

Table 13B. Sinusitis

Referral Guideline	Rationale	Evidence Type
Patients with chronic rhinosinusitis of any type.	This set of conditions related to chronic inflammation of sinus and contiguous nasal mucosa often co-exists with allergic rhinitis. ¹ Allergist/immunologist care is associated with improved outcomes. ² Allergy immunotherapy is demonstrated to improve outcomes in patients with concomitant allergic rhinitis. ³	Direct outcome evidence Indirect outcome evidence (immunotherapy)
Patients with chronic or recurrent Infectious rhinosinusitis.	Many patients with this condition have humoral immunodeficiency, cystic fibrosis, fungal sinusitis, and granulomatous diseases. ¹ Allergist/immunologists are trained in the evaluation and management of these disorders. ⁴	Diagnostic evidence and indirect outcome evidence (avoidance, pharmacologic, and immunologic therapy)
Patients with chronic eosinophilic rhinosinusitis.	This is a chronic inflammatory disease with characteristics of allergic inflammation. ¹ It often co-exists with aspirin sensitivity, asthma, and sinus/nasal polyposis. ^{5,6} Allergist/immunologists are experts in allergic inflammation and can evaluate and treat both environmental allergy and aspirin sensitivity. ⁴	Diagnostic evidence, indirect outcome evidence (avoidance, pharmacologic, and immunologic therapy)
Patients with allergic fungal rhinosinusitis.	This is a chronic inflammatory disease with characteristics of IgE and eosinophilic inflammatory response to fungi in sinuses. ^{7,8} Evaluation involves allergy skin testing and other laboratory testing. ⁹ Management involves medical management, allergen immunotherapy and surgery. ^{9,10} Allergist/immunologists are experts in the evaluation and management of allergic diseases, including allergy immunotherapy. ⁴	Diagnostic evidence, indirect outcome evidence (pharmacotherapy, immunotherapy)

References:

- Steinke JW, Borish L. The role of allergy in chronic rhinosinusitis. *Immunol Allergy Clin North Am.* 2004; 24(1):45-57. Evidence grade: IV
- McNally PA, White MV, Kaliner MA. Sinusitis in an allergist's office: analysis of 200 consecutive cases. *Allergy Asthma Proc.* 1997; 18(3):169-75. Evidence grade: III
- Nathan RA, Santilli J, Rockwell W, Glassheim J. Effectiveness of immunotherapy for recurring sinusitis associated with allergic rhinitis as assessed by the Sinusitis Outcomes Questionnaire. *Ann Allergy Asthma Immunol.* 2004; 92(6):668-72. Evidence grade: III
- 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 2002
http://www.aaaai.org/professionals/careers/training_programs.stm Evidence grade: IV

5. Borish L. Sinusitis and asthma: entering the realm of evidence-based medicine. *J Allergy Clin Immunol.* 2002; 109(4):606-8. Evidence grade: IV
6. Szczeklik A, Stevenson DD. Aspirin-induced asthma: advances in pathogenesis, diagnosis, and management. *J Allergy Clin Immunol.* 2003; 111(5):913-21. Evidence grade: IV
7. Schubert MS. Allergic fungal sinusitis: pathogenesis and management strategies. *Drugs.* 2004; 64(4):363-74. Evidence grade: IV
8. Schubert MS, Goetz DW. Evaluation and treatment of allergic fungal sinusitis. I. Demographics and diagnosis. *J Allergy Clin Immunol.* 1998; 102(3):387-94. Evidence grade: IV
9. Schubert MS, Goetz DW. Evaluation and treatment of allergic fungal sinusitis. II. Treatment and follow-up. *J Allergy Clin Immunol.* 1998; 102(3):395-402. Evidence grade: IV
10. Mabry RL, Marple, BF, Folker RJ, Mabry CS. Immunotherapy for allergic fungal sinusitis: Three years' experience. *Otolaryngol Head Neck Surg.* 1998; 119:648-51. Evidence grade: III