

Overcoming challenges in management of atopic dermatitis: Role of oxidative stress in the pathogenesis and treatment target of atopic dermatitis (ROAD)

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The Dermatology Advisory Board on Atopic Dermatitis from Asian Medical Expert Academy compiles current evidence-based approach review in managing atopic dermatitis (AD) among Asians.

A premeeting survey was performed prior to the meeting to gather opinions from experts to identify the individual unmet demands in the current management, and the possible strategies to overcome these issues.

Current challenges in AD management include:

- steroid phobia
- compliance
- myths among the community
- frequent flares leading to loss of patience

The Expert Panel recommends a stepwise approach to treatment based on disease severity.

- The use of moisturizers is recommended across all levels of AD severity.
- Oxidative stress is recognized as an important contributor to AD that can directly damage skin cells and induce an immune response that leads to AD.
- Prescribed Emollient Device (PED) with antioxidants can help mitigate the effects of oxidative stress in causing AD.

Furfuryl palmitate is an antioxidant that has demonstrated efficacy in managing symptoms of AD in adults and children, as well as other inflammatory dermatoses.

- PEDs can potentially play an important role in the treatment of AD by augmenting "upstream" treatment.
- This could potentially help reduce the risk of side effects and adverse events in patients undergoing treatment for AD.



The impact of AD

Among all the morbidities from AD, the most distressful symptom affected by the disease is pruritus.

- 51.3% of patients with AD has limited their lifestyle
- 39% of them tend to avoid social interaction
- 43.3% impacted activities

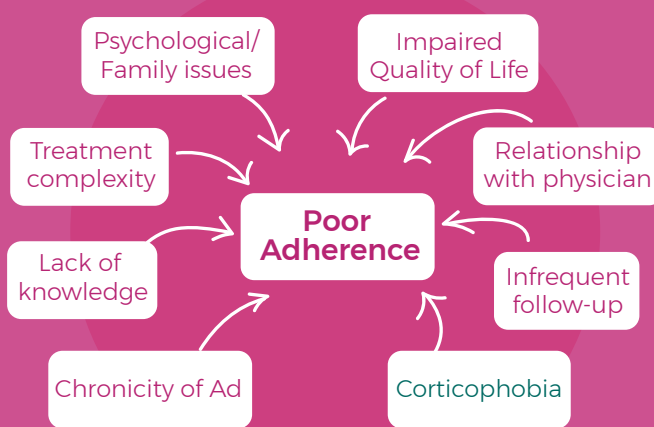
The concept of Prescribed Emollient Device (PED)

Prescribed Emollient Devices are used to prevent transepidermal water loss (TEWL) and to improve skin hydration in patients with AD.

PEDs are different from OTC moisturizers and are FDA-approved devices that provide a structural role in skin barrier function by specifically targeting defects in skin barrier function that are observed in AD.

Challenges in AD management

Poor adherence to treatment is the major reason for treatment failure.



Commonalities across current consensus and different guidelines for AD

- Furfuryl palmitate is also efficacious in reducing symptoms associated with allergic contact dermatitis
- About 85% of investigators thought that the efficacy and tolerability of the product were good or excellent.
- Asian guidelines recognize FP as an agent for improving AD symptoms: moisturizers with antioxidants, such as vitamins, polyphenols, FP and grape seed oil with antipruritic agents, have been shown to significantly improve AD symptomatically at the same level as TCS.

The advisory board unanimously give highest consensus on recommending emollients use at all stage of disease (mild to severe), in active flare, remission and in maintenance with inactive disease.

With the proven clinical value of this role, clinicians should encourage and supervise patients to achievement a better compliance in moisturizer use.

