epidermis undergoes thickening with an increased keratin layer. There can be varying degrees of vasodilation in the dermis, accompanied by an inflammatory infiltrate, which may vary depending on the type of eczema. While the pathogenesis of exogenous eczema, especially primary irritant and allergic contact eczema, is well comprehended, the understanding of the pathogenesis of endogenous eczema remains unclear¹⁰. In Unani system of

medicine, eczema is believed to result from an imbalance in the quality and quantity of the four basic humors: blood, phlegm, yellow bile and black bile leading to the accumulation of toxins in the body³. According to Jalinoss (129-200 AD), eruptions on the body occur when Dam is mixed with Safra⁷. Razi described a process in Narfarsi where there's an initial burning sensation accompanied by itching. Subsequently, a blister forms and becomes filled with a diluted substance⁸. Ibne Sina (980-1037) described it as a disease having eruptions with burning sensations like fire. The causative morbid humour is Akkaal (corrosive), haar (hot) and lazeh (irritative) which may spread with blood (sanguineous matter) or phlegm (Phlegmatic matter). It is believed to be produced when haar akhlaat (Bilious matter and sanguineous matter) are mixed with yabis khilt that is Saudavi madda (Melancholic matter). He further added that Nar-e-farsi results from haad akhlat mixed with khilt e raqeeq (Safra)⁹. M. H. Quamri also had similar belief regarding the pathogenesis of the disease. The restoration of the balance of the four humors and elimination of the morbid matter from the body is the basis of the treatment which is achieved by combination of dietary modifications, physical therapies and procedures, lifestyle adjustments and some unani drugs⁴. The herbal formulations used in Unani Medicine for eczema often include ingredients like Hena, kafoor, sat podina, and sat ajwain possessing blood purifying properties within them. While Unani Medicine offers valuable insights and time-tested approaches to manage eczema, it is essential to consult a qualified Unani physician for an accurate diagnosis and personalized treatment plan. Moreover, integrating Unani remedies with modern medical approaches can provide a comprehensive and holistic approach to effectively manage eczema and improve the quality of life for those affected with this challenging skin condition. A traditional system of medicine (especially Unani Medicine) with historical roots in ancient Greece and Persia, has been practiced for centuries

and offers a holistic approach for understanding and treating various ailments, including skin disorders like eczema⁴.

Aims and Objective

To assess the efficacy of Marhame Hina in management of eczema.

MATERIAL AND METHOD

This study was conducted in department of Amraz-e-jild wa Zohrawiya in Ajmal Khan Tibbiya College, AMU from the period of September 2021 to September 2022 on patients presented in skin OPD of the department diagnosed with eczema.

Study Design

Single-arm, open-label clinical study.

Sample Size

22 participants with 25% dropouts.

Inclusion Criteria

- Individuals aged 18-65 years, diagnosed with mild to moderate eczema based on established diagnostic criteria and with a history of chronic eczema symptoms.

Exclusion Criteria

- Individuals with severe eczema requiring immediate medical intervention.
- Patients with known allergies to any components of Marhame Hina.
- Pregnant or lactating women.
- Patients with other skin conditions which may mask the clinical manifestation of eczema and interfere in correct diagnosis.

Method of Data Collection

Total 35 participants were recruited for the study initially. Of which, 7 participants did not fulfil the inclusion criteria and 6 did not give consent to be enrolled in the trial. Therefore, a total of 22 participants took part in the study by their voluntary consent which was taken in written in a proforma having details of purpose of the study, interventions involved, potential risks and benefits of Marhame Hina. Out of 22 patients, 25% were the dropouts and did not complete the therapy.

Method of Application

Topically to the affected areas twice daily for a duration of 8 week

Duration of Protocol Therapy

8 weeks

Follow Up

At first visit and then at 2 weeks interval for 8 weeks.

Outcome Assessment

- The outcome was based on improvement in the symptoms including itching, discharge, burning sensation, scaling, excoriation, lichenification and hyperpigmentation using validated questionnaires.

Safety Monitoring

- Participants were encouraged to report any new or worsening symptoms during the study period.

Statistical Analysis

- Efficacy outcomes were analyzed using appropriate parametric tests to compare baseline and post-treatment scores.

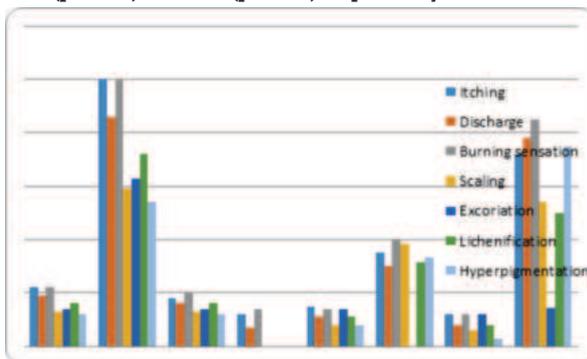
OBSERVATION AND RESULT

Table 1- Effect Of The Drug On Itching, Discharge, Burning Sensation, Scaling, Excoriation, Lichenification And Hyperpigmentation

Clinical features	0th day		14th day		28th day		42nd day	
	No. of patients	% of patients	No. of patients	% Improvement	No. of patients	% Improvement	No. of patients	% Improvement
Itching	22	100	18	12	15	35	12	72
Discharge	19	86	16	7	11	30	8	78
Burning sensation	22	100	20	14	14	40	12	85
Scaling	13	59	13	0	8	38.5	6	53.8
Excoriation	14	63	14	0	14	0	12	14.3
Lichenification	16	72	16	0	11	31.2	8	50
Hyperpigmentation	12	54	12	0	8	33.3	3	75

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The observation before, during and after treatment was recorded and has been tabulated in Table 1. The total no. of patients enrolled in the trial were 22 (n=22). Of which 100% patients presented with complaints of itching, 19 patients (86%) had discharge, 22 patients (100%) had burning sensation, 13 (59%) had scaling, 14 (63%) had excoriation, 16 (72%) had lichenification and 12 patients (54%) had hyperpigmentation on 0th day. The effect of the drug on itching, discharge and burning sensation was 72% (p <0.05), 78% (p <0.05) and 85% (p <0.05) respectively. It was observed that after 42 days of continuous therapy, the improvement in scaling, excoriation, lichenification and hyperpigmentation was 53.8% (p <0.05), 14.3% (p <0.05), 50% (p <0.05) and 75% (p <0.05) respectively.



(Pre Treatment) (Post Treatment)
Effect of Marham-e-Hina on Nar-e-Farsi (Eczema)

DISCUSSION

The results of the study are promising and are in agreement with the study done by Nawab et.al in 2008 on Lawsonia inermis in patients of eczema. Lawsonia inermis, known for its anti-inflammatory, anti-pruritic (anti-itching) and antimicrobial properties alleviate burning sensation, itching, redness and excoriation which are the key symptoms presented by eczema patients⁸. Marhame-Hina possesses several pharmacological properties including anti-inflammatory, anti-pruritic (anti-itching) and antimicrobial due to the presence of its active chemical constituents like Lawsons, tannins and flavonoids which may contribute to its

potential therapeutic benefits in eczema management. Moreover, it exhibits potential antioxidant property which could help mitigate oxidative stress-induced damage in eczematous skin. Additionally, its hygroscopic effect enhances the skin barrier function, promotes healing and reduces trans epidermal water loss. The formulation, applied as an ointment forms a protective coating on the lesion, potentially preventing contact with allergens and promoting a smoother healing process, resulting in faster lesion recovery. However, since the study was conducted for a limited duration with a small sample size, despite of cultivating promising results further advance studies need to be carried out to substantiate the role of Marhame Hina on the above disease.

CONCLUSION

The efficacy of Marhame Hina on eczema was found clinically and statistically significant. The formulation was tolerated well and during the course of the trial no significant adverse effect was noticed. The treatment which is achieved by combination of dietary modifications, physical therapies and procedures, lifestyle adjustments and some unani drugs.

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