



Continuing Medical Education Activity Information

Allergic Rhinitis-IQ: Closing the Treatment Gap in Allergic Rhinitis Quality of Life Issues Adult Webisode 2

Learning Objectives

Upon completion, participants should be able to:

- Discuss the impact of AR on patients' daily functioning and quality of life
- Formulate appropriate management strategies for patients with AR

Program Faculty

Gary N. Gross, MD
Clinical Professor of Medicine
University of Texas
Southwestern Medical School
Dallas, TX

Contributors

R. Grant Steen, PhD
Chapel Hill, NC

Kimberly Diminni, MS, MD
Clinical Content Manager
Med-IQ
Baltimore, MD

Target Audience

This activity is intended for nurse practitioners and physician assistants, as well as other healthcare professionals with an interest in the management of allergic disease.

Accreditation/Designation Statement

Med-IQ is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Med-IQ designates this activity for a maximum of 0.5 *AMA PRA Category 1 Credit*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Statement of Evidence-Based Content

Educational activities that assist physicians in carrying out their professional responsibilities more effectively and efficiently are consistent with the ACCME definition of continuing medical education (CME). As an ACCME-accredited provider of CME, it is the policy of Med-IQ to review and ensure that all the content and any recommendations, treatments, and manners of practicing medicine in CME activities are scientifically based, valid, and relevant to the practice of medicine. Med-IQ is responsible for validating the content of the CME activities it provides. Specifically, (1) all recommendations addressing the medical care of patients must be based on evidence that is scientifically sound and recognized as such within the profession; (2) all scientific research referred to, reported, or used in CME in support or justification of a patient care



recommendation must conform to generally accepted standards of experimental design, data collection, and analysis.

Med-IQ is not liable for any decision made or action taken in reliance upon the information provided through this activity.

Acknowledgment of Commercial Support

This activity is supported by an educational grant from sanofi-aventis U.S.

Statement of Need

Because allergic rhinitis (AR) has a significant effect on quality of life and may lead to further health complications, healthcare professionals (MDs, NPs, and PAs) must accurately diagnose and appropriately treat affected patients based on their symptoms and level of impairment in daily life. These healthcare professionals have an important role in the diagnosis and management of AR because it is prevalent in both urban/suburban and rural settings and across various regions of the country, and many patients self-medicate. Unfortunately, professional practice gaps exist in the optimal treatment of this condition. Educational activities designed to inform healthcare professionals about advances in the understanding of the pathophysiologic mechanisms of AR and the emergence of newer medications for controlling symptoms, including the relief of nasal congestion, are needed to improve patients' overall health and quality of life.

Educational Design

This activity is available in one format. Participants can earn credit by participating in up to four Webisodes. Each Webisode contains an attestation and evaluation. To receive credit, each participant must read the introductory CME material, view the entire Webisode, and complete the attestation and evaluation.

Hardware/Software Requirements

Operating System

Microsoft® Windows® 98, NT, 2000, XP, ME

Browser/PDF Viewer

Microsoft Internet Explorer 5.5 or 6.0

Adobe® Acrobat® Reader® or Adobe Reader

Media Player

Windows Media® Player 7.1 or higher, OR

RealPlayer® Basic 8 or higher

Connection Type

High bandwidth (300k) is strongly recommended

Low bandwidth (100k) results in less than optimal quality

56k dial-up/modem is not sufficient

Estimated Time to Complete This Activity: 0.5 hour



Dates of Release and Expiration

Original Release Date:
June 24, 2009

Expiration Date for Submitting Test for Credit:
June 24, 2010

Disclosure Policy

Med-IQ requires any person in a position to control the content of an educational activity to disclose all relevant financial relationships with any commercial interest. The ACCME defines "relevant financial relationships" as those in any amount occurring within the past 12 months, including those of a spouse/life partner, that could create a conflict of interest (COI). Individuals who refuse to disclose will not be permitted to contribute to this CME activity in any way. Med-IQ has policies in place that will identify and resolve COIs prior to this educational activity. Med-IQ also requires faculty to disclose discussions of investigational products or unlabeled/unapproved uses of drugs or devices regulated by the US Food and Drug Administration.

Med-IQ Disclosure

The employees of Med-IQ have no financial relationships to disclose.

Faculty Disclosure

The content of this activity has been peer reviewed and has been approved for compliance. The faculty has indicated the following financial relationships, which have been resolved through an established COI resolution process, and has stated that these reported relationships will not have any impact on his ability to give an unbiased presentation.

Gary N. Gross, MD

Consulting fees/advisory boards: Cornerstone Biopharma, Sepracor Inc.
Speakers' bureau: AstraZeneca, GlaxoSmithKline, sanofi-aventis U.S., Genentech, UCB Pharma, Inc.

Grant/research support: Alcon, Amgen, Amphastar Pharmaceuticals, Inc., Apicron, AstraZeneca, Capnia, Inc., Johnson & Johnson, sanofi-aventis U.S., SkyePharma, GlaxoSmithKline, Novartis Pharmaceuticals, Schering-Plough Corporation

R. Grant Steen has stated no real or apparent conflicts.

Kimberly Diminni, MS, MD has stated no real or apparent conflicts.

How to Receive CME Credit

Participants must view the CME materials, view the activity, and complete and submit the attestation and evaluation online at www.AllergicRhinitis-IQ.com. For other CME activities, please visit www.Med-IQ.com.

ADA Statement

Med-IQ fully complies with the legal requirements of the ADA and the rules and regulations thereof. If any participant in this educational activity is in need of accommodations, please contact Amy Sison, CME Compliance Manager, at (443) 543-5179.

© 2009 Med-IQ. All rights reserved.

Adult Webisode 2:

Quality of Life Issues

Dennis's Clinical History

- Borderline hypertension
- Obese
- Severe daytime sleepiness
- Month-long head cold
- Clear nasal discharge

Faculty



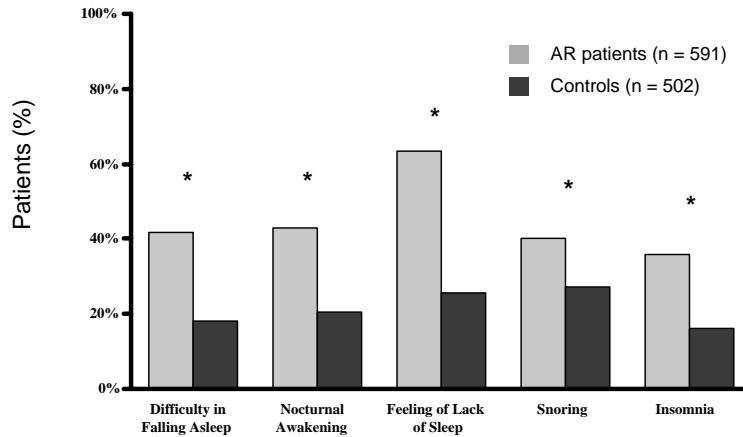
Gary N. Gross, MD
Clinical Professor of Medicine
University of Texas
Southwestern Medical School
Dallas, TX

Dennis's Clinical Concerns

- Month-long head cold
- Daytime sleepiness
- Clear nasal discharge
- Congestion
- Rhinorrhea
- Nasal itch
- Sneezing
- Postnasal drip

Impact of AR on Sleep

Prevalence of Sleep Complaints and Sleep Disorders Among Adults With and Without AR



* $P < 0.001$ for patients with AR vs. controls.

Léger D, et al. *Arch Intern Med.* 2006;166:1744-8.

AR and Sleep Disturbance

Nocturnal Symptoms

- Loud snoring
- Observed apneic pauses
- Snorting/gasping/choking
- Restless sleep

Daytime Symptoms

- Daytime somnolence
- Behavioral/school problems
- Morning headaches
- Nasal congestion
- Mouth breathing

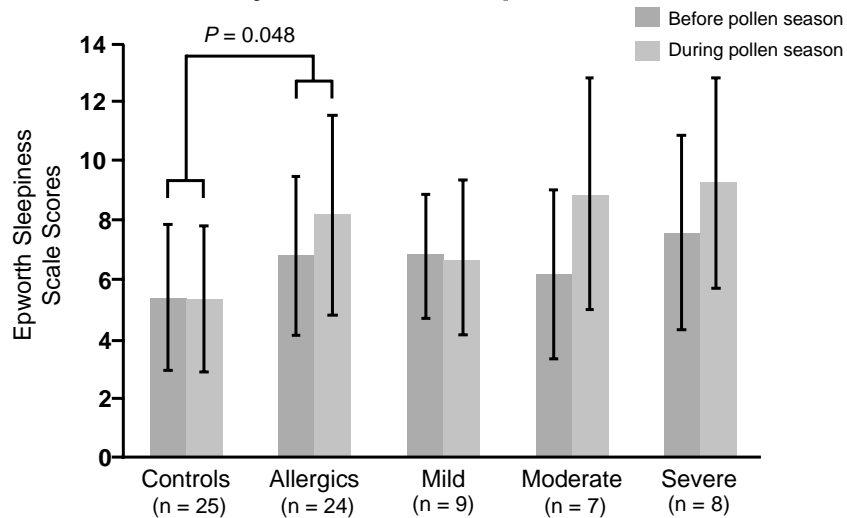
McColley SA, et al. *Chest.* 1997;111:170-3.
Ferguson BJ. *Otolaryngol Head Neck Surg.* 2004;130:617-29.

Clinical Concern: Sleep Apnea

Dennis did not experience the following:

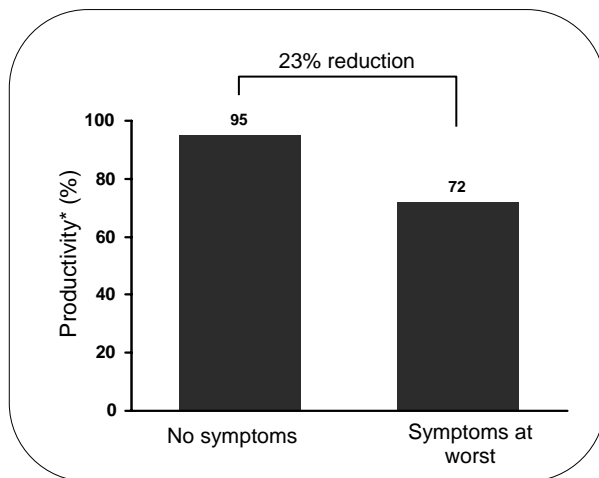
- Waking abruptly at night
- Episodes of diaphoresis or enuresis
- Choking or gasping sounds during sleep

AR Leads to Increased Daytime Sleepiness



Stuck BA, et al. *J Allergy Clin Immunol*.2004;113:663-8.

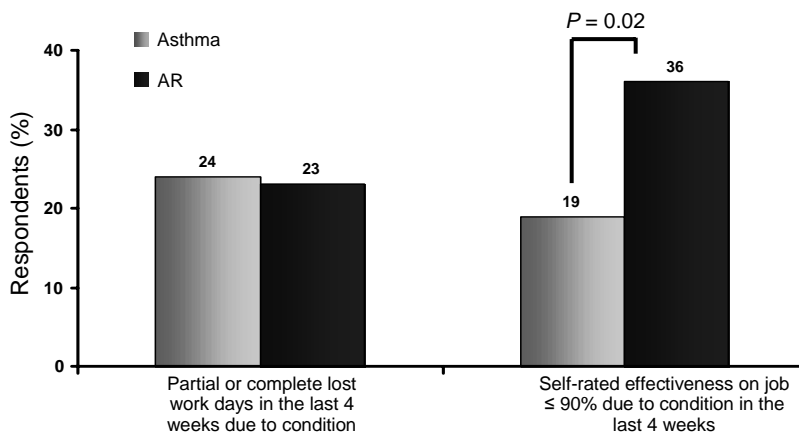
Work Productivity and Allergies



*Mean productivity

Allergies in America: A Landmark Survey of Nasal Allergy Sufferers. www.myallergiesinamerica.com. Accessed 05/19/09

Work Loss Due to Allergic Rhinoconjunctivitis vs. Asthma



Blanc PD, et al. *J Clin Epidemiol.* 2001;54:610-8.

AR: Impact on Sleep

- Nasal congestion and mouth breathing are a consequence of AR
 - Results in sleep-disordered breathing
 - ↑ sleep fragmentation
 - ↑ microarousals (10-fold greater than controls)
 - ↑ airway blockage which may lead to sleep apnea
- Loss of sleep results in daytime fatigue

Nathan RA. *Allergy Asthma Proc.* 2007;28:3-9.
Blaiss MS. *Allergy Asthma Proc.* 2003;24:231-8.

Optimizing Patient Outcomes

- Identify allergens causing symptoms
 - Skin prick test
- Eliminate identified allergens as best as possible
- Regular exercise and weight loss program
- Identify optimal treatment

Estimated Symptom Efficacy of AR Pharmacotherapies

	Sneezing	Rhinorrhea	Nasal obstruction	Nasal itch	Eye symptoms
H₁-antihistamines					
oral	++	++	+	+++	++
intranasal	++	++	+	++	0
intraocular	0	0	0	0	+++
Corticosteroids					
intranasal	+++	+++	+++	++	++
Chromones					
intranasal	+	+	+	+	0
intraocular	0	0	0	0	++
Decongestants					
intranasal	0	0	++++	0	0
oral	0	0	+	0	0
Anticholinergics	0	++	0	0	0
Antileukotrienes	0	+	++	0	++

++++ = Very good/excellent efficacy
 +++ = Good efficacy
 ++ = Mild efficacy
 + = Questionable efficacy
 0 = No effect

Bousquet J, et al. *Workshop Expert Panel. Allergic Rhinitis and its Impact on Asthma (ARIA): Executive summary of the workshop report. Allergy* 2002; 57:841-55.

Intranasal Corticosteroids

- The onset of effect with nasal corticosteroids may be delayed
 - May take up to 12 hours to observe symptom relief
- Consistent use over days and weeks maximizes efficacy
- Proper administration technique is critical to clinical success

Marple BF, et al. *Otolaryngol Head Neck Surg.* 2007;136:S107-24.

Relative Importance of Medication Characteristics

Results of the AAFA Allergic Rhinitis Survey

Feature	Percent of Patients
Symptom relief	96
Minimal side effects	93
Easy to take	75
Non-habit-forming	75
Dosing flexibility	54
Steroid-free	51

Total survey population = 1,214.

Marple BF, et al. *Otolaryngol Head Neck Surg.* 2007;136:S107-24

Advantages of Intranasal Drug Administration in Patients With AR

- High drug concentration delivered to the target organ, avoiding or minimizing unwanted systemic effects
- Reductions in unwanted systemic effects associated with oral administration of some drugs

Marple BF, et al. *Otolaryngol Head Neck Surg.* 2007;136:S107-24.

Intranasal Corticosteroids Considerations

- The onset of effect with nasal corticosteroids may be delayed
 - May take up to 12 hours to observe symptom relief
- Consistent use over days and weeks maximizes efficacy
- Proper administration technique is critical to clinical success

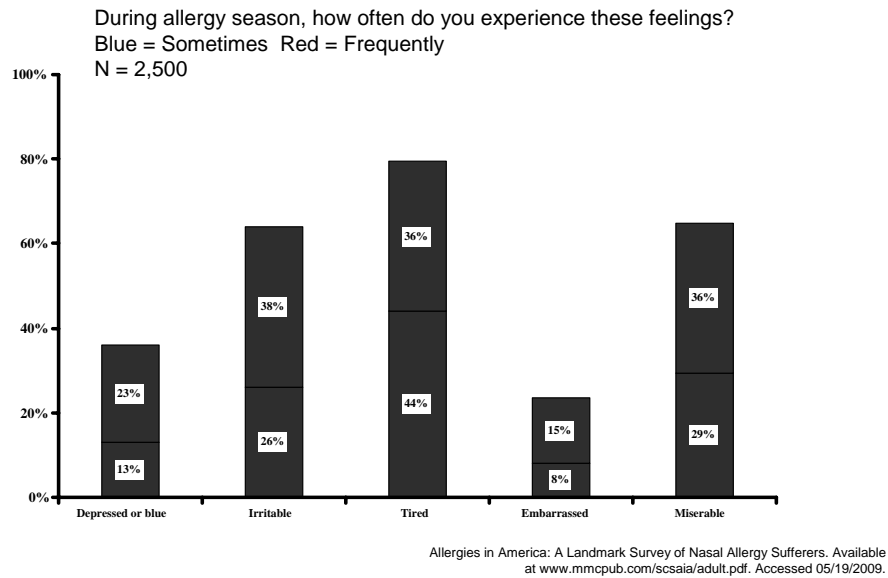
Greiner A. *Med Clin N Am.* 2006;90:17–38.

Sedating Antihistamines: Risk Factors for Traumatic Occupational Injury

- Sedating antihistamine exposures led to elevated acute injury risk (main effect OR: 2.93)
- Young workers using a sedating antihistamine had a particularly high risk of injury.
- Use of sedating antihistamines was not different between physician-diagnosed and self-diagnosed AR patients.

Hanrahan LP, et al. *Am J Ind Med.* 2003;44:438–46.

Symptoms During Worst Month



Discussion With Dennis

- His daytime sleepiness was resolving with therapy, and he was encouraged to continue with treatment
- Weight loss and exercise were discussed
- Skin prick test was encouraged



Child Webisode 1:
The Risks of Asthma and Other Comorbidities



Child Webisode 2:
Differential Diagnosis and Quality of Life Issues



Adult Webisode 1:
Classification Schemes and Management Strategies



Adult Webisode 2:
Quality of Life Issues

Comments about today's program?

Call toll-free 866 858 7434
E-mail info@med-iq.com

To receive credit, participants must view the CME materials, view the activity, and complete and submit the attestation and evaluation online at www.AllergicRhinitis-IQ.com.

Click on the "Get Credit" tab to complete your attestation and evaluation forms now.

Please visit us online at www.Med-IQ.com for additional activities sponsored by Med-IQ.

