MANAGING ATOPIC DERMATITIS IN ADULTS

THE BEST TREATMENTS FOR THE WORST CASES.

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According to the American Academy of Dermatology's (AAD's) Guidelines of Care on its Web site (www.aad.org), atopic dermatitis is defined as a chronic inflammatory pruritic skin disease that is more common in children than in adults. IgE levels are often elevated, and patients have a personal and family history of type 1 allergy symptoms. There is no single distinguishing feature or agreed-upon laboratory test for the diagnosis.

The following is a personal perspective for evaluating and treating patients with severe atopic eczema.

Though atopic dermatitis is more common in children, it also affects adults. In fact, this condition can have severe negative effects on patients' quality of life.

A cross-section of findings in severe cases includes worsening of eczema, especially of the hands and face, dissemination, and secondary infection with weeping, draining lesions. Itching is often constant, worse in the winter but often in hot weather as well, and accompanied by marked excoriation and lichenfication, especially of the face, hands, periorbital areas and trunk. Patients in wet work occupations, such as cosmetologists, machinists and healthcare workers, may be significantly impaired from performing their activities of daily living at home, at school and at work. Friends and family may complain of the constant scratching, scale and foul odor when infected.

Topical treatments may burn when applied and are reported to not be effective. Patients have seen multiple dermatologists and allergists, especially with accompanying allergic rhinitis and asthma and with persistence may abandon allopathic care for homeopathic physicians. Long-term atopic dermatitis patients may present with striae from constant topical and/or systemic corticosteroid use, a history of hospitalization for erythrodermic flares and occasional suicidal ideations. Patients with the most severe forms of the disease may be applying for Social Security Disability and or Workers' Compensation. This is a typical representation of the worst cases of atopic dermatitis.

ATOPIC DERMATITIS IN ADULTS

There are three patterns of presentation of atopic dermatitis in adults. The first includes patients who have never been free of disease since childhood. The second includes patients whose atopic dermatitis disappeared in childhood, then reappeared as typical atopic dermatitis in adulthood. And the third includes patients whose childhood atopic dermatitis disappeared, then reappeared in adulthood under a different guise, such as hand eczema, which is not recognized as related to the childhood disease.

In adults, atopic dermatitis typically affects the hands. Chronic hand eczema is seen in 60% to 70% of adults with atopic dermatitis. It also commonly involves the head, neck, and periocular and eyelid areas. Exfoliative erythroderma is seen in the most severe cases.

CLINICAL COMPLICATIONS OF ATOPIC DERMATITIS

It's important to be aware of clinical complications such as infection with *Staphylococcus aureus*. A less common but more troublesome infection is molluscum contagiosum, which requires modification of topical and systemic treatment. Herpes simplex causing Kaposi's varicelliform eruption is an important complication that should not be overlooked. Other complications include lymphedema of the hands from recurrent cellulitis and lymphangitis, which is fortunately infrequent, and the more common stasis dermatitis with autoeczematization. Erythroderma with high output congestive heart failure is rare in my experience. Flares of atopic eczema may be triggered by

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reactions to systemic medications, allergic contact dermatitis to nickel in metal jeans buttons and from topical therapies, trauma (dermatitis in loco minoris), and irritation from wet work and even clothing labels and tags.

DIFFERENTIAL DIAGNOSES

There are a number of disorders in the differential diagnoses of atopic eczema. With facial involvement, consider irritant and allergic contact dermatitis — direct from applied cosmetics and therapies; occasional from a pillow, for example; or ectopic from nail polish; systemic, connubial and airborne. Photosensitivity and other facial dermatoses should also be considered.

With hand involvement, consider allergic contact dermatitis, particularly if there is a change in pattern from the palms to the dorsum or from the web spaces to the fingertips. Contact urticaria is not uncommon and may evolve into eczema. Hyperkeratotic, frictional and nummular eczema, or a hybrid of all of these, are diagnoses to consider.

With whole body involvement, the differential diagnoses includes chronic dermatoses, such as seborrheic, asteatotic and nummular dermatitis, lichen simplex chronicus, and psoriasis. Also don't overlook infections and infestations, such as scabies, dermatophytosis (especially in the axilla and perineum) and HIV. Also don't forget metabolic and genetic conditions, immunologic disorders, drug eruptions and primary immunodeficiencies. Pemphigus foliaceus can mimic erythroderma and exfoliative dermatitis.

ADULT ECZEMA EVALUATION

When evaluating the adult patient with eczema, it's important not to call it idiopathic, even if contact dermatitis, drug eruptions and childhood atopic eczema have been excluded. Workup should include complete dermatological and physical examination, including the abdomen and lymph nodes, which should be repeated every 3 to 6 months as needed.

Rule out systemic causes of erythroderma with skin biopsies, including cultures and gene rearrangement; laboratory work including CBC and peripheral smear, metabolic profile and Sezary cell studies; chest X-ray and imaging studies; and consideration of biopsy of enlarged lymph nodes.

Then, patch test with an expanded standard tray when the skin is clear. If you can't clear the back entirely, patch test on low-dose prednisone (~10 mg per day), especially with changing patterns of dermatitis. Then also consider testing for contact urticaria, radioallergosorbent tests (RASTs) for some inhalant allergens and latex, and prick testing by an allergist.

TREATING ADULT ATOPIC DERMATITIS

Therapy with topical corticosteroids is the first line and the various factors to consider when determining which one to use include site, severity, chronicity and vehicle issues. Start with the most potent to control, then taper to daily or less often use. I prefer ointments such as triamcinolone, fluocinolone and non-augmented betamethasone dipropionate over creams. There are newer formulations that deliver increased potency. If patients are applying corticosteroids around the eyes, I recommend that they have their eye pressure checked intermittently. Known side effects include atrophy, striae, rosacea, periorbital dermatitis, systemic absorption and contact dermatitis.

When topical corticosteroids demonstrate no response or are not advisable, topical calcineurin inhibitors (TCIs) are indicated for short-term, non-continuous use twice a day in non-immunocompromised patients from 2 to 15 years of age. TCIs are good for the eyelids, face and folds, and also the trunk and extremities, and generally I prefer tacrolimus (Protopic), though pimecrolimus (Elidel) is also an option. Alternating a TCI with a topical corticosteroid is an effective treatment option.

Alcohol intolerance is an interesting side effect of TCI treatment and occurs in about 7% of patients. Patients experience

a localized vascular flush reaction confined to the head and neck with a feeling of warmth; it doesn't occur in other treated areas. Flushing occurs between 5 to 15 minutes of alcohol ingestion, fading after 60 minutes.

There is a need to counsel patients about the FDA black box warnings for TCIs. I reassure patients and parents and tell them that scientific evidence is lacking for neoplasia. I also give them the National Eczema Association statement on this or refer them to the AAD Web site.

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OTHER THERAPIES

Emollients are a first-line therapy for patients with mild to moderate eczema, and an important adjunctive therapy for other patients with atopic eczema. There are also several new prescription topical therapies available. These are steroid-free, TCI-free, and target xerosis in the compromised barrier function. One interesting point is that these are FDA approved as devices and not drugs. First, Biafine was approved, followed by MimyX and Atopiclair, all of which contain a number of lipids. More recently, Epiceram, which contains ceramides, became available. And there is also CeraVe, which is a non-prescription ceramide-containing product.

Colloidal baths can help in severe cases, and coal tar is useful. Doxepin cream can also be used, though a number of patients develop allergic contact dermatitis from use of this topical antihistamine. It was introduced in 1994 and because I saw so many allergic patients, I included it on my standard patch test tray and reported 13 cases in the *Archives of Dermatology* in 1996. The FDA confirmed this finding in a report in the *Journal of the American Academy of Dermatology* in 2003. There is significant percutaneous absorption with this drug, so it's critically important to not use it in infants or children under the age of 12. Pramoxine-containing lotions, creams and ointments may be helpful. Lidocaine creams are being used more often, though we do see occasional contact dermatitis from this, and diluted capsaicin has been used. Bleach baths can also be useful in reducing recurrent cutaneous *S. aureus* skin infections.

Topical and systemic antibiotics are also important, but should be used for limited periods of time. Oral antihistamines are said to be ineffective, though I still use them as helpful adjuncts. I prefer fexofenadine 180 mg during the day and doxepin 10 mg to 25 mg at night. Ultraviolet light therapy is still very important — UVA1 or narrowband UVB are more commonly used. For hand and foot eczema, bath PUVA is quite helpful.

SYSTEMIC THERAPY

Systemic corticosteroids are effective for severe flares of atopic dermatitis and should be used short term and intermittently. Monitor and treat for osteoporosis, especially if patients are or have been using systemic corticosteroids long term.

My next step would be to consider methotrexate 12.5 mg per week or lower with appropriate laboratory and clinical monitoring. In addition to routine laboratory work I screen for hepatitis.

Other systemic and emerging therapies include cyclosporine, interferon gamma and probiotics. Of these, cyclosporine is an excellent drug for quickly controlling severe flares of widespread and recalcitrant disease, but long-term use is limited. Next, consider azathioprine or mycophenolate mofetil, with appropriate laboratory monitoring, though data on efficacy is limited. There is insufficient data on leukotriene inhibitors.

In terms of the biologics, the most data exist for omalizumab (Zolair) and efalizumab (Raptiva). Of these, our department has had limited experience with good results from efalizumab, but caution for *Staphylococcus* infection and thrombocytopenia is warranted. Some data exist for etanercept (Enbrel) and infliximab (Remicade), adalimumab (Humira) and alefacept (Amevive).

A MULTI-FACTORIAL DISEASE

Atopic dermatitis is a multi-factorial genetic and environmental disease. It's important to identify the complications and treatable associations such as contact dermatitis, and the approach for treating the worst cases will probably depend on patient experience and acceptance.

Severe disseminated, recalcitrant atopic eczema is one of the most impairing and disabling skin diseases and topical therapy clearly is often not adequate. In these cases one has to consider systemic therapy, and hopefully there will be newer or less-toxic therapies in the future. ■

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