american rhinologic society **NOSE NEWS**

NOSE NEWS JUNE 2015

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ARS ANNUAL MEETING: A LOOK AHEAD

Peter Hwang, MD, FARS President Elect and Program Chair

To our distinguished membership, thank you for helping to make the spring ARS at COSM meeting a great success. I owe a special debt of gratitude to the members of the Program Committee, our panelists, and moderators for your dedication in helping to develop and present our scientific program. The quality of the oral and poster presentations was outstanding, reaffirming the ARS scientific meetings as one of the premier showcases for the work of our brightest and most innovative researchers. We hope that you left Boston with new ideas, fresh perspectives, and renewed enthusiasm for our field. A special thanks to Wendi Perez, without whom our meeting would simply not be possible. Thank you, Wendi, for your tireless efforts and your dedication to the ARS.

I am pleased to share with you that for the first time this fall, the ARS will be expanding its fall scientific meeting from a single day to one and a half days. We have found that we have so much worthy content to present that we have simply outgrown our original meeting footprint. This year's fall annual meeting is being held at the Dallas Sheraton in Dallas, Texas, and the program will now begin at 1pm on Friday, September 25, 2015 and conclude at 5pm on Saturday September 26, 2015. Program highlights include:



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- Joint panels with the American Academy of Otolaryngic Allergy and the North American Skull Base Society
- The annual Kennedy Lecture, delivered this year by Dr. James Stankiewicz

- · Keynote address from Dr. Daniel Hamilos of the American Academy of Allergy, Asthma, and Immunology
- The 2nd annual Fall Film FESStival... back by popular demand
- Cutting edge oral and poster research presentations
- Live webcast with Latin American colleagues
- Guest countries: China, Japan, Korea, Taiwan, and Thailand

Registration and abstract submission information can be found on our website.

See you in Dallas!

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PRESIDENT'S REPORT

Roy Casiano, MD, FACS

As President of the ARS, I would like to thank you for your continued support of our Society's mission in education and research. The Society continues to grow significant interest from members at all levels of otolaryngology. Whether you are a resident, a fellow, a general otolaryngologist in practice, or an academic rhinologist, we hope that the ARS will continue to be your place for the latest rhinologic news, research, advocacy, and education. In collaboration with sister organizations like the AAOA, AAO-HNS, and others, we have drafted new initiatives to confront the rapidly changing pace of healthcare changes in our country. Advocacy for our patients and members continue to be one of our greatest challenges and priorities.



Under the leadership of our President-elect, Peter Hwang, the ARS meeting at COSM (spring meeting) was another great success. The Program Committee has once again provided a spectacular program, highlighting the best cutting-edge and innovative rhinologic research in

the world, as well as provocative interactive panels, discussing some of the most controversial topics in rhinology.

There have also been new initiatives in the way we deliver educational programs to our members. With the support of our corporate partners, we have enhanced our annual courses with hands-on anatomic endoscopic dissection labs that have a focus on residents, fellows, and general otolaryngologists. We have also improved our online access to webinars and video streaming, covering some of the most popular topics in rhinology, presented by some of the leading experts in our field. There have also been enhancements to our online patient educational materials. Finally, our very popular Summer Sinus Symposium Meeting is now free for members. Therefore, if you're not a member, we hope you would

consider becoming one. If you are a member, thank you again for your support.

Hope to see you in Chicago (Summer Sinus Symposium) and Dallas (ARS at the AAO-HNS).





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SUMMER SINUS SYMPOSIUM 2015...RIGHT AROUND THE CORNER! Rick Chandra, MD Kevin Welch. MD

Once again the Summer Sinus Symposium comes to Chicago, IL at the Westin Michigan Avenue July 16-18, 2015. This will be our 4th annual summer conference where we discuss all aspects of rhinology and the impact these issues have on patient care.



National leaders such as Drs. David Kennedy, Donald Lanza, Timothy Smith, Todd Kingdom, Michael Setzen, Brent Senior, Alexander Chiu and many more will lead panel discussions of the pertinent clinical issues

affecting the field of rhinology. Watch Drs. Chiu and Senior expertly dissect cadaver heads while answering your questions. Our goal is to deliver a program broad in content and reach, and high in value for the practicing otolaryngologist and allied health professional involved in rhinologic patient care. In addition to core rhinology topics, a large and experienced faculty will address contemporary topics such as rhinoplasty, skull base surgery, practice management, allergy, sleep apnea, the role of reflux, and applications of new technologies, including balloon dilation. This program will serve the interests of all attendees to be sure.

Enhance your experience through a number of non-CME symposia during which attendees will be able to hone their skills with the latest technologies. On Friday night, we will mix and mingle in the truly unique Signature Room on the 95th floor of the John Hancock Center, conveniently located just steps from the Westin. Wake up to breakfast symposia each morning and join your colleagues in some stimulating discussion lead by experts in our field. Participate in audience polls, ask your questions, and debate the experts.

This meeting is targeted to all otolaryngologists doing rhinology and is the BEST SINUS COURSE IN THE WORLD! Tell your colleagues, come for the camaraderie, and enjoy the best value ever in a sinus course. Join the American Rhinologic society and get registration for free.

Join us! It's a meeting that isn't to be missed. Chicago is also a terrific summer destination for couples and families!

Register Now!

For more information, please visit the <u>Summer Sinus Symposium Website</u>. To become a member of the ARS, please <u>fill out an</u> <u>application</u>.





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JOURNAL EDITOR UPDATE

David W. Kennedy, MD

IFAR Ranked #6 of 43 Otolaryngology Journals

I am very pleased to report that the International Forum of Allergy and Rhinology (IFAR) was ranked #6 of 43 otolaryngology journals in the most recent Institute for Scientific Information (ISI) Impact Factor ranking. This is an excellent achievement for a relatively new journal and reflects the work put in by the Editorial Board and all those who review manuscripts for the Journal. At the same time, we have reduced the average time from submission to 1st decision to 26 days, and the average time from acceptance to online publication to 47 days. The impact factor of the Journal is now 2.371, placing it above all of the general otolaryngology journals including Laryngoscope. With the dramatic rise in impact factor, the Journal has also seen a significant increase in submissions, especially from overseas. The editorial office received 435 new articles over the past year and processed a total of 714 manuscripts. The majority of articles from overseas came from China, Canada, Korea and Australia. I would like to take this opportunity to thank all of the reviewers of manuscripts for the Journal for providing detailed, timely and appropriately encouraging critical reviews. It is you, the reviewers, who have enabled the Journal to achieve this high status and recognition. Each of the Associate Editors rank the reviewers in terms of timeliness, and detail and accuracy and I am pleased to say that moving forward both the American Rhinologic Society and the American Academy of Otolaryngologic Allergy have agreed to recognize the top reviewers for the Journal at their annual meetings.



The Journal accepts original research, shorter articles on specialty techniques, letters to the editor and selected review articles and we encourage accompanying short video clips. A distinct advantage of submitting to IFAR, in addition to the relatively short average review time, is the fact that the Journal publishes color illustrations at no charge. The Journal is circulated free of charge to all members of the American Rhinologic Society and the American Academy of Otolaryngologic Allergy, as well as to subscribers and subscribing institutions throughout the world. Last year the publishers, Wiley, introduced a free App available for download from the iTunes App Store which enables you to read articles of interest and download the entire Journal onto an iPhone or iPad. In addition, the app provides excellent functionality, allowing the reader to store articles of interest, and even e-mail specific figures and place them into PowerPoint presentations. If you have not already done so, I would strongly encourage you to download this free app. Simply search "IFAR" in the iTunes App Store.

Please take a moment to ensure that your institution also subscribes to the International Forum of Allergy and Rhinology. If you cannot access the Journal through the institution, it would be very helpful if you would contact your librarian and see if it can be made available for those in your hospital or university who are currently not members of the AAOA or ARS.

Again, I would like to thank everyone who has worked so hard to make this Journal the success that it has become.

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PAC CORNER: CRITERIA FOR COMPUTED TOMOGRAPHY (CT) IMAGING FOR ACUTE OR CHRONIC RHINOSINUSITIS

Ayesha Khalid, MD Monica O. Patadia, MD

Prior authorizations or peer-to-peer reviews are becoming increasingly common with certain insurance carriers for obtaining sinus imaging. However, there are no exact criteria for obtaining CT imaging for acute or chronic rhinosinusitis. Below, we review the current guidelines.

According to the 2007 AAO-HNS Sinusitis Guidelines, radiographic imaging of any kind is unnecessary for acute sinusitis unless there is concern for a complication or a suspicion of an alternative diagnosis. Imaging should only be considered for patients with symptoms of rhinosinusitis for at least 7-10 days who either have a history of recurrent symptoms (3 or more acute episodes in 1 year) or who are unresponsive to multiple courses of antibiotics. Patients who are immunocompromised, who have a concern for acute frontal or sphenoid sinusitis or periorbital cellulitis or concern for antibiotic resistance may be considered for imaging. In addition, imaging should be considered prior to any surgical intervention to evaluate a patient's anatomy.

It is important to note that the majority of uncomplicated cases of acute (less than 4 weeks) or subacute (4-12 weeks) sinusitis should be diagnosed clinically and should not require any imaging. CT imaging has a high sensitivity but a low specificity for diagnosing acute sinusitis. A routine scan done on any patient may note abnormal findings in 40% of asymptomatic



patients. Additionally, 87% of patients with upper respiratory tract viral infections may note sinus abnormalities on sinus CT. Due to this lack of specificity, imaging for routine acute sinusitis is ultimately not cost effective and exposes patients to unnecessary radiation.

Ultimately, the decision to obtain imaging should be based on the clinician's suspicion or concern of recurrent or refractory sinusitis despite treatment. Additionally, concern for a complicated infection, abscess or neoplasm warrants imaging. There is a trend in certain accountable care organizations to revisit the use of unnecessary imaging and as a commonly ordered procedure in the United States, sinus CT scan are certainly under review. Consequently, it is prudent to document one's logic clearly in the patients chart to help improve communication between all parties involved and to assure that payers will be able to follow the logic when deciding whether to grant prior authorization.

REFERENCES

- 1. Okuyemi, Kolawole and Tsue, Terance. Radiologic Imaging in the Management of Sinusitis. American Family Physician. 2002: 66: 1882-1886.
- 2. Willett LR, Carson JL, Williams JW Jr. Current diagnosis and management of sinusitis. J Gen Intern Med. 1994;9:38–45.
- 3. Kuhn JP. Imaging of the paranasal sinuses: current status. J Allergy Clin Immunol. 1986;77:6-8.
- 4. Skinner DW, Richards SH. A comparison between sinus radiographic findings and the macroscopic appearances of the paranasal sinus mucosa. Ear Nose Throat J. 1991;70:169–72.
- 5. Rao VM, el-Noueam KI. Sinonasal imaging. Radiol Clin North Am. 1998;36:921–39.
- 6. http://www.entnet.org/sites/default/files/uploads/PracticeManagement/Reimbursement/_files/PQRS-Measure-333.pdf

got inflammation? Learn how sustained, steroid delivery directly to the mucosa can improve outcomes.

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RHINOLOGY PERSPECTIVES: EVALUATION AND MANAGEMENT OF "SINUS HEADACHE" Zara M. Patel, MD

John M. DelGaudio, MD

Headache is the most common reason why people around the world seek medical care.¹ As pharmaceutical companies use the term "sinus headache" freely to sell headache therapies, and primary care and emergency room physicians often diagnose patients with "sinus headache" based solely on location of pain, many headache patients eventually come to be seen by otolaryngologists. It thus becomes our responsibility to separate out those patients who truly have sinus disease versus other headache syndromes masquerading as rhinosinusitis.

Neurologists have noted that obtaining a complete history is the most important part of the patient visit.² By heeding this advice, the otolaryngologist can immediately filter out many patients who do not meet criteria for acute or chronic rhinosinusitis (ARS or CRS). Of note, headache in the setting of ARS may be a real phenomenon, but most patients who end up in an otolaryngology office have been suffering with their headaches over an extended period of time. To this point, The International Headache Society (IHS) has stated that CRS is "not

validated as a cause of headache or facial pain unless relapsing into an acute stage".³ In spite of this, most patients coming to see sinus specialists with this diagnosis will need to be



convinced, either by an imaging study or via endoscopy that they themselves can see, that the sinuses are not the source.

Certainly, some patients will meet ARS or CRS criteria, and should be treated appropriately with medical or surgical therapy when indicated. However, the literature demonstrates many cases of inappropriate antibiotic use and even invasive surgical procedures due to misdiagnoses, all because of failure to obtain appropriate diagnostic testing of the paranasal sinuses.

Although the list of headache syndromes misdiagnosed as rhinosinusitis is long, here are some key points to help diagnose appropriately:³

- 1. When a patient presents with "sinus headache" but they have a clear endoscopy and CT scan, the most common correct diagnosis is migraine.⁴⁻⁶
 - If sinusitis is present on the CT scan but not in the distribution of the headache, consider migraine, as the sinus disease is not likely causing the pain.
- 2. If headache is accompanied by photophobia, phonophobia, nausea or vomiting and is aggravated by or causes avoidance of a normal physical routine, migraine is the likely cause.
- 3. If pain is reproduced by chewing, biting or pressing on the temporomandibular joints, or if there is an audible sound upon opening or pressure on these joints, Temporomandibular Joint Dysfunction (TMD) is the likely cause.
- 4. If pain is "band-like", tightening or squeezing and non-pulsating around the head, and the CT is clear, Tension-Type Headache (TTH) is the likely cause.
- 5. If pain is centered around the orbit or temple, is unilateral and accompanied by rhinorrhea, lacrimation and/or sweating, and the CT is clear, Cluster Headache (CH) is a likely cause.
- 6. If the symptoms are consistent with CH but either occur greater than 5 times/day for more than half the time, or are persistent for >3 months, and attacks are prevented completely with indomethacin, the likely cause is either Paroxysmal Hemicrania (PH) or Hemicrania Continua (HC).
- 7. If the pain is sharp or stabbing, lasting seconds up to 2 minutes and is limited to one or more of the trigeminal nerve distribution, then Trigeminal Neuralgia (TN) is the most likely cause.
- 8. If headache develops in close relation to jaw claudication and/or repeated episodes of amaurosis fugax, Giant Cell Arteritis (GCA) is a likely cause.
- 9. If the headache has developed or markedly worsened over at least 3 months of regular overuse of a medication for acute treatment of headache, Medication Overuse Headache (MOH) is the likely cause.
- 10. Although controversial and with only low-level evidence confirming this as a possible diagnosis, contact-point headache may be a consideration as well.

Although a neurologist is the appropriate specialist to work through a primary headache syndrome with the patient until an optimal treatment regimen has been established, there are some simple steps the otolaryngologist can take to help a patient until they are able to receive this specialized care.⁷

- 1. Triptans are first line abortive therapy to treat migraine. Neurologists can then work with the patient to find the right preventive medication that works for them.
- 2. If PH or HC are suspected, indomethacin in a dose of ≥150mg per day will abort these headaches.
- 3. If CH is suspected, oxygen at 7L/min or more along with a dose of sumatriptan can often abort the headache.
- 4. If GCA is suspected, this is considered an ophthalmologic emergency, and starting the patient on high dose steroids (40-60mg) is indicated to prevent possible blindness.
- 5. If TMD is suspected, conservative therapy including soft foods, bite guards, NSAIDs and warm compresses are indicated before pursuing more invasive options.
- 6. If MOH is suspected, the only possible treatment is complete removal of pain medication for an extended period of time.

REFERENCES

- 1. nz.nielsen.com/news/OTC_Aug07.shtml. Accessed April 9, 2015.
- 2. Peatfield R. Headache and facial pain. Medicine 2008;36(10):526-30.
- 3. Headache Classification Subcommittee of the International Headache Society. ?The international classification of headache disorders: 2nd edition. Cephalalgia ?2004;24(Suppl 1):9–160.
- 4. Schreiber CP, Hutchinson S, Webster CJ, et al. Prevalence of migraine among patients with history of self-reported or physician-diagnosed "sinus" headache. Arch Inten Med 2004;164:1769–72.
- 5. Eross EJ, Dodick DW, Eross MD. The sinus, allergy and migraine study (SAMS). Headache 2007;47:213–24.
- 6. Foroughipour M, Sharifian SM, Shoeibi A, et al. Causes of sinus headache in patients with a primary diagnosis of sinus headache. Eur Arch Otorhinolaryngol 2011;268:1593–6.

7. Patel ZM, Setzen M, Poetker DM, DelGaudio JM. Evaluation and Management of "sinus headache" in the Otolaryngology Practice. Otolaryngol Clin N Am 47 (2014) 269–287



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RESIDENTS AND FELLOWS COMMITTEE UPDATE Jamie Litvack, MD

Senior residents convened in Los Angeles for the 7th Annual Incoming Rhinology Fellows course from April 30-May 2. Under the guidance of co-directors Drs. Joe Hahn and Jeff Suh, and with the support of industry partners Karl Storz and Medtronic, the incoming Rhinology fellows met for a two-day course in advanced sinus and skull base surgery. Faculty discussed a range of topics, including basic sinus anatomy, extended endoscopic approaches and managing complications in endoscopic sinus surgery. Residents participated in a full-day cadaver dissection at UCLA. In addition to Drs. Han and Suh, we extend our gratitude to the local and visiting faculty who volunteered their time including Drs. Naveen Bhandarkar, Seth Brown, Christopher Church, Adam DeConde, Anne Getz, Jivianne Lee, Jamie Litvack, and Bozena Wrobel.

We urge graduating residents to update their membership contact information so the American Rhinologic Society may continue to communicate with you after graduation. And remember, membership is free for the first 6 months after completing fellowship.

Membership for residents and fellows is FREE. Invite your fellow residents to become ARS members. Benefits include free registration for the Summer Sinus Symposium, discounts on registration at the Spring and Fall meeting, free access to the International Forum of Allergy &

Rhinology journal, Nose News e-letter, and members-only educational material for you and your patients. <u>Apply for membership now</u>.

Speaking of education, check out our new educational content under the education tab. New sinus videos are posted. New patient handouts on a range of topics from how to perform saline irrigations to what to expect after sinus surgery are available to print out for your patients. In addition, there are more than 22 hours of lectures by experts on a range of Rhinology topics. You must be logged in as a member to access this wealth of content.

See you at the Summer Sinus Symposium in July!

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CASE OF THE QUARTER: EXTRAOSSEOUS CHORDOMA OF THE NASOPHARYNX



Daniel R. Cox, MD, Jeremiah A. Alt, MD, PhD

A 28 year-old female was referred to sinus and skull base clinic for evaluation of a nasopharyngeal mass found incidentally on an MRI of the cervical spine. She denied any sinonasal or neurological symptoms. Family history was significant for a father who died of a nasal tumor of unknown type. Physical examination, including anterior rhinoscopy and cranial nerve exam, was unremarkable. In-office nasal endoscopy revealed a smooth, mucosalized mass in the posterior nasopharynx (Figure 1).



Figure 1. Endoscopic appearance of the mass in the nasopharynx viewed through the left nasal passage. White arrow: Left eustachian tube orifice.

An MRI showed a T2-hyperintense cystic lesion measuring approximately 1.6 cm in greatest dimension. The mass was centered anterior to the pre-spinal musculature in the nasopharyngeal soft tissues. There was extension into the clivus, which could be seen best on the sagittal T2 sequences, but this was not appreciated initially. Since the patient was asymptomatic and there were no identified concerning findings on imaging, the decision was made to observe for 4 months with a follow up MRI. On repeat MRI, the mass was slightly larger, and mild enhancement of the surrounding mucosa was seen (Figure 2).



Figure 2. Axial T1-weighted post-contrast MRI. White arrow: Heterogeneously-enhancing mass in the nasopharyngeal soft tissues. Note mild enhancement of surrounding mucosa

Importantly, the lesion was noted to communicate with the clivus posteriorly through a small channel that was felt to be the median basal canal (Figure 3).



Figure 3. Axial T2-weighted MRI with fat saturation. Thin arrow: T2 hyperintense mass in nasopharynx. Thick arrow: Sinus tract between nasopharyngeal mass and clivus (median basal canal). Note "golf ball on a tee" appearance.

A CT scan was obtained which showed a small focus of calcification within the mass and confirmed extension into the median basal canal of the clivus (Figure 4). There was also some mild scalloping of the anterior clivus. These finding were concerning for a more aggressive etiology and warranted a biopsy.



Figure 4. Sagittal bone-windowed CT without contrast demonstrating a soft tissue mass in nasopharynx. White arrow: median basal canal in clivus.

Endoscopic biopsy was performed, revealing a mass that was lobular and white in color with a small cystic component. Frozen section analysis revealed a myxoid neoplasm, with the diagnosis of chordoma being favored. Immunohistochemical staining of the permanent specimens showed diffuse positivity for S100, cytokeratin AE1/AE3, and CAM5.2 (anti-cytokeratin antibody), confirming the diagnosis of chordoma.

Following discussion at our head and neck tumor board, surgical resection was recommended with post-operative radiation therapy dependent on final pathology. The tumor was resected via a transnasal endoscopic approach with a posterior septectomy to improve visualization of the tumor. Bilateral wide sphenoidotomies with resection of the inter-sinus septum and drilling of the sphenoid floor allowed excellent access to the superior extent of the tumor. The tumor was then dissected to the level of the clivus and excised. Frozen sections of the surgical margins sent intraoperatively were all negative at the conclusion of the case. The patient has had no clinical signs of recurrence in 9 months of follow up.

Chordomas are malignant tumors which arise from embryonic notochord remnants¹. Skull base chordomas typically present as midline, extradural masses centered within the clival bone². Extraosseous nasopharyngeal chordoma is a rare skull base chordoma subtype in which the tumor is centered in the nasopharyngeal soft tissues³. This diagnosis can be easily missed because a high index of suspicion is required since these masses are not centered within the clival bone, and may be mistaken for more common soft tissue pathologies. Of critical importance in this case was recognition of key imaging features. The median basal canal is a sinus tract leading from the nasopharynx into the midline clivus4. Embryologically, it is thought to be the location where the notochord exits the skull base as it migrates into the nasopharyngeal soft tissues. It is frequently seen in extraosseous nasopharyngeal chordomas4 and its presence suggests this diagnosis. The narrow tract leading from the mass to the clivus gives the lesion a "golf ball on a tee" appearance on axial T2-weighted MRI sequences (figure 3). Other important imaging characteristics include areas of calcification within the tumor and scalloping of the anterior border of the clivus^{3,4}, both of which were seen in this case.

Conclusions:

- Extraosseous chordoma, although rare, is an important consideration in the diagnosis of nasopharyngeal soft tissue masses.
- Presence of a sinus tract into the clivus (median basal canal) should raise suspicion for a chordoma.
- Other imaging findings suggesting chordoma include evidence of calcification within the tumor and scalloping of the anterior border of the clivus.
- A high index of suspicion is required in order to make the diagnosis of extraosseous chordoma in a timely manner and prevent treatment delays.

REFERENCES

- 1. Chugh R, Tawbi H, Lucas DR, Biermann JS, Schuetze SM, Baker LH. Chordoma: the nonsarcoma primary bone tumor. The oncologist 2007; 12:1344-1350.
- 2. Fernandez-Miranda JC, Gardner PA, Snyderman CHet al. Clival chordomas: A pathological, surgical, and radiotherapeutic review. Head & neck 2014; 36:892-906.
- 3. Yan ZY, Yang BT, Wang ZC, Xian JF, Li M. Primary chordoma in the nasal cavity and nasopharynx: CT and MR imaging findings. AJNR American journal of neuroradiology 2010; 31:246-250.
- 4. Nguyen RP, Salzman KL, Stambuk HE, Ahuja AT, Harnsberger HR. Extraosseous chordoma of the nasopharynx. AJNR American journal of neuroradiology 2009; 30:803-807.

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The American Rhinologic Society would like to express our deepest thanks and appreciation to the participants of our Corporate Partners Program. Our corporate partnerships have been invaluable in their support of ARS initiatives to promote excellence in rhinology and skull base surgery. Through our ongoing collaborative relationships, we hope to continue to mutually develop exciting and lasting opportunities for our members to enhance education, investigation, clinical care, and patient advocacy in the future.

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