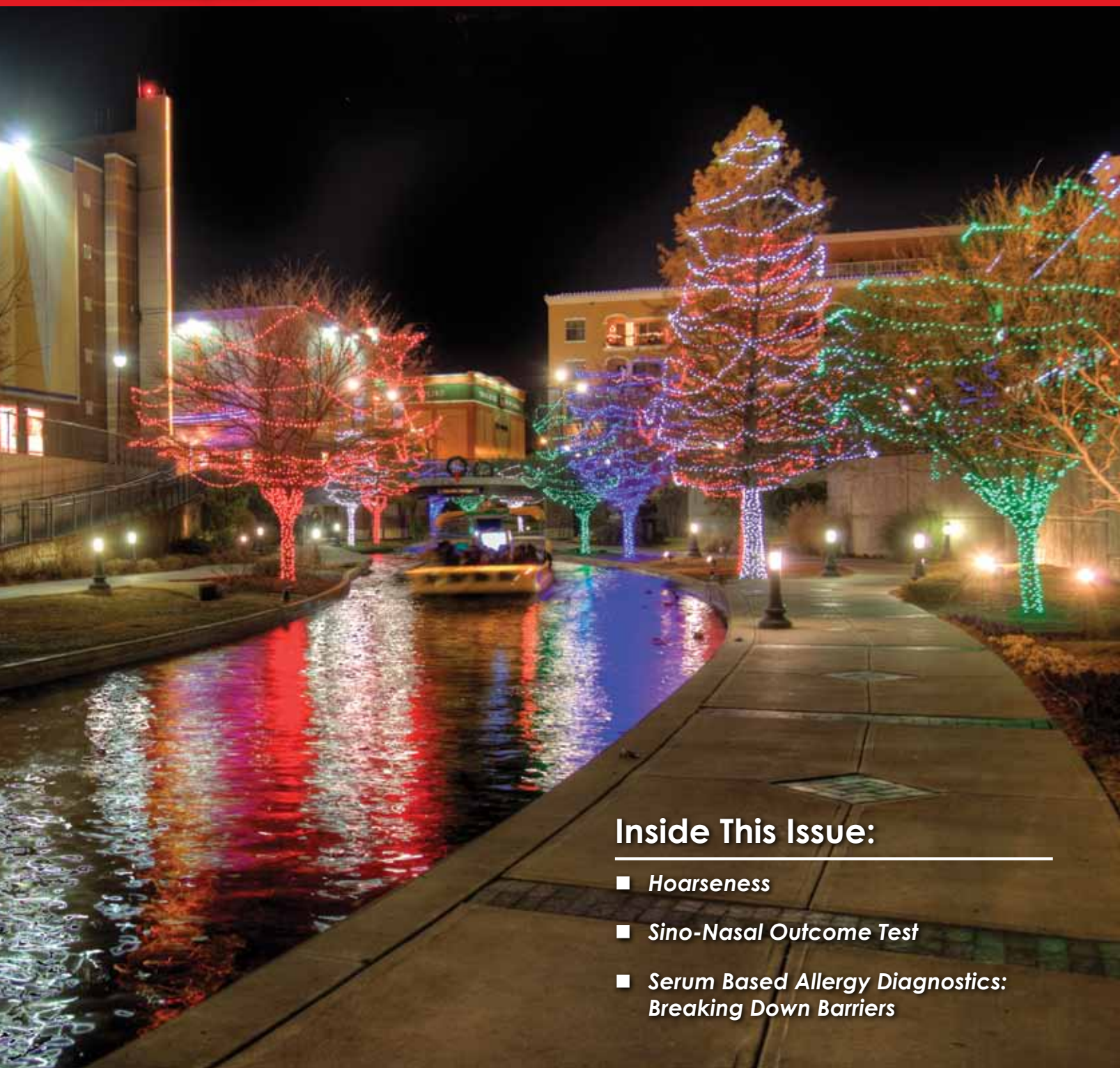
OKLAHOMA OTOLARYNGOLOGY ASSOCIATES, L.L.C.

OOA Today



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On behalf of the physicians and staff of Oklahoma Otolaryngology Associates and the audiologists and staff of Oklahoma Hearing Center, I would like to welcome you to the second edition of the "OOA Today" magazine. We hope that it provides useful information about our group as well as useful tips for the care of your patients.

Our primary goal as a group of physicians and audiologists is to provide for our patients the best possible ear, nose and throat care in the Oklahoma City metropolitan area. We are constantly striving to achieve excellence in diagnosis and treatment of ear, nose and throat diseases through education, appropriate use of technology and a balance between surgical and non-surgical treatment of the patients who are referred to our practice. We are very thankful for you entrusting us with the care of your patients and we will do everything within our power to see that your patients are satisfied with the care we provide.

Oklahoma Otolaryngology Associates and Oklahoma Hearing Center have seven office locations in the metropolitan area as well as physicians traveling to Tulsa, Chickasha, Clinton, Pauls Valley and Yukon. Our practice includes not only general otolaryngology but sub-specialists in otology and head and neck cancer. The audiologists of Oklahoma Hearing Center also provide a full spectrum of audiologic services, including hearing and balance testing. We would like to thank you, once again, for allowing us to partner with you in caring for your patients.

Sincerely,

Christopher A. Paskowski, MD
Vice President,
Oklahoma Otolaryngology Associates

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Hoarseness

Voice concerns frequently generate visits to healthcare providers so it is important to understand the causes of dysphonia and the treatment options available to care for your patient.

Dysphonia is the inability to produce sounds using the vocal cords, dysarthria involves impairment of speech production. The voice can be weak, breathy, harsh, rough, brassy or unpredictable. The disability can be mild, affecting only the singing voice or other demanding vocal activity. It can be severe and resulting in complete aphonia.

Causes of hoarseness can be grouped into a number of categories, including infection, inflammation, trauma, endocrine/metabolic, neoplasms, hematologic, iatrogenic/pharmacologic or functional. According to Christopher A. Paskowski, MD, "Hoarseness that persists for 12 weeks should be examined by an ENT with either indirect or fiber optic laryngoscopy."

Infections of the vocal tract can include viruses, which often cause acute laryngitis lasting less than a week and self-limited. These infections respond well to hydration, anti-inflammatories and good vocal hygiene which involves avoidance of prolonged loud talking or shouting, take frequent short breaks from lecturing or singing and avoidance of harsh coughing or throat clearing.

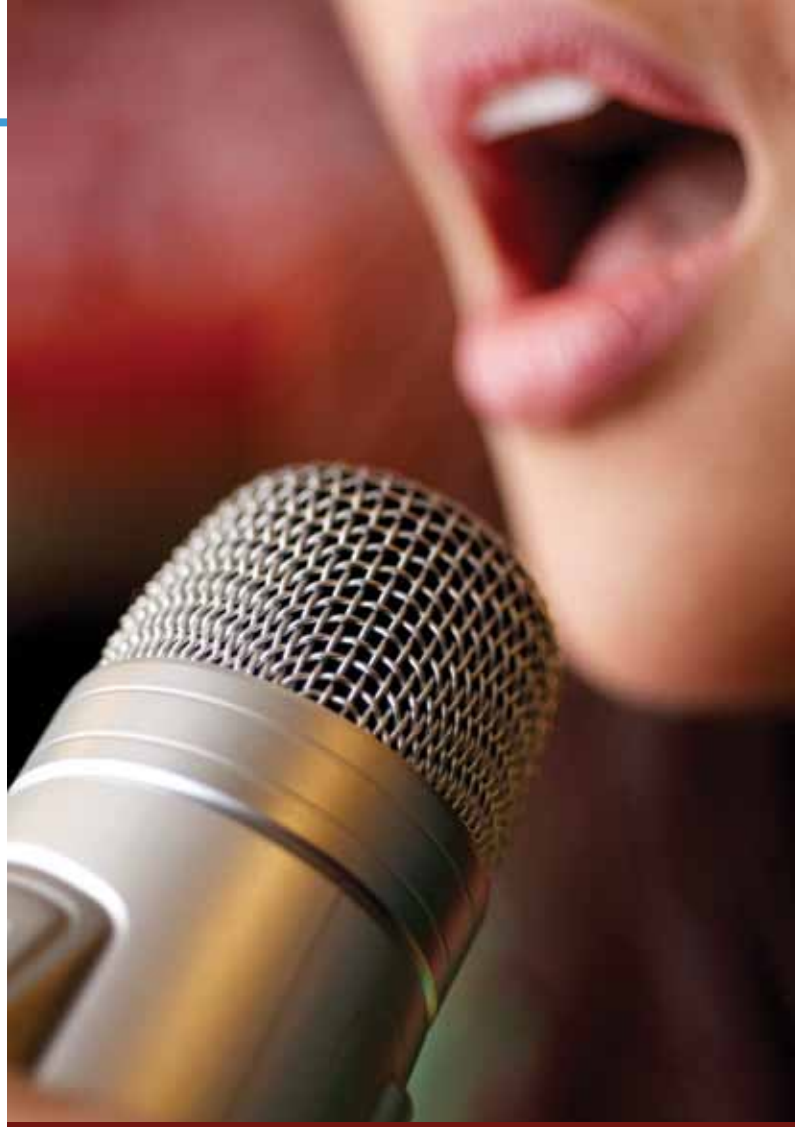
Bacterial or fungal laryngitis are less common, more severe and longer lasting than viral laryngitis. These infections may require office laryngoscopy to diagnose and usually require a course of antibiotic or antifungal therapy, which can be performed by a physician at Oklahoma Otolaryngology Associates. Frequently, a severe sinus infection with concomitant post-nasal purulent drainage will cause a secondary bacterial laryngitis.

Inflammation of the vocal cords most often comes as a result of Laryngo-Pharyngeal Reflux (LPR), a common and often misdiagnosed form of gastroesophageal reflux disease. This is usually treated with a prolonged course of PPIs, often taking six months or more of therapy to achieve improvement. Some patients even require Nissen fundoplication of the lower esophagus if the laryngitis doesn't resolve with pharmacotherapy.

Laryngeal trauma can occur externally as in the case of a steering wheel injury or a choking assault. Direct visualization is important to rule out lacerations or hematomas that might threaten the airway and a CT scan is often helpful to rule out occult laryngeal fractures.

Your patient's hoarseness can be caused by a traumatic endotracheal intubation. Latrogenic injuries can include intubation trauma, prolonged intubation, as in an ICU patient, injury to the laryngeal structures when performing another surgery (such as an anterior neck fusion), or injury to the recurrent laryngeal nerve in the neck or upper thorax such as with thyroid or cardiac surgery. Therapy is often conservative if neurapraxia is suspected, since the nerve may heal. However, if nerve section is suspected, then the paralyzed vocal cord may require injection or laryngoplasty to improve vocal function.

Thyroid disease, especially chronic hypothyroidism can adversely affect the voice as can less common endocrine dysfunction such as hypersecretion of growth hormone or calcitonin. Insulin deficiency does not affect the voice per se, but diabetes, especially Type II, is often accompanied by obesity with a higher incidence of GERD/LPR and related inflammatory laryngitis.



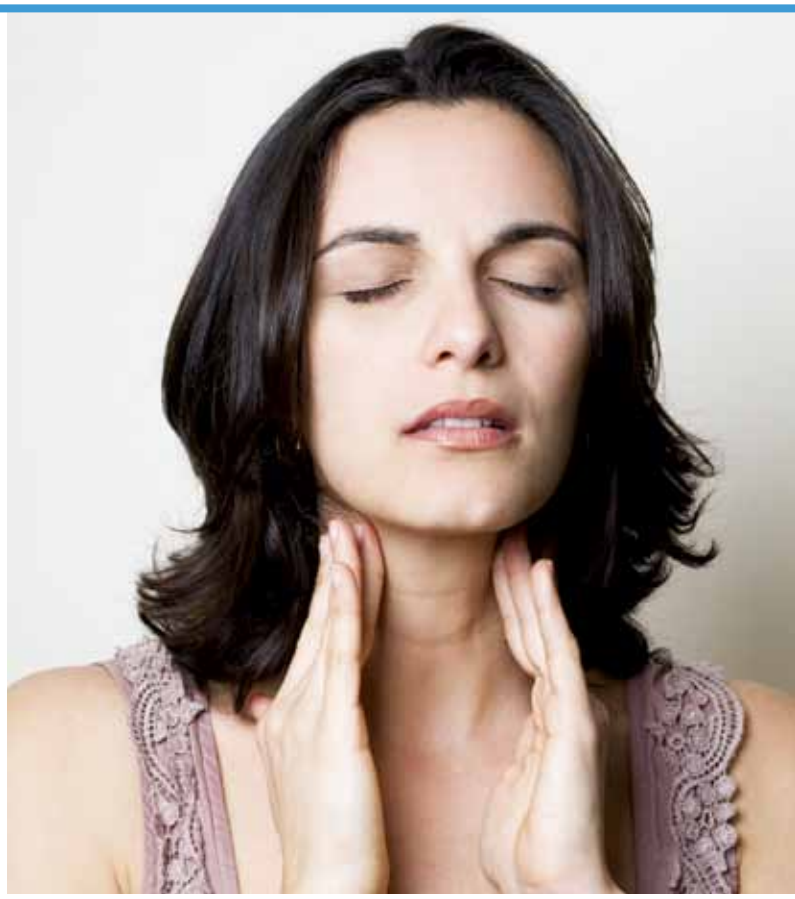
Hoarseness that persists for 12 weeks should be examined by an ENT with either indirect or fiber optic laryngoscopy.

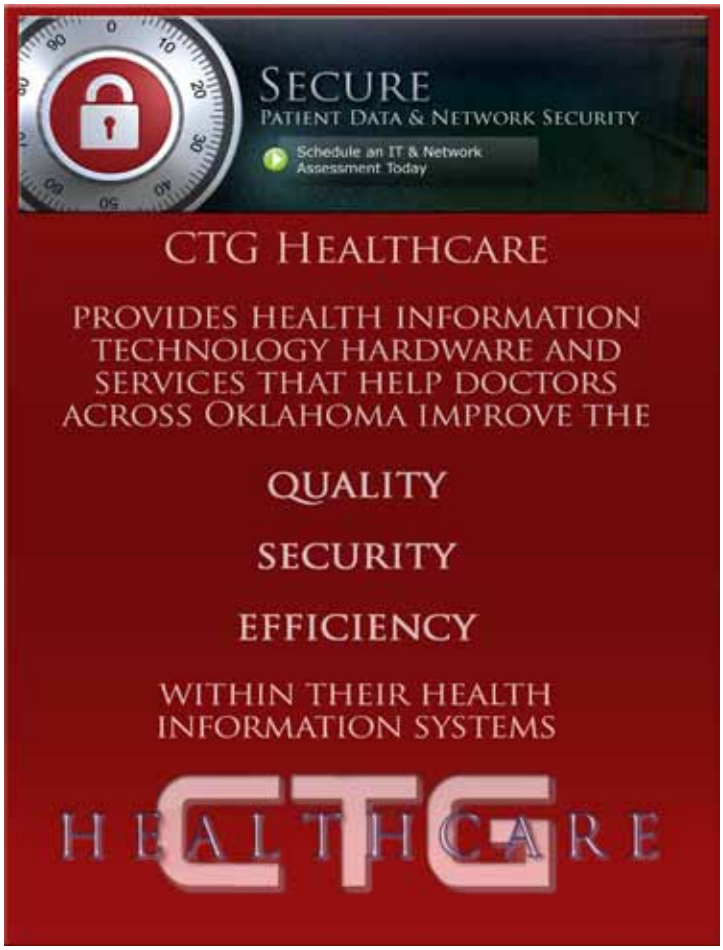
— Christopher A. Paskowski, MD

Laryngeal carcinoma often presents with hoarseness, especially if the tumor originates on one of the vocal cords. Any voice change in a smoker should be investigated thoroughly to rule out vocal cord cancer prior to other treatments. Other head and neck malignancies are less likely to cause hoarseness, but may be present with dysphagia, otalgia or a painless neck mass. Lung and thyroid cancer have the capability of causing vocal cord paralysis secondary to involvement of the recurrent laryngeal nerve.

Medications that cause mucosal drying or irritation can affect vocal function and cause hoarseness. Vocal irritants such as fluticasone propionate and salmeterol inhalation power, orally inhaled steroids for asthma and ACE inhibitors such as Lisinopril can cause inflammation of the vocal cords and hoarseness.

The causes of hoarseness are many and varied and careful discussion of patient history coupled with visualization of the vocal cords usually results in correct diagnosis and treatment. Most hoarseness can be improved or eliminated with proper therapy. The physicians at Oklahoma Otolaryngology Associates would be pleased to help with the care for patients with any of these physical conditions.





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Sino-Nasal Outcome Test (SNOT-20)

The following questionnaire is intended to help define your symptoms and provide valuable information and insights for your doctor. Answer the questions, rating to the best of your ability the problems you have experienced over the past two weeks.

Patient Name: _____

Date: _____

1. Consider how severe the problem is when you experience it and how frequently it happens. Please rate each item below on how "bad" it is by circling the number that corresponds with how you feel. 2. Please mark the most important items affecting your health (maximum of five items).	No Problem	Very Mild Problem	Mild or Slight Problem	Moderate Problem	Severe Problem	Problem As Bad As It Can Be		Five Most Important Items
1. Need to blow nose	0	1	2	3	4	5		○
2. Sneezing	0	1	2	3	4	5		○
3. Runny nose	0	1	2	3	4	5		○
4. Cough	0	1	2	3	4	5		○
5. Post-nasal discharge	0	1	2	3	4	5		○
6. Thick nasal discharge	0	1	2	3	4	5		○
7. Ear fullness	0	1	2	3	4	5		○
8. Dizziness	0	1	2	3	4	5		○
9. Ear pain	0	1	2	3	4	5		○
10. Facial pain/pressure	0	1	2	3	4	5		○
11. Difficulty falling asleep	0	1	2	3	4	5		○
12. Wake up at night	0	1	2	3	4	5		○
13. Lack of sleep	0	1	2	3	4	5		○
14. Wake up tired	0	1	2	3	4	5		○
15. Fatigue	0	1	2	3	4	5		○
16. Reduced productivity	0	1	2	3	4	5		○
17. Reduced concentration	0	1	2	3	4	5		○
18. Frustrated/restless/irritable	0	1	2	3	4	5		○
19. Sad	0	1	2	3	4	5		○
20. Embarrassed	0	1	2	3	4	5		○

Score	Evaluation	Recommended Next Step
0 to 29	No problem to mild problem	No action necessary or symptoms can be treated with medications
30 to 69	Mild to moderate problem	Symptoms can most likely be treated with minimally invasive office procedure
70 to 100	Moderate to severe problem	Treatment to be determined by doctor, possible surgical candidate

*The SNOT score evaluation is to be used as a guide and not a physicians' diagnosis. Treatment to be determined by a doctor upon appointment.

Serum Based Allergy Diagnostics:

Breaking Down Barriers

by Jason S. Sigmon, M.D.

We have a legacy in modern healthcare whereby advances in medical diagnostics increase the healthcare provider's ability to more efficiently manage specific disease states. These diagnostic advancements must include accurate, reliable and reproducible results as well as being easily accessible for patients. For these diagnostic advances to impact comprehensive management of specific diseases, therapeutic options must be equally available and reproducible.

It is not unusual for the combination of advances in diagnostics and therapeutics to change how and where patients are treated and frequently leads to centralization of disease management at the primary care level, or at least a shift in the relationship between the specialist and the primary care provider.

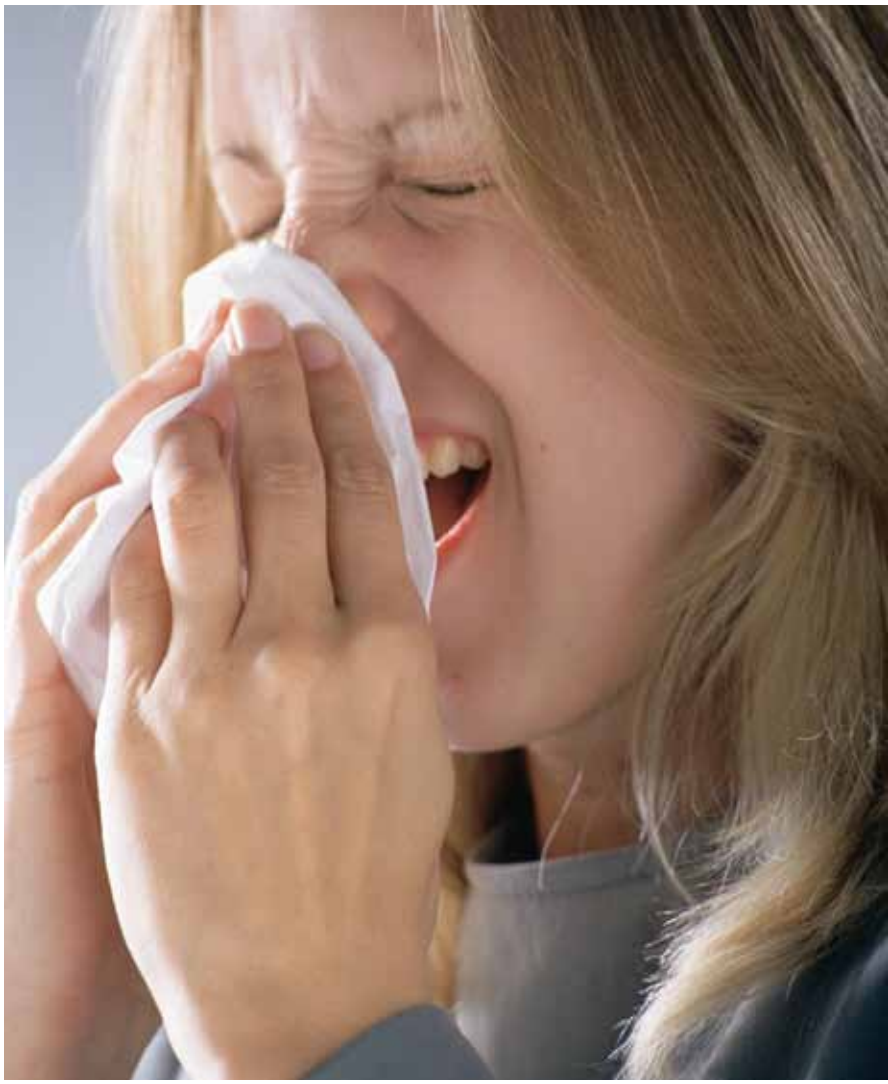
We don't have to look far to see how diagnostic and therapeutic advances change where and how patients are managed when we examine disease states such as diabetes and hypertension. It is clear that these disease states are managed much differently now versus twenty years ago and it is equally clear that the patient has benefited from these changes.

The title of this article mentions 'barriers' and therefore I think it's appropriate for an explanation as to how diagnostic options for specific diseases, or lack thereof, may have barriers that impact patient management. In the example of IgE mediated or triggered diseases such as allergic rhinitis, atopic dermatitis and asthma, we can focus on provocative skin testing as an example.

Traditionally, skin testing has been our best diagnostic option, and for accurate, reproducible and reliable results required specialty administration and reporting. An obvious geographic 'barrier' exists with this practice. Specialty care is not equally available in rural versus metropolitan areas. Increasingly, I have found that even within our major metropolitan area many limitations exist for patients to travel locally for skin testing diagnostics, such as time away from work and fuel costs.

With serum IgE diagnostics the geographical barrier to accurate diagnosis is overcome. Regardless of the patient's geography, healthcare providers can determine their patient's specific IgE sensitivities guiding appropriate pharmacotherapy utilization and environmental or dietary avoidance.

Now that this geographic and efficiency barrier to IgE diagnosis has been overcome with serum specific testing, primary care healthcare providers and specialists are able to more efficiently manage these diseases. Fortunately, advances in pharmacotherapy have paralleled these diagnostic advances allowing primary care healthcare providers to more comprehensively manage these diseases. These advances include not only pharmacotherapy, but specific immunotherapy as well.



While efficient and safe application of specific immunotherapy desensitization at the primary care level is a process that is currently still evolving, the implications of this advance as well as the sub-lingual delivery of immunotherapy is truly leading to a paradigm shift in how IgE diseases are managed. And as our legacy supports in other disease states, the patient is the one who ultimately benefits.

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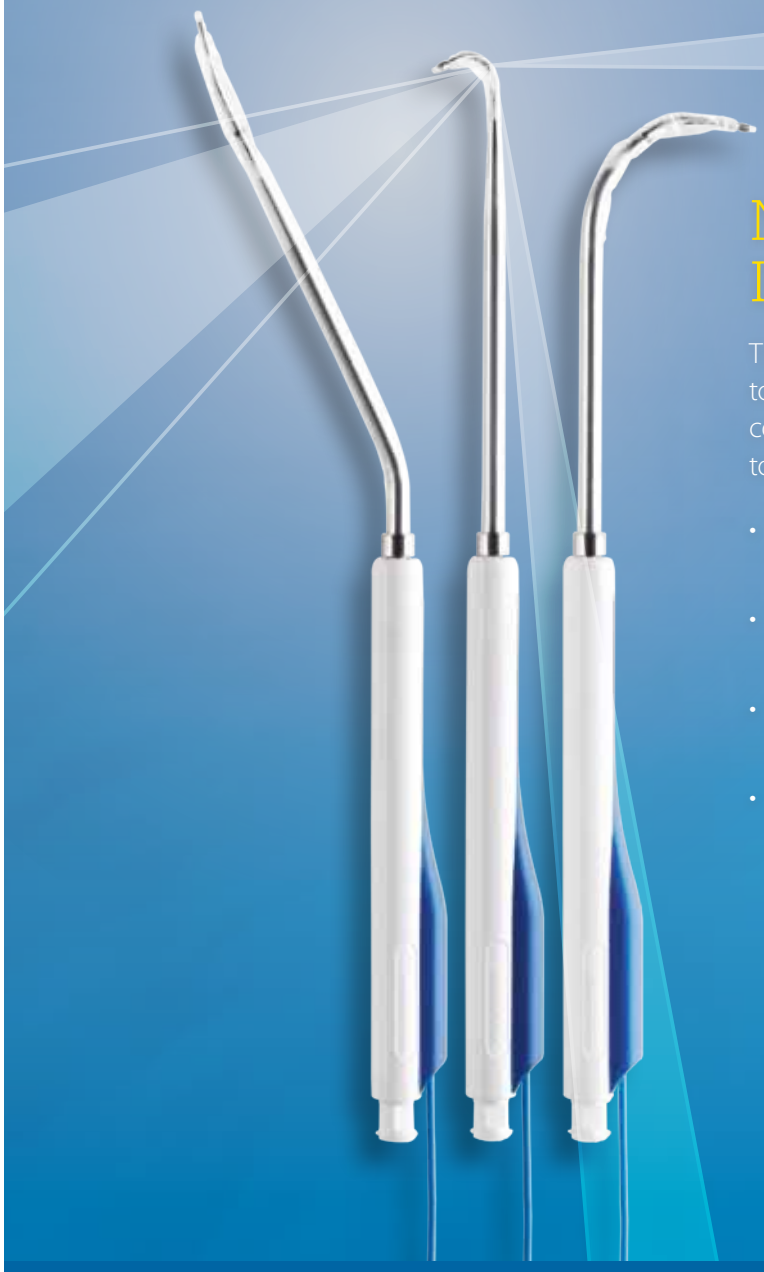

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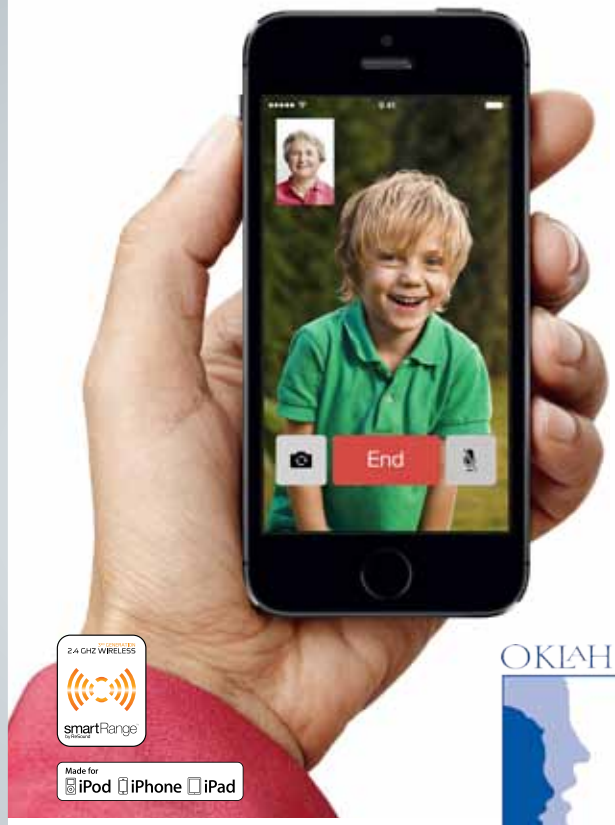

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