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EDITORIAL

Let's not presuppose that patients take their medications

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Atopic dermatitis is a very common condition with a variable response to treatment. In patients in whom more conservative therapies are ineffective, cyclosporine can be used. But even cyclosporine is only of variable efficacy in controlling atopic dermatitis. In this issue of the *Journal of Dermatological Treatment*, Beaumont and Arkwright describe a study designed to determine factors associated with the response of atopic dermatitis to cyclosporine treatment (1). They found that cyclosporine was highly effective in patients with atopic dermatitis in whom skin infection was the main trigger and in whom the infection was cleared with antibiotics. Cyclosporine was much less effective when the infection would not clear with antibiotics and when factors other than infection are driving the disease.

The authors come to several intriguing conclusions, including the idea that since cyclosporine is less effective in those without infection, those patients may have a form of atopic dermatitis in which T cells are of relatively minor importance. The conclusions of this study depend on an unmentioned assumption that patients are taking their medication as directed. A better assumption would be that patients with resistant atopic dermatitis are not taking their medication. In clinical trials, atopic dermatitis study subjects do not use their medication as directed; atopic dermatitis patients in the clinic have even worse adherence (2,3).

It should not be at all surprising that cyclosporine was less effective in patients in whom infection did not clear with antibiotics, for if patients aren't taking their antibiotics, they probably aren't taking their cyclosporine either. Explaining why cyclosporine did not work well in atopic dermatitis subgroups does not require patients to have T cells resistant to cyclosporine or dermatitis that isn't driven by a T-cell pathogenesis. These subgroups may have been most resistant to treatment because they were least likely to use treatment.

The variability in response of atopic dermatitis treatment is likely in large measure determined by the variability in adherence to treatment for the disease. Mothers are fearful of steroids; they are probably terrified of cyclosporine. Getting children to take medications—even remembering to have them take it—are major hurdles. Assuring, and even measuring, adherence in a study like this one isn't straightforward. Blood cyclosporine levels would be almost useless for identifying patients taking their medicine because patients tend to take their medication around the time of clinic and study visits and miss many more doses between visits. Without accurate monitoring of adherence, we should be a bit restrained about the conclusions we draw from atopic dermatitis clinical trials.

References

1. Beaumont DR, Arkwright PD, . Factors determining the effectiveness of oral ciclosporin in the treatment of severe childhood atopic dermatitis. J Derm Treatment. 2012;23:318–322.
2. Krejci-Manwaring J, Tusa MG, Carroll C, Camacho F, Kaur M, Carr D, et al. Stealth monitoring of adherence to topical medication: adherence is very poor in children with atopic dermatitis. J Am Acad Dermatol. 2007;56:211–216.
3. Sagransky MJ, Yentzer BA, Williams LL, Clark AR, Taylor SL, Feldman SR. A randomized controlled pilot study of the effects of an extra office visit on adherence and outcomes in atopic dermatitis. Arch Dermatol. 2010;146:1428–1430.

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