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James Stankiewicz, MD **ARS President**

President's Message

The ARS is continually looking at ways to improve educational and research opportunities for our members. Rhino World 2009 occurring in April in Philadelphia will fulfill everyone's wishes in this regard. The joining together of ISIAN, IRS, ARS, and AAOA at one meeting is unprecedented. The world of Rhinology will come to Philadelphia. The number of courses, panels, free papers covering the nose,

-Olympus

sinuses, facial cosmetic surgery, and allergy has not been seen in the U.S. since 2000. Please make a great effort to attend this excellent educational experience.

The ARS Board of Directors is working to help the membership improve reimbursement for sinus surgery. Many members have had trouble getting paid for the use of balloon dilation during sinus surgery. The ARS leadership is in the process of working with AAO-HNS and AAOA toward a fair solution to the guestion of appropriate coding for endoscopic sinus surgery using a balloon as a tool in assisting surgery.

Several solutions are in discussion and it is hoped that the joint societies will influence the AMA CPT editorial panel favorably to honor existing codes for endoscopic sinus surgery with balloon technology. We will keep you informed as progress is made.

Lastly, the ARS in an attempt to bring more clinical content to our meetings increased the length of our meeting program at COSM and Fall meetings by ½ day. This increased meeting time will bring more clinical panels and papers to our membership. Your meeting evaluations have requested greater clinical meeting content and we have responded accordingly. We appreciate your candid comments and criticisms. They help the ARS put on a better program.



The American Rhinologic Society would like to thank ASL, GYRUS and Xoran for partnering with the ARS Newsletter for 2009.



Registration Form Enclosed

ISSUE #1 2009

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Michael Setzen, MD

Point-of-Service or In-Office CT should be a Covered Otolaryngology Service!

Michael Setzen, MD and Pete Batra, MD

Point-of-service (POS) or in-office CT is becoming more popular today with both patients and otolaryngologists. POS CT enhances patient care by improving the quality of care and convenience that we as a specialty can offer our patients. This diagnostic modality enhances patient satisfaction as the otolaryngologist is able to review the imaging study with the patient at the time of the office visit prior to initiating treatment.

In-office CT may be instrumental in management of our patients in several clinical scenarios. This option is particularly important in the headache patient who is convinced that his or her headache is due to sinusitis. Timely imaging may help confirm or refute this diagnosis. It is helpful in the early postoperative period when the patient complains of facial pain, headache or fever to rule out potential complications. It is useful on the weekend and after hours when requesting a CT in the emergency department could take hours. In addition, it is of important in the patient that meets symptom criteria for chronic rhinosinusitis (CRS) but has normal endoscopy. POS CT will help establish accurate diagnosis and institute appropriate medical therapy in a timely fashion.

A recent case-control study evaluated management of 40 consecutive new patients meeting symptom criteria for CRS with negative endoscopy that underwent point-of-care (POC) CT.1They were compared to 50 patients in the pre-POC CT era whose initial treatment was based on symptoms alone. Interestingly, 10 patients (20%) in the pre-POC CT group were lost to follow-up. Patients undergoing POC CT were more likely to receive oral steroids for management of CRS and were less likely to be lost to follow-up.

From the patient's perspective, POS offers several advantages. There are no scheduling delays as the CT can be performed immediately with no additional time away from work or school. This obviates the delay before the patient is informed of the results, by which time they may already be well and unnecessary medications, especially antibiotics and/or steroids, may have been used.

In spite of this, many radiology benefit management (RBM's) companies will not precertify an otolaryngologist and, therefore, the service will not be reimbursed. RBM's would rather approve a radiology-owned office performing these services especially in the New York area. In-office CT allows the otolaryngologist to diagnose and treat the patient in one visit with complete documentation of the patient's problem. We must continue to challenge these RBM's which are unfairly curtailing the ability of the practicing otolaryngologist to perform in-office CT in the interest of quality patient care.

The standard of care with respect to an otolaryngologist officially reading the report is not well established at this time. It would be most prudent for otolaryngologists to review the CT with the patient and offer a provisional report but send the films electronically to a radiologist for an official reading. CPT codes are as follows:

- CT Sinus- 70486 (CT orbit, sella,etc; without contrast media)
- CT sinus follow-up- 76380 (CT limited or localized follow up study)

Always link the CPT code with an appropriate ICD-9 code and document medical necessity.

1. Conley DB, Pearlman AN, Zhou K, et al. Effect of point-of-care miniCT on treatment of chronic rhinosinusitis. Poster presentation. 2008 ARS Annual Fall Meeting. Chicago, Illinois.

Rhinology World 2009: The Preview

David W. Kennedy, MD, President IRS; James Palmer, MD
President Elect, ISIAN; James Stankiewicz, MD, President Elect, ARS

We would like to invite you to Rhinology World 2009 to be held in Philadelphia April 15-19, 2009. Rhinology World 2009 is the joint IRS/ISIAN/ARS/AAOA international meeting, and looks to be a once in a decade event! All aspects of medical and surgical Rhinology, from rhinoplasty to skull base surgery, from alternative medical therapies to cutting edge genetic treatments will be featured. The meeting will also be co-hosted by The University of Pennsylvania, and CME credit will be offered through the ARS and the AAOA.



The city of Philadelphia, also known as the city of "brotherly love," is the perfect setting for this historic meeting. Home to the Liberty Bell (pictured), and to Independence Hall where the United States Constitution was drafted in 1787, Philadelphia is famous not only for its history but also for its science, art and culture. The Sheraton Philadelphia City Center Hotel, site of the 4-day event, is conveniently located within walking distance of the Philadelphia Museum of Art (pictured), the Rodin Museum, the Franklin Institute and the Academy of Natural Sciences. The social program will include a Welcome Reception Thursday night, and a Gala Dinner at the Constitution Center highlighted by live entertainment and emceed by Dr Nancy Snyderman.

Our world-renowned faculty represents all parts

of the globe. Guest lecturers will hail from North, South and Central America, Europe, Asia, Africa and Australia. This rare gathering of renowned rhinologists will provide ample opportunity for friendship and scholarly interaction. An index of the importance of this meeting can be gauged by commitment of the faculty. World-recognised Rhinology courses such as the NYU Rhinology Update, The Southern States Rhinology Course, the Cornell Rhinology Course, The USC Rhinology Course, and the Penn Rhinology Course have all moved their educational programs to Rhinology World. A fully outfitted cadaver dissection lab will be available, staffed by our talented



OGY WORLD

RS. ISIAN - ARS

faculty. A lab ticket combined with the seminars offered represents the best of any Rhinology course!

The "RhinoWorld Knowledge Bowl" will be an interactive resident knowledge-bowl competition with a \$5000 USD award to the winning resident team, as well as 2nd 3rd and 4th. The Championship battle will be the prime event on Sunday to conclude Rhinology World. Residency training programs or countries are invited to submit their teams of two residents and one alternate for this event. Please see the website for more details on how to enter a team.

The ARS portion of the meeting will mirror the standard Spring meeting of the ARS in content, and will also sponsor CME credit. A prime position on the schedule each day is reserved for the ARS Free Paper Session, and these sessions will comprise the very best of all free papers submitted to Rhinology World. Please note abstract submission date is December 1, 2008, and the submissions will be processed through the Rhinology World website. Applicants will be notified of their acceptance prior to January 1, ample time to make reservations for the meeting. Dr. Stil Kountakis, as 1st Vice president, is in charge of the ARS Free Paper portions of the meeting, as well as the ARS sponsored panels and mini-seminars that will take place during Rhinology World. We look forward to learning about the stimulating advances created by ARS members!

The American Academy of Otolaryngic Allergy has also graciously agreed to bring their Basic Allergy Course to Rhinology World. The basic course will be incorporated into Rhinology World by beginning in the late morning and running through the day. By this mechanism, attendees will be able to participate in the main plenary sessions as well as receive CME credit towards AAOA board certification.

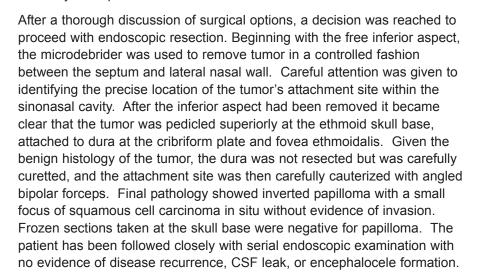
Please continue to follow our website, www.rhinologyworld.com, as we update the information regarding the meeting and highlights of Philadelphia and the surrounding areas. Hotel registration, abstract submission, and meeting registration all are though the website and ready to receive visitors. Please be sure to register early to take advantage of the early registration discount and before the hotel rooms run out!

Case of the Quarter: Inverted Papilloma Eroding the Ethmoid Skull Base

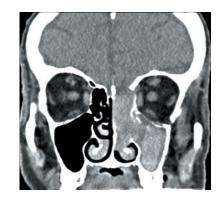
Zachary M. Soler MD and Timothy L. Smith MD, MPH

Case

An 80 year old man presented upon referral with six months of left-sided nasal obstruction, discharge, and periorbital facial pain unresponsive to antibiotics and topical steroids. CT scan demonstrated soft tissue filling the mid to posterior left nasal cavity with complete opacification of the left ethmoid, maxillary, and sphenoid sinuses (Figures). There was absence of the left cribriform plate (medial and lateral lamella) and fovea ethmoidalis. Rigid nasal endoscopy demonstrated a papillomatous mass filling the left nasal cavity and concurrent biopsy confirmed the suspicion of inverted papilloma. Subsequent MRI demonstrated intact dura at the ethmoid roof and the presence of retained secretions rather than tumor filling the maxillary and sphenoid sinuses.







Discussion

Inverted papilloma is a benign, but often locally aggressive tumor derived from the respiratory mucosa which lines the nasal cavity and sinuses1. Erosion of adjacent bone is common and tumor may extend into the sinuses proper, orbit, or rarely intracranially2. Nasal congestion and epistaxis are the preeminent symptoms. The diagnosis is suggested on endoscopy by the presence of a unilateral mass, often with papillomatous appearance. CT depicts surrounding bony anatomy. MRI is complementary and allows tumor to be differentiated from retained secretions and offers increased scrutiny of the tumor-dural interface4. The lesion has a proclivity to recur with rates reported from 0-78% (usually quoted between 5-20%),2,3. Additionally, 5-15% of tumors will harbor a concurrent squamous cell carcinoma5. Treatment is primarily surgical, and currently, most cases are amenable to endoscopic techniques.6 Bone underlying the attachment point should be resected or drilled, although this issue was not applicable in the present case. Radiation is reserved for cases where carcinoma is observed and there is concern for residual malignant disease. Long-term followup is essential.

References

- 1. Mendenhall WM Hinerman RW, Malyapa RS. Inverted papilloma of the nasal cavity and paranasal sinuses. Am J Clin Oncol 2007; 30: 560-563.
- 2. Busquets JM, Hwang PH. Endoscopic resection of inverted sinonasal papilloma: a meta-analysis. Otolaryngol Head and Neck Surg 2006; 134: 476-482.
- 3. Chiu AG, Jackman AH, Antunes MB, Feldman MD, Palmer JN. Radiographic and histologic analysis of bone underlying inverted papillomas. Laryngoscope 2006; 116: 1617-1620.
- 4. Oikawa K, Furuta Y, Oridate N, et al. Preoperative staging of sinonasal inverted papilloma by magnetic resonance imaging. Laryngoscope 2003; 113: 1983-1987.
- 5. Wormald PJ, Ooi Eng, van Hasselt A, Nair S. Endoscopic removal of sinonasal inverted papilloma including endoscopic medial maxillectomy. Laryngoscope 2003; 113: 867-873.
- 6. Banhiran W, Casiano RR. Endoscopic sinus surgery for benign and malignant nasal and sinus neoplasm. Curr Opin Otolaryngol Head Neck Surg 2005; 13:50-54.



Chair Ma Maine MD

Ethics Committee Report

Chris McMains, MD

In 2008, the ARS Board of Directors established an ad-hoc Ethics Committee. Members of this committee represent a

wide array of experience- academic, private practice, civilian, and military. They were selected on the basis of their high ethical standards and histories of leadership in ethical practice of Rhinology. Members include Drs. Scott Stringer (MS), Hassan Ramadan (WV), Mark Zacharek (MI), Maj. Erik Weitzel (TX), Jim Hadley (NY), and Chris McMains (TX, Chairman).

Upon its formation, the Ethics Committee was pressed into immediate service. At the Winter ARS Board meeting, the Committee presented recommendations endorsing the AAO-HNS Code of Ethics, establishing a conflict of interest policy for ARS members, and establishing guidelines concerning industry funding for CME activities. These recommendations were accepted by the Board, thus formalizing ARS policy in these areas.

Future initiatives scheduled to be undertaken by the Ethics committee include: participating in a workgroup on ethical fundraising for the ARS, presenting a mini-seminar on Professionalism at a future ARS meeting, and exploring converting the Ethics committee to a standing committee within the ARS. We hope to continue supporting the tradition of ethical patient care that has long been the standard in the ARS. It is an honor to serve the ARS in this capacity.



Peter Hwang, MD

Secretary's Report

Peter Hwang, MD

This spring, the ARS will be participating in the newly formed Specialty Society Advisory Council to the

American Academy of Otolaryngology-Head & Neck Surgery. The primary role of the SSAC is to serve as a consultant voice for specialty issues to the AAO-HNS, as well as to convene the otolaryngology specialty societies as a conduit for improved communication and identification of shared opportunities. The ARS will therefore be represented on the SSAC at the Board of Governors spring meeting in Washington, DC in March 2009. Look for more details regarding the proceedings from this meeting in future editions of Nose News.

Registration remains open for Rhinology World in April 2009 in Philadelphia. As you will recall, the spring meeting of the ARS is being held as part of Rhinology World in lieu of our participation in COSM. Register now to secure your seat and hotel accommodations for this landmark international conference (www.rhinologyworld.com).

See you in Philadelphia!



Joseph Jacobs, MD

Treasurer's Report

Joseph B Jacobs, MD

Global financial strength has markedly weakened during the fall period of 2008. However the American Rhinologic Society has not been dramatically impacted. Our assets are disbursed between fixed income vehicles and a number of diversified equity stock funds. Approximately 60% of the resources are distributed between various financial instruments such as global, value, growth and emerging market stocks. Therefore, our accounts have suffered a modest loss of approximately 25% overall balanced by the fixed income component. During our recent Winter Board Meeting in Chicago a conference call with our managers, Bank of New York Mellon, took place. The account manager provided us with a detailed summary of account performance and expectations. Given the long term goals of the society the present distribution of assets is based on solid long term statistical data and results. All major tax exempt entities depend upon equity performance within their asset base. If any of you read the recent material published concerning the substantial loss suffered by Harvard's endowment which was invested in highly leveraged investments. We have avoided such a catastrophe. I am working diligently with Wendi Perez, our administrator, to streamline processes within our accounting system. In addition, the Audit Committee of the society, Chaired by Dr. Roy Casiano, has been directed to review deposits and distributions within our Corporate and Operating Accounts. Wendi is developing a budget template to ensure that a yearly operating financial plan is presented to the ARS board for authorization of expenditures. In addition, every ARS meeting and activity will require an approved budget prior to granting ARS support. These actions have been necessitated both by the contemporary financial climate as well as the ongoing and increasing scrutiny over fund raising by outside agencies. I promise that your society will continue to prosper.



CareFirst BCBS Reverses Policy on Balloon Catheter Dilation: Sinuplasty controversial or commonplace?

Marc Dubin MI

Marc Dubin, MD

In September 2008 CareFirst BCBS, a major Blue Cross provider in the mid-Atlantic region, changed its policy regarding the use of balloon catheters in endoscopic sinus surgery. Reversing its previous position, CareFirst acknowledged the use of the technology as an instrument that may be utilized in sinus surgery and stated that is not a procedure in and of itself. In so doing it did state that 31276 (frontal sinusotomy), 31256 (maxillary antrostomy) and 31287 (sphenoidotomy) were the appropriate codes when balloon catheters are utilized to enlarge sinus ostia in the setting of these procedures.

As CareFirst is one of dominant providers in this region, and was a one of the last providers to accept balloon dilation as a method to enlarge sinus ostia, it is fair to ask if the procedure has finally been accepted as part of routine armamentarium of the Rhinologist. Is the controversy over?

This controversy surrounding the rise of Acclarent in the Otolaryngology community in 2004 is well known, and was recently summarized by Christopher T. Melroy, MD in the September 2008 supplement to Otolaryngology-HNS. The widespread utilization of the device has also been touted. According to Acclarent, as of November 2008, 4000 surgeons were trained to use the devices and 138,000 sinuses have been treated in 46,000 patients. Furthermore, there have been over 15 peer reviewed journal articles on the subject.

As the initial controversy has, at the minimum, ebbed, it is possible to look forward to what comes next. It is clear that the devices are being widely used, and have been accepted by many practicing otolaryngologists. However, as with any new technology/procedure, indications need to be more carefully defined. If current trends hold up, it appears that balloon catheter dilation will continue to be utilized in endoscopic sinus procedures for years to come. Fortunately, insurance providers are beginning to accept this modality.



Jay Dutton, MD

ARS IT Committee Report

Jay Dutton, MD, FACS, ARS IT Officer

Now that I am entering into my third and final year as the IT Officer for the American Rhinologic Society (ARS), I want to thank the society for trusting me with the tremendous responsibility of running the ARS website (www.american-rhinologic.org).

The goals of the website are to inform and serve two separate primary populations, both ARS members as well as non-members interested in learning more about nasal and sinus disorders. The website also serves as a liaison to bring these two populations together.

For the ARS members, the website can be used for numerous tasks. Upcoming meetings can be identified (http://www.american-rhinologic.org/meetings.phtml), and members can register through the website for meetings, find hotel information, submit abstracts, and review the upcoming program. An example of these tools can be seen for the spring "Rhinoworld" meeting at http://www.american-rhinologic.org/springmeeting.phtml. Members can also go to the "members" page (http://www.american-rhinologic.org/abstracts.phtml) and perform almost any other task needed within the ARS, including identifying other ARS members through the membership directory, review research grants and deadlines, review CME courses and fellowships, and pay their annual dues. Our immediate goals for 2009 for ARS members are to create a "career center" for those offering or searching for employment in rhinology-related careers, and altering our ARS messenger service to highlight the most recent published articles in the field of Rhinology. We will also explore the possibility of making membership an entirely on-line endeavor.

For non-members, the website also has much to offer, most notably the "patient information" articles (http://www.american-rhinologic.org/patientinfo.phtml) authored by experts in the field of rhinology. Patients and non-ARS visitors to the website can also link to other related sites and can offer feedback through the ARS e-survey. Our primary goal for 2009 is to link patients to ARS members better through a "Find a Sinus Specialist" application that will be featured on the front page as well as the patient information page so that patients can simply find in their zip code and find an ARS member near them.

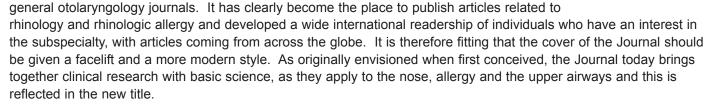


ARS journal gets new cover & new name

David W. Kennedy, MD Editor in Chief, American Journal of Rhinology and Allergy

Around the time that you receive this newsletter, ARS members will receive a renamed Journal. The American Journal of Rhinology has become the American Journal of Rhinology and Allergy to better reflect the journal content and the focus of the articles published. The change should also make the Journal more attractive as a source of advertising for pharmaceutical companies involved in the field of allergy management. At the same time the cover has been redesigned and will now feature a color photograph, either from an article within the edition, or, occasionally, another illustration of photographic merit and interest submitted by a subscriber.

The Journal has grown from relatively humble beginnings in 1987, to one of the most prestigious journals within the field of otolaryngology and has fulfilled its vision of spanning the spectrum of rhinology from basic science to clinical research. It is currently ranked in the top 1/3 of journals within the field of otolaryngology and boasts an impact factor higher than some of the well known



I would like to take this opportunity to sincerely thank the reviewers, the Editorial Board and the Associate Editors for all their work in helping to make the Journal so successful. Although only approximately 1/3 of the articles actually submitted can be published in the Journal, the reviewers and the Editorial Board have markedly reduced the average time to first decision for prospective authors to where it is now only slightly over a month. If you are interested in being considered as potential reviewer of articles for the Journal, please don't hesitate to contact me and to submit a copy of your CV. I would also like to welcome two new Associate Editors, Drs. Bradley Marple and Alexander Chiu. I hope that you will enjoy this format change and the continued growth of the Journal.



Seth Brown, MD

Residents and Fellows Committee Report

Seth Brown, MD

The residents and fellows committee at the ARS is now starting its third year in existence! The natural question for those

who haven't been paying attention to the ARS is what have we accomplished? In addition to providing social events for our members at the national meetings, we have provided educational opportunities such as the business of medicine lecture we sponsored at COSM this past year. We also have representatives on every major committee in the ARS of interest to our members including: membership, education, and fellowship and play active roles in recruitment and education. We have worked with the ARS to provide the American Journal of Rhinology for our senior residents and to allow graduating ARS members to continue their membership free of charge

when they update their contact information prior to graduation. We continue to be busy planning events for our members. Recently we had a very successful fall meeting with a social/educational event sponsored by Xoran reviewing CT anatomy. We also brought on 4 new resident members from a diversity of programs. This spring we hope to be active participants in the World Rhinology meeting which is shaping out to be a very exciting international event. We are already planning for the rest of 2009 with a senior resident sinus and business course hopefully to take place this spring and a social/educational event at the annual meeting in San Diego. As always, membership in the ARS is free for residents and fellows and we are always open to new ideas to improve our society.

American Journal of

Rhinology & Allergy

American Rhinologic Society Wendi Perez Administrator PO Box 495 Warwick, NY 10990

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2009 Course List

Advanced Techniques in Endoscopic Sinus Surgery

California Sinus Institute, East Palo Alto, CA February 12-15th, 2009 Director: Winston C. Vaughan M.D.

Contact: Roy F. Thomas, M.D., 650-462-3132,

sinusmdcsi@aol.com

Ohio Valley Advanced Endoscopic Sinus and Cranial Base Course

Institution: University of Cincinnati, Cincinnati, Ohio

March 20-21, 2009

Contact: Barbara G. Huber, 513.558.5391,

barbarag.huber@uc.edu

5th Biennial International "Milano Masterclass"

Sinonasal & Skull Base Endoscopic Surgery
 Aesthetic and Reconstructive Rhinoplasty

City, State: Milano, Italy
March 27 - 31, 2009
Contact: CQ-Travel Tel: (+39) 02 4804.951
Fax: (+39) 02 4391.1650

masterclass@cq-travel.com; www.milanomasterclass.it

Rhinology World 2009

ARS, IRS, ISIAN, AAOA and the University of Pennsylvania, Philadelphia, PA

April 15-19, 2009

Contact: Cathy Lafferty, 215-662-2137 or 215-349-5382; cathy.lafferty@uphs.upenn.edu;

www.rhinologyworld.com

Comprehensive Endoscopic Sinus Surgery

Johns Hopkins University, Baltimore, MD June 20-21, 2009

Contact: Kimberly Butler, 410-955-2959, cmenet@jhmi.edu

2008 Summer Sinus Course at Williamsburg

Eastern Virginia Medical School (host), Cleveland Clinic, St. Louis University and Northwestern University, Williamsburg, VA

July 23-25, 2009 Contact: Malissa Nesbit

(NesbitMN@EVMS.EDU) or Drucie Papafil (PapafiDA@EVMS.EDU); 757-446-5979

If you would like have your upcoming rhinology meeting noted here, simply provide the editor with pertinent information: newsletter@american-rhinologic.org

The American Rhinologic Society does not endorse these meetings but simply provides the list as a service to its members.

The content of Nose News represents the opinions of the authors and does not necessarily reflect the opinions of the American Rhinologic Society.

The American Rhinologic Society Newsletter Editorial Office

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join the ARS