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Clinical Pearls

Clinical Pearls help prepare residents for the future by providing them with top tips from experts about what they should know about specific, key subject areas by the time they complete their residency.

Atopic dermatitis

By Raj Chovatiya MD, PhD, FAAD

1. Be purposeful with your language. Atopic dermatitis (AD), atopic eczema (AE), dermatitis, and eczema are all often used interchangeably to describe the same entity: a clinically diagnosed, pruritic rash consisting of inflammatory changes (e.g., redness, swelling, scaling) in a characteristic distribution. Much of the confusion in terminology stems from historical precedent, changing of descriptors based on evolution of diagnostic criteria over the past century, geographic differences, and patient vs. physician preference. Currently, eczema is thought of as a group of conditions with shared signs and symptoms, of which AD (or AE) is the most common form worldwide. Given that patients and non-dermatologist clinicians often imprecisely refer to AD as eczema, dermatologists have an important educational opportunity for this disease state. This becomes especially critical when using ICD-10-CM coding, as most of the newer, targeted therapies are specifically indicated for AD.[1]

2. Get comfortable with diagnostic criteria. We often treat AD as a "gut" diagnosis — you know it when you see it. However, with the proliferation of so many new, targeted therapies (and many more to come) it's imperative to understand the essentials of how to make the diagnosis to connect the right patients to the right therapy. This is often easier said than done given several different accepted diagnostic criteria, many of which are not commonly used in the clinic setting. Most criteria are based upon the gold standard Hanifin and Rajka guidelines, first published in 1980, which require the presence of at least three major and three minor features from a list containing multiple options. Several groups have attempted to simplify these for routine clinical practice over the years, and in the last set of guidelines published by the AAD in 2014, only two essential features are needed for diagnosis: pruritus and eczema (consisting of typical morphology, age-specific patterns, and/or chronic or relapsing history). No matter the choice of diagnostic criteria, all agree that AD is a clinical diagnosis.[2]

3. Don't get fooled when searching for a "classic" presentation. Historically, AD was described as disease of childhood consisting of pruritic, red patches localized to the flexures that generally resolved by adulthood. Though this description is still commonly associated with the disease, our knowledge of AD presentation has evolved dramatically. AD is now better understood to be an extremely heterogeneous disease consisting of various cutaneous morphologies (e.g., nummular eczema, prurigo nodules, lichen simplex chronicus, lichenoid lesions, follicular papules, dyshidrosis) and topographies (head/neck, eyelids, lips, nipples, hands/feet, genitals, widespread erythroderma), with further differences in the presentation of skin inflammation (erythema, edema, lichenification, excoriation, xerosis, etc.) across diverse skin types. Looking beyond skin signs, symptoms (including pruritus, skin pain, sleep disturbance, and mental health symptoms), comorbidities, longitudinal patterns, and effects on quality of life also vary dramatically between patients.[3]

4. Keep a broad differential in mind before locking in the diagnosis. AD has such a high prevalence (approximately 10% in the United States) that it can be tempting to diagnose and treat any pruritic rash with characteristic eczematous features as AD. Remember: There are other subtypes of eczema along with AD, and each of these can occur in the absence or presence of AD: seborrheic dermatitis, stasis dermatitis, nummular eczema, dyshidrotic eczema, neurodermatitis/lichen simplex chronicus, and contact dermatitis. Additionally, in reflection of its heterogeneity, AD can present similarly to a variety of other non-eczematous conditions, including psoriasis (and other papulosquamous disorders), immunobullous disease, lichenoid dermatoses, tinea infections, scabies infestation, immunodeficiencies and other genodermatoses, nutritional deficiencies, and cutaneous lymphomas. Though AD is a clinical diagnosis, biopsy and/or lab workup can be especially useful in these circumstances.[4]

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