HOPE

Humectant **O**cclusive **P**rotective **E**mollient

NEWSLETTER

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Think **Moisturizer**

Think **Ajanta** Dermatology

Think Moisturizer
Think Ajanta Dermatology

Glycerin, Ceramide, Butter based moisturiser

AQUASOFT

Cream/Lotion/Max Cream/Max Lotion/S Bar/CV

Ceramide & Colloidal Oat meal based moisturiser

Biosilk

Ceramide 1,3,6-II, Oat Com, Pentavitin, Stimulex-AS complex, Sodium Hyaluronate

Lotion/Cream

Facial moisturiser

Aquasoft FC

60 / 100 g Cream

Aquaxyl Uvinul A Plus, Uvinul T 150, Tinosorb S, Vitamin E

Urea based moisturiser

Aqurea HF | 20 | 10

Urea 40% Urea 20% Urea 10%

Ultra moisturising complex

1st Time in India

SORILAST® Cream

Urea 12%, Salicylic acid 0.5%, Lactic acid 6.81%, Avena Sativa 0.10%, HACE 200 0.10%, Witch Hazel extract 1%, Biophilic H-MB 1%

HOPE
Humectant Occlusive Protective Emollient
NEWSLETTER
ISSUE 8

Think Moisturizer
Think Ajanta Dermatology

DOCTOR'S CORNER

Dr. Koushik Lahiri,

MBBS, DVD (CAL) , FIAD, FFAADV, FRCP, (Glasgow), FRCP (Edin), FRCP (London),

Professor and Distinguished Academician, Apollo Hospitals Educational and Research Foundation (AHERF),

Senior Consultant Dermatologist, Apollo Multispeciality Hospital, Kolkata.

Hand eczema

- Hand eczema is often a chronic, multifactorial disease. It is usually related to occupational or routine household activities.[1]
- It is estimated that 2–10% of the population will develop hand eczema at some point in their life.
- Hand eczema appears to be the most common occupational skin disease, comprising 9–35% of all occupational diseases and up to 80% or more of all occupational contact dermatitis.[1]

Multifactorial etiology of hand eczema

Most cases of hand eczema have a multifactorial etiology that can be broadly divided into exogenous and endogenous causes. Among exogenous causes, contact irritants, such as soaps, detergents, rubber, vegetables, etc., are most blamed for hand eczema. Physical friction and minor trauma can also cause irritant contact dermatitis.[1]

A study by Kaur and Sharma in Chandigarh found that 53.1% of the patients with hand eczema were sensitive to metals. Of these, nickel, cobalt and chromate sensitivity was seen in 40.6, 31.2 and 21.8% of patients, respectively. The same study found medicaments, rubber, and vegetable sensitivity in 40.6, 13, and 13% of patients, respectively. The miscellaneous sensitizers were positive in 23.4% of patients with hand dermatitis; they included plants, oil, file cover, currency notes, dichlorodiphenyltrichloroethane (DDT), para-phenylene diamine, formaldehyde, mercuric chloride, film, and paper developer.[1]

Soaps and detergents were found to be the second most common sensitizers in females in a study of 71 patients by Bajaj. These findings were also observed in another study by Singh and Singh, who believed that detergents cause irritant and allergic contact dermatitis.[1]

A study by Pasricha and Kanwar reported vegetable sensitivity to be as high as 75.8% and 82.7% in housewives' eczema, respectively. Garlic and onion were the most frequent sensitizers. This study also showed that allergic contact dermatitis to garlic and onion has predominant involvement of the index, thumb, and middle finger of the dominant hand and thumb of the other hand (fingertip dermatitis).[1]

Role of skin barrier and genetics in eczema

- While barrier disruption induces cutaneous inflammation, improvement of permeability barrier function alleviates inflammation. Studies have demonstrated that improving epidermal permeability barrier function prevents the development of atopic eczema and delays the relapse of these diseases.[2]
- Lack of serine protease inhibitor Kazal-type (SPINK; a protein that inhibits serine protease action in the skin) results in uncontrolled serine protease elastase-2 activity. Increased protease activity negatively alters filaggrin and lipid (ceramide) processing, thereby decreasing skin barrier function.[1]
- Ceramides-containing cream has been suggested as the best treatment to improve skin barrier function by increasing stratum corneum lipid levels in patients with atopic dermatitis.[3]

Cream containing ceramide C and personalized training for secondary prevention of hand eczema[3]

Objective

To investigate the effectiveness of personalized training on skin protection associated with the regular use of ceramide-containing cream (CC) *vs.* other creams (OC) for improving hand contact dermatitis.

Methods

A double-center randomized trial that enrolled workers with hand dermatitis (n=102)

↓

Group 1: Treated with a CC 3 times a day (n=54)
Group 2: Treated with a traditional emollient without ceramides (OC) 3 times a day (n=48)

↓

Personalized training: Information on skin anatomy, stratum corneum function, skin damage from irritants and detergents, and the use of gentler products and emollients for protection was given.

↓

Primary outcome
Improvement in hand dermatitis at 1 and 3 months of follow-up

CC: Ceramide-containing cream; OC: Other creams.

Results

- Improvement in dermatitis at the first follow-up was found in 40% and 52.5% of OC and CC patients, respectively, and at the second follow-up in 50% and 63% of OC and CC patients, respectively.
- The use of CC was significantly associated with improved dermatitis (odds ratios 2.6; 95% confidence intervals 1.30–5.2), analyzed using generalized equation estimation during the follow-up.

An educational personalized intervention could improve the signs and symptoms in patients with hand dermatitis, and the use of a CC resulted in a significantly better outcome during the 3 months of follow-up.

References: 1. Agarwal US, Besarwal RK, Gupta R, *et al.* Hand eczema. Indian J Dermatol. 2014;59(3):213–224. **2.** Man G, Elias PM, Man M. Therapeutic benefits of enhancing permeability barrier for atopic eczema. Dermatol sin. 2015;33:84–89. **3.** Filon FL, Maculan P, Crivellaro MA, *et al.* Effectiveness of a skin care program with a cream containing ceramide C and a personalized training for secondary prevention of hand contact dermatitis. Dermatitis. 2023;34(2):127–134.

GUIDELINE UPDATE

Italian S3-Guideline on the treatment of atopic eczema

Table I and Table II represent general recommendations for systemic drugs in special atopic eczema patient populations and topical drugs for treating atopic eczema, respectively.

Table 1. General recommendations for systemic drugs in special AE patient populations

	Conventional systemic treatments			Biologics		JAK inhibitors		Rescue therapy
	Cyclosporine	Methotrexate	Azathioprine	Dupilumab	Tralokinumab	Baricitinib	Upadacitinib	Systemic corticosteroids
Children and adolescents with AE who are candidates for systemic treatment	↑↑	↑	↑	↑↑			↑↑	
Dose for children	Licensed for ≥16 years Commonly used dosage in children: 2.5-5 mg/kg per day in two single doses	Off-label Commonly used dosage in children: 0.3-0.4 mg/kg per week	Off-label Commonly used dosage in children: 1-3 mg/kg per day	Licensed for ≥6 years Age 6-11: From 15 kg to <60 kg, initially 300 mg SC day 1 and 15 followed by 300 mg Q2W Age 12-17: <60 kg: Initially 400 mg SC day 1 followed by 200 mg Q2W, when ≥60 kg: Initially 600 mg SC day 1 followed by 300 mg Q2W	Off-label	Off-label	Licensed for ≥12 years Age 12-17 (≥30 kg BW); 15 mg per day	General unspecific license for children for stroid responsive skin disease Max dosage: 1 mg/kg per day
Pregnancy (in candidates for systemic treatment)	↑	↓↓	↑	0		↓↓	↓↓	↑ Prednisolone (0.5 mg/kg/d) only as rescue therapy for acute flares
Breastfeeding	↓	↓	↓	0		↓	↓	↑ Prednisolone (0.5 mg/kg/d) only as rescue therapy for acute flares

Q2W: Once every 2 weeks; AE: Atopic eczema; JAK: Janus kinase; SC: Subcutaneously; BW: Body weight.

Symbols	Implications
↑↑	We believe that all or almost all informed people would make this choice
↑	We believe that most informed people would make this choice, but a substantial number would not
0	We cannot make a recommendation
↓	We believe that most informed people would make a choice against this intervention, but a substantial number would not
↓↓	We believe that all or almost all informed people would make a choice against this intervention
	No recommendation

Table 2. General recommendations for topical drugs for the treatment of atopic eczema

Overall recommendation	TCS ↑↑		TCI ↑↑	
	TCS class I and II	TCS class III and IV	Tacrolimus 0.1% Tacrolimus 0.03%	Pimecrolimus 1%
Recommendations	Class I not suitable for long-term proactive treatment Long-term proactive treatment only class II	Acute flare Proactive treatment with TCS class III Class IV not for long-term daily treatment or head and neck Class IV not recommended for proactive treatment either	Acute flare Long-term proactive treatment Especially in face, intertriginous site, anogenital area	Acute flare Especially in face, intertriginous site, anogenital area
Most important side effects	Skin atrophy Telangiectasia Striae distensae Ecchymosis Hypertrichosis Perioral dermatitis	Skin atrophy Telangiectasia Striae distensae Ecchymosis Hypertrichosis Perioral dermatitis Corticosteroid addiction syndrome Suppression of adrenal function	Initial warmth, tingling or burning	Initial warmth, tingling or burning
	TIC class II and III are off-label for proactive treatment		In label for proactive treatment	Not suitable for proactive treatment
Special considerations				
Suitable for **children >2 to <16 years** of age	Yes	Yes	Yes (0.03%)[2]	Yes[2]
Suitable for **babies <2 years** of age	Yes	Under specialist supervision	Yes (0.03%)[1]	Yes[2] (from the age of three months)
Suitable during **pregnancy**	Yes	Yes	Yes (0.03% and 0.1%)[1]	Yes[1]
Suitable during breastfeeding	Yes	Yes	Yes (0.03% and 0.1%)[1]	Yes[1]
Suitable for pruritus	Yes	Yes	Yes (0.03% and 0.1%)	Yes

[1]Off-label use; [2]licensed use.

Symbols	Implications
↑↑	We believe that all or almost all informed people would make this choice
↑	We believe that most informed people would make this choice, but a substantial number would not
0	We cannot make a recommendation
↓	We believe that most informed people would make a choice against this intervention, but a substantial number would not
↓↓	We believe that all or almost all informed people would make a choice against this intervention
	No recommendation

TCS: Topical corticosteroids; TCI: Topical calcineurin inhibitors.

Reference: Argenziano G, Cusano F, Corazza M, *et al.* Italian S3-Guideline on the treatment of atopic eczema - Part 2: Non-systemic treatments and treatment recommendations for special AE patient populations, adapted from EuroGuiDerm by the Italian Society of Dermatology and STD (SIDEMAST), the Italian Association of Hospital Dermatologists (ADOI) and the Italian Society of Allergological and Occupational Dermatology (SIDAPA). Ital J Dermatol Venerol. 2024;159(3):251–278.

CONFERENCE UPDATE

American Academy of Dermatology (AAD) Association 2024

Mental health support from primary eczema providers for patients with atopic dermatitis

Objective

To understand the level of mental health (MH) support and types of MH resources atopic dermatitis (AD) patients and caregivers receive from their primary eczema provider.

Methods

The National Eczema Association survey

Patients with AD or caregivers of pediatric patients with AD (n=954)

Primary outcome

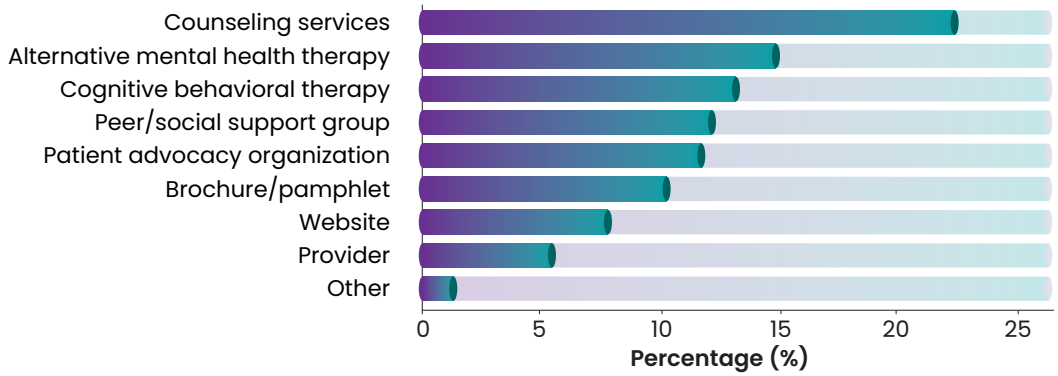
Frequency of MH discussion

AD: Atopic dermatitis; MH: Mental health.

Results

- About 41.9% of patients/caregivers reported never discussing MH concerns, and 39.4% were not asked about their MH by their primary eczema provider. Additionally, 64% reported not receiving a mental health referral.
- Males (2.00 [1.08–3.69]), patients with low or middle education (4.89 [2.10–11.36], 2.71 [1.36–5.40]), or those with purchased insurance policies (4.43 [1.79–10.98]), were more likely to receive mental health support.
- The most common mental health referrals included counseling services, alternative mental health therapy, cognitive behavioral therapy, and peer/social support groups (Figure 1).

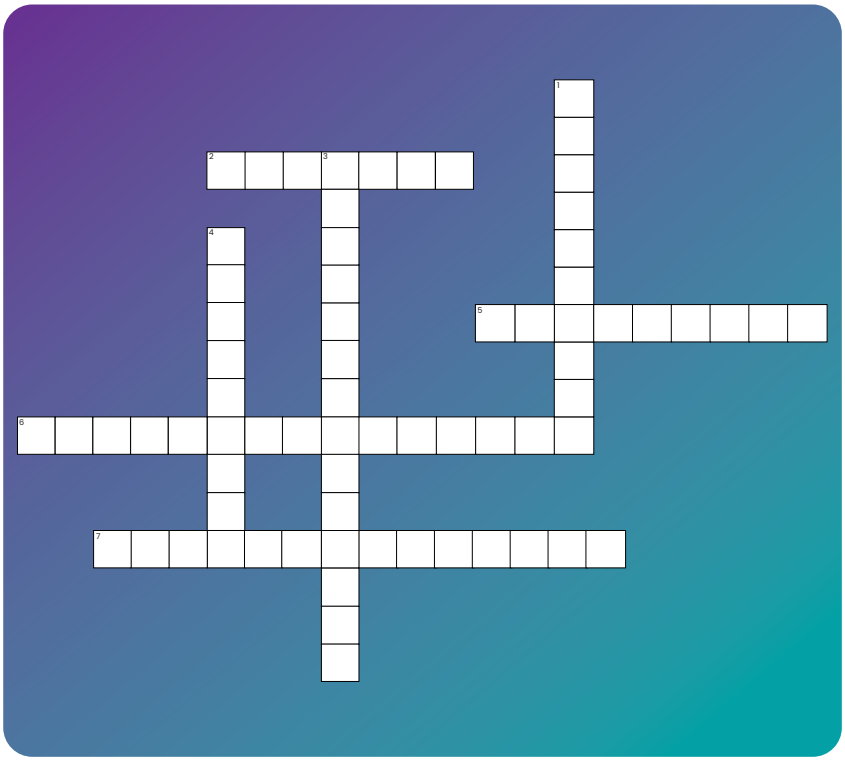
Figure 1. Types of mental health referral



Most AD patients/caregivers reported not receiving mental health support from their/their child's primary eczema provider. Utilizing validated mental health screening tools, evaluating the efficacy of available mental health resources, and addressing barriers to mental healthcare may improve the mental health burden in patients with AD.

Reference: Chatrath S, Johnson JK, Loiselle AR, *et al.* Mental health support from primary eczema providers for patients with atopic dermatitis. Poster ID: 51404. Available at: https://eposters.aad.org/abstracts/51404. Accessed on August 21, 2024.

CROSSWORD & QUIZ



ACROSS

2. What type of dermatitis is often associated with exposure to irritants and allergens in hand eczema?
5. What genetic factors may affect skin barrier function in endogenous causes of hand eczema?
6. What term is used to describe the condition of thickened, hardened skin resulting from chronic hand eczema?
7. What is the primary therapeutic approach for managing hand eczema that involves restoring the skin's barrier function?

DOWN

1. What is the primary pathology of hand eczema often involving in the skin barrier?
3. Reduced ceramide levels in hand eczema can lead to increased permeability in which process?
4. What types of factors include irritants like soaps and detergents in hand eczema?

Across: 2. Contact; 5. Mutations; 6. Lichenification; 7. Moisturization.
Down: 1. Disruption; 3. Transepidermal; 4. Exogenous.

1. What is a typical clinical feature of chronic hand eczema?

A. Hyperpigmentation
B. Erythema and scaling
C. Hair loss
D. Edema

2. How do ceramides help in managing hand eczema?

A. By acting as anti-inflammatory agents
B. By improving barrier function
C. By reducing pigmentation
D. By increasing skin hydration

3. Which type of eczema is associated with physical friction and minor trauma?

A. Allergic contact dermatitis
B. Atopic dermatitis
C. Irritant contact dermatitis
D. Nummular dermatitis

4. Which of the following is a common symptom of hand eczema?

A. Excessive sweating
B. Hypertrichosis
C. Telangiectasia
D. Skin peeling

5. What is the primary function of ceramides in the skin's stratum corneum?

A. To produce melanin
B. To facilitate cell turnover
C. To maintain hydration and prevent water loss
D. To synthesize collagen

Answers: 1. B; 2. B; 3. C; 4. D; 5. C.