

**Table 6A. Atopic Dermatitis**

Referral Guideline	Rationale	Evidence Type
To confirm the diagnosis of atopic dermatitis in a patient with dermatitis.	Allergist/immunologists are specifically trained to diagnose atopic dermatitis <sup>1</sup> . Defining IgE-mediated sensitivity (by skin or in vitro testing) is useful in the differential diagnosis.	Diagnostic
To identify the role of inhalant allergy in patients with atopic dermatitis.	Aeroallergens may trigger atopic dermatitis. In such patients, environmental control may be helpful. <sup>2-10</sup>	Diagnostic Indirect outcome (environmental control)
To identify the role of food allergy in patients with atopic dermatitis.	Approximately 35% of young children with moderate to severe atopic dermatitis have food allergy; the association appears less common in adults, but is possible. <sup>11-19</sup>	Diagnostic Indirect outcome (food avoidance)
Patients whose atopic dermatitis responds poorly to treatment.	Allergist/immunologists are specifically trained and experienced in managing atopic dermatitis in both children and adults. <sup>20-25</sup>	Indirect outcome (pharmacologic therapy)
For in-depth exploration of immune mechanisms and etiology of atopic dermatitis	Allergist/immunologists can provide a comprehensive and in-depth evaluation of atopic dermatitis based on their training, expertise and understanding of immune mechanisms. <sup>26-34</sup>	Diagnostic
Many people with eczema also have asthma or hay fever as children or adults	Good control of atopic dermatitis may theoretically reduce the incidence and/or severity of asthma. Allergist/immunologists are the only specialists trained in the management of both of these (atopic) disorders. <sup>35-39</sup>	Direct

**References:**

1. Allergy and Immunology Core Curriculum Outline 1996. Core Curriculum Subcommittee of the Training Program Directors. American Academy of Allergy, Asthma and Immunology. *J Allergy Clin Immunol* 1996;98(6pt.1):1012-5, updated in 2002 ([http://www.aaaai.org/professionals/careers/training\\_programs.stm](http://www.aaaai.org/professionals/careers/training_programs.stm)). Evidence grade: IV
2. Platts-Mills TA, Mitchell EB, Rowntree S, Chapman MD, Wilkins SR. The role of dust mite allergens in atopic dermatitis. *Clin Exp Dermatol*. 1983; 8(3):233-247. Evidence grade: II
3. Tupker RA, De Monchy JG, Coenraads PJ, et al. Induction of atopic dermatitis by inhalation of house dust mite. *J Allergy Clin Immunol* 1996;97:1064-1070. Evidence grade: II

4. Huang JL, Chen CC, Kuo ML, et al. Exposure to a high concentration of mite allergen in early infancy is a risk factor for developing atopic dermatitis: a 3-year follow-up study. *Pediatr Allergy Immunol* 2001; 12:11-16. Evidence grade: III
5. Palmer RA, Friedmann PS. Effect of house dust mite avoidance measures in children with atopic dermatitis. *Br J Dermatol* 2001;144:912-913. Evidence grade: Ib
6. Ricci G, Patrizi A, Specchia F, et al. Effect of house dust mite avoidance measures in children with atopic dermatitis. *Br J Dermatol* 2000;143:379-384. Evidence grade: Ib
7. Gutgesell C, Heise S, Seubert S, et al. Double-blind placebo-controlled house dust mite control measures in adult patients with atopic dermatitis. *Br J Dermatol* 2001;145:70-74. Evidence grade: Ib
8. Tan BB, Weald D, Strickland I, et al. Double-blind controlled trial of effect of house dust-mite allergen avoidance on atopic dermatitis. *Lancet* 1996;347:15-18. Evidence grade: Ib
9. Holm L, Bengtsson A, van Hage-Hamsten M, et al. Effectiveness of occlusive bedding in the treatment of atopic dermatitis-a placebo-controlled trial of 12 months' duration. *Allergy* 2001;56:152-158. Evidence grade: Ib
10. Arshad SH, Bateman B, Sadeghnejad A, Gant C, Matthews SM. Prevention of allergic disease during childhood by allergen avoidance: the Isle of Wight prevention study. *J Allergy Clin Immunol*. 2007;119(2):307-13. Evidence grade: Ib
11. Sampson HA, Albergo R. Comparison of results of skin tests, RAST, and double-blind, placebo-controlled food challenges in children with atopic dermatitis. *J Allergy Clin Immunol* 1984; 74:26-33. Evidence grade: Ib
12. Lever R, MacDonald C, Waugh P, et al. Randomized controlled trial of advice on an egg exclusion diet in young children with atopic eczema and sensitivity to eggs. *Pediatr Allergy Immunol* 1998;9:13-19. Evidence grade: Ib
13. Woodmansee DP, Christiansen SC. Improvement in atopic dermatitis in infants with the introduction of an elemental formula. *J Allergy Clin Immunol* 2001;108:309. Evidence grade: III
14. Sampson HA. Utility of food-specific IgE concentrations in predicting symptomatic food allergy. *J Allergy Clin Immunol* 2001;107:891-896. Evidence grade: III
15. Sicherer SH, Morrow EH, Sampson HA. Dose-response in double-blind, placebo-controlled oral food challenges in children with atopic dermatitis. *J Allergy Clin Immunol* 2000;105:582-586. Evidence grade: Ib
16. Niggemann B, Reibel S, Roehr CC, et al. Predictors of positive food challenge outcome in non-IgE-mediated reactions to food in children with atopic dermatitis. *J Allergy Clin Immunol* 2001;108:1053-1058. Evidence grade: Ib
17. Eigenmann PA, Sicherer SH, Borkowski TA, Cohen BA, Sampson HA. Prevalence of IgE-mediated food allergy among children with atopic dermatitis. *Pediatrics* 1998; 101:E8. Evidence grade: III
18. Noh G, Ahn HS, Cho NY, Lee S, Oh JW. The clinical significance of food specific IgE/IgG4 in food specific atopic dermatitis. *Pediatr Allergy Immunol*. 2007;18(1):63-70. Evidence grade: Ib

19. Sistek D. Is the effect of probiotics on atopic dermatitis confined to food sensitized children? *Clin Exp Allergy*. 2006;36(5):629-33. Evidence grade: Ib
20. Leung DY, et al. Disease management of atopic dermatitis: an updated practice parameter. Joint Task Force on Practice Parameters, representing the American Academy of Allergy, Asthma and Immunology, the American College of Allergy, Asthma and Immunology, and the Joint Council of Allergy, Asthma and Immunology. Work Group on Atopic Dermatitis. *Ann Allergy Asthma Immunol* 2004; 93:S1-S21. Evidence grade: IV
21. Van Der Meer JB, Glazenburg EJ, Mulder PG, et al. The management of moderate to severe atopic dermatitis in adults with topical fluticasone propionate. The Netherlands Adult Atopic Dermatitis Study Group. *Br J Dermatol* 1999; 140:1114-1121. Evidence grade: Ib
22. Devillers AC, de Waard-van der Spek FB, Mulder PG, et al. Treatment of refractory atopic dermatitis using 'wet-wrap' dressings and diluted corticosteroids: results of standardized treatment in both children and adults. *Dermatology* 2002; 204:50-55. Evidence grade: II
23. Sowden JM, Berth-Jones J, Ross JS, et al. Double-blind, controlled, crossover study of cyclosporin in adults with severe refractory atopic dermatitis. *Lancet* 1991; 338:137-140. Evidence grade: Ib
24. Harper JI, Berth-Jones J, Camp RD, et al. Cyclosporin for atopic dermatitis in children. *Dermatology* 2001; 203:3-6. Evidence grade: IV
25. Boguniewicz M, Nicol N, Kelsay K, Leung DYM. A multidisciplinary approach to evaluation and treatment of atopic dermatitis. *Sem Cut Med Surg* 2008;27(2):115-27. Evidence grade: IV
26. Gong JQ, Lin L, Lin T, et al. Skin colonization by *Staphylococcus aureus* in patients with eczema and atopic dermatitis and relevant combined topical therapy: a double-blind multicentre randomized controlled trial. *Br J Dermatol*. 1999;140:1114-21. Evidence grade: Ib
27. Taylor AL, Hale J, Hales BJ et al. FOXP3 mRNA expression at 6 months of age is higher in infants who develop atopic dermatitis, but is not affected by giving probiotics from birth. *Pediatr Allergy Immunol*. 2007;18(1):10-19. Evidence grade: Ib
28. Caproni M, Torchia D, Antiga E, et al. The effects of tacrolimus ointment on regulatory T lymphocytes in atopic dermatitis. *J Clin Immunol*. 2006;26(4):370-75. Evidence grade: Ib
29. Verhagen J, Akdis M, Traidl-Hoffman C, Schmid-Grendelmeier P. Absence of T-regulatory cell expression and function in atopic dermatitis skin. *J Allergy Clin Immunol*. 2006;117(1):176-83. Evidence grade: III
30. Dunstan JA, Hale J, Breckler L, Lehmann H. Atopic dermatitis in young children is associated with impaired interleukin-10 and interferon-gamma responses to allergens, vaccines and colonizing skin and gut bacteria. *Clin Exp Allergy*. 2005;35(10):1309-17. Evidence grade: III
31. Homey B, Steinhoff M, Ruzicka T, Leung DY. Cytokines and chemokines orchestrate atopic skin inflammation. *J Allergy Clin Immunol*. 2006;118(1):178-89. Evidence grade: IV
32. Miraglia del Giudice M, Decimo F, Leonardi S, et al. Immune dysregulation in atopic dermatitis. *Allergy Asthma Proc*. 2006;27(6):451-5. Evidence grade: IV

33. Ong PY, Leung DY. Immune dysregulation in atopic dermatitis. *Curr Allergy Asthma Rep.* 2006;6(5):384-9. Evidence grade: IV
34. Fonacier L, Spergel J, Charlesworth EN, et al. Report of the Topical Calcineurin Inhibitor Task Force of the American College of Allergy, Asthma and Immunology and the American Academy of Allergy, Asthma and Immunology. *J Allergy Clin Immunol.* 2005;115(6):1249-53. Evidence grade: IV
35. Cantani A. The growing genetic links and the early onset of atopic diseases in children stress the unique role of the atopic march: a meta-analysis. *J Investig Allergol Clin Immunol.* 1999;9(5):314-20. Evidence grade: IA
36. Allergic factors associated with the development of asthma and the influence of cetirizine in a double-blind, randomized, placebo-controlled trial: first results of ETAC. *Early Treatment of the Atopic Child. Pediatr Allergy Immunol.* 1998;9(3):116-24. Evidence grade: III
37. Marenholz I, Nickel R, Ruschendorf F, Schulz F, Esparza-Gordillo J. Filaggrin loss-of-function mutations predispose to phenotypes involved in the atopic march. *J Allergy Clin Immunol.* 2006;118(4):866-71. Evidence grade: IV
38. Eichenfield LF, Hanifin JM, Beck LA, et al. Atopic dermatitis and asthma: parallels in the evolution of treatment. *Pediatr.* 2003;111(3):608-16. Evidence grade: IV
39. Spergel JM, Paller AS. Atopic dermatitis and the atopic march. *J Allergy Clin Immunol.* 2003;112(6 suppl):S118-27. Evidence grade: IV