

The Georgia ENTertainer

Spring 2017 Issue

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President's Message

by: Adam Klein, MD

Assistant Professor, Otolaryngology - Head & Neck Surgery

Assistant Director, Emory Voice Center

Director, Laryngology Fellowship, Emory Voice Center

Dear Friends and Colleagues,

Welcome back to the ENTertainer. Since the last edition, we have had another successful fall meeting at the Ritz Carlton Lodge, Reynolds Plantation at Lake Oconee. Dr. Scott Schoem, Chief of the Division of Pediatric Otolaryngology from the University of Connecticut, addressed the management of pediatric neck masses, nasal pathology in the newborn population and controversies in the management of ankyloglossia. It was a well-attended, fruitful, and enjoyable weekend.



We are looking forward to our next Summer Meeting at the family-friendly Ponte Vedra Inn and Club, in Ponte Vedra, Florida from July 27-29, 2017. We have organized another informative and collegial meeting with 3 keynote speakers. Dr. M. Boyd Gillespie, Professor and Chair of the Department of Otolaryngology-HNS at the University of Tennessee-Memphis will be discussing the management of snoring and salivary gland pathology. Dr. Robert Labadie, Professor and Vice Chair of the Department of Otolaryngology-HNS at Vanderbilt University will be covering the use of image-guidance, updates in cochlear implants and the evaluation and management of sudden hearing loss. Finally, Dr. Spencer Payne, Associate Professor in the Department of Otolaryngology-HNS at the University of Virginia gives terrific lectures on the office management of nasal polyps, CPT and ICD codes for rhinologic procedures, and rhinogenic headache. With these guests, as well as speakers from our own

membership, it is sure to be a wonderful meeting at a terrific venue. We hope you can make it.

It goes without saying that the political and healthcare landscapes have seen much uncertainty and drama since the last edition. This only emphasizes the importance and benefits of groups such as the Georgia Society of Otolaryngology-Head and Neck Surgery. Our influence grows with numbers, whether it is used to voice an opinion on SB 153 and OTC Access to Hearing Aids or to aid new members in the establishment of their practices in an ever-changing market. I strongly encourage every otolaryngologist in the state to join, participate and recruit colleagues.

No newsletter is complete without expressing our gratitude to Tara Morrison and her hard-working team for all their support and effort. When hearing about other state societies, it is often shocking to hear how much more developed and accomplished ours has become. This is, without doubt, largely due to their abilities and attentiveness.

It has been a privilege and pleasure serving as President of the GSO-HNS. The opportunity to work with such a collegial, thoughtful and knowledgeable Board of Directors has been a formative experience. This society thrives on the involvement and energy of its members, and I welcome you to get involved in the continued growth and success of our organization.

Georgia Members Receive a
5% DIVIDEND IN 2017



Legislative Report

by: Jimmy Brown, DDS, MD
President, GSO-HNS
Legislative Representative, GSO-HNS

The Georgia General Assembly (House of Representative and Senate) has adjourned for its 2017 regular session - 'Sine Die'. In the realm of healthcare matters overall, there were 15 House Resolutions (HR), 2 House Bills (HB), 11 Senate Resolutions (SR) and 3 Senate Bills (SB). The 2017 regular session did not specifically address bills immediately pertinent to our Otolaryngology, Head & Neck (OTO-HNS) community.



However, on the national front, several legislative battles are at boiling points. First, the so called "Audiology Kitchen-Sink Bill" (H.R. 2276) has reared its ugly head once more; this, in the form of a house resolution put forward by Representatives Tom Rice, Lyn Jenkins and Matt Cartwright. In simple terms, H.R. 2276 proposes to convey the title of "physician" to audiologists. This seeks to expand the 'scope of practice' for the audiologist by bestowing "limited licensed physician status," thus creating a primary provider status for the delivery of hearing healthcare services. Under Medicare provisions, audiologists would be granted

unlimited direct access to Medicare patients without a necessary and comprehensive evaluation by a duly trained physician. This would essentially eliminate the physician/MD as the natural referral source for hearing healthcare services. In the last Congress, similar legislative efforts by audiology stakeholders garnered opposition by more than 120 national and state organizations. It is reasonable to expect a similar response to H.R. 2276 at the next legislative session. Our academy has launched its advocacy campaign in Washington and has voiced strong opposition in the form of a position letter to the bill sponsors and the collective House of Representatives.

Another area of interest is the "Over-the-Counter Hearing Aid Act of 2017" (H.R. 1652). This proposed legislation was examined by a congressional committee entitled 'The Health Subcommittee of the House Energy and Commerce.' In their recent hearing titled, "Examining Improvements to the Regulation of Medical Technologies," lawmakers heard testimony regarding H.R. 1652, the "Over-the-Counter Hearing Aid Act of 2017." Our academy's advocacy arm has been following the progress of H.R. 1652 as it travels through the legislative process. Our academy worked relentlessly to formulate position statements for the record, outlining the academy's qualified support of creating a new class of "Over-the-Counter Hearing Aid" or a form of more affordable "basic" hearing aids. Our academy, while a proponent of easier access and increased utilization, has placed a premium on the need to ensure a high quality and safety of hearing healthcare services and that of the hearing rehabilitative devices.

Finally, in this short column, I would be remiss not to have mentioned the hottest topic on the healthcare frontier. Yes, the US House of Representatives did indeed pass H.R. 1628, the American Healthcare Act of 2017. The vote count, which is worth mentioning, was a close 217-213. This legislation which is the bedrock of efforts by our current government to repeal and replace the Affordable Care Act must now face a more daunting US senate floor. Its success and or the final shape and form are yet to be seen. The advocacy arm of our Academy continues to converse with law makers in this light. Our focus must still be: affordable access to care; control of spiraling cost and to reduce the administrative burden we all face daily.

As GSO members we must remember that what happens legislatively at home in our individual states or nationally permeates each and everyone's practice with potentially serious and long-term implications. It is ill-advised to be apathetic and non-participatory in today's current healthcare climate; this would be tantamount to handing over the steering wheel to those without a patient-centered focus.

GSO/HNS Receives the 2017 AAO/HNS Board of Governors Model Society of the Year Award!!

We are excited to announce that the GSO/HNS was just named the recipient of this prestigious award. Congratulations to all members, board of directors and GSO/HNS Officers.

Please see the letter that was sent to GSO/HNS President, Adam Klein letting him know of this distinction.

Dear Dr. Klein:

On behalf of the Board of Governors (BOG), please accept our congratulations as the 2017 Board of Governors Model Society Awardee! This award is the BOG's most prestigious society award and recognizes local/state/regional societies that exhibit effective leadership, institute Academy

and Foundation programs, and further Academy goals through active participation in the BOG. The Georgia Society of Otolaryngology/Head & Neck Surgery (GSO/HNS) has proven to be a leader with its campaigns to promote otolaryngology to the public and primary care physicians, involvement with state and federal advocacy, and exemplary educational programs.

As the 2017 BOG Model Society Award winner, the award will be officially presented to a GSO/HNS representative by me, the BOG Chair, during the BOG General Assembly Meeting on Monday, September 11, 5:00-7:00 PM, held during the AAO-HNSF 2017 Annual Meeting & OTO Experience, September 10-13, at the McCormick Place Convention Center in Chicago, IL. The GSO/HNS Board and its members are cordially invited to attend the event.

We hope to make this occasion a pleasant memory for the Georgia Society of Otolaryngology/Head & Neck Surgery.

Sincerely,
Stacey L. Ishman, MD, MPH
Chair, Board of Governors

Medical Association of GA Update

by: Arthur Torsiglieri, MD, FACS
Representative, MAG Legislative Council
Assistant Professor, General Otolaryngology
Department of Otolaryngology-Head and Neck Surgery
Augusta University



The Medical Association of Georgia (MAG) is the leading voice for physicians in the state of Georgia. That means protecting the patient-physician relationship, and maintaining the best possible medical care for patients in Georgia. For more information see www.mag.org.

MAG is the most powerful advocate for physicians in Georgia in the legislative arena. Legislative priorities for 2017 included Out-Of-Network Billing and Network Adequacy, Medicaid Payment Parity, Maintenance of Certification, and Patient Safety.

State lawmakers considered many important bills during this year's session. MAG tracked more than 150 bills during 2017. Key legislation that passed included:

H.B. 165- this prevents the state's Medical Practice Act from being used to require Maintenance of Certification as a condition of licensure.

H.B. 249- this makes naloxone available as an OTC and require prescription drug dispensers to update the state's Prescription Drug Monitoring Program (PDMP) every 24 hours and require prescribers to check the PDMP every time they prescribe a Schedule II drug beginning in 2018.

S.B. 153- (which began as an OTC hearing aid bill and was then replaced) allows trained optometrists under direct supervision by ophthalmologists to inject pharmaceutical agents around the eye (MAG has requested the Governor to veto this bill).

Key bills that did not pass include:

H.B. 71- would have required physicians to participate in every health insurance plan that is

offered by any hospital where they have privileges.

S.B.8- would have established an unfair payment system for out-of-network physician who provide emergency care.

S.B.277- a MAG and physician supported plan to address the surprise out-of-network insurance gap.

H.B.163- which requires drivers to use a hands-free device while operating a motor vehicle and making phone calls.

Lawmakers did pass a 2018 budget that included \$38 million to increase pay for certain Medicaid codes.

Future MAG events include the MAG Legislative Education Seminar on June 23-25, 2017 at Brasstown Valley and the House of Delegates Meeting on October 21-22, 2017 at the Hyatt Regency in Savannah.

AAO-HNS BOG Report

by: Peter J Abramson, MD
Director-at-Large, AAO-HNS

The time for over the counter hearing aids is here. The AAOHNS has long been opposed to OTC hearing aid sales particularly obtaining hearing aids without a waiver from an Otolaryngologist who has assessed the patient. The push for easier access to hearing aids was further amplified by the President's Council of Advisors on Science and Technology (PCAST) and seems destined to succeed. The Academy has submitted comments on the recommendation to the FDA and Congress. The AAOHNS has been instrumental in providing input as this legislation moves forward. The AAOHNS currently has qualified support for the "concept of OTC hearing aids" but wants to help prevent "a preoccupation with increased utilization and broader access (by easing entry and reducing costs)" from overriding "quality and safety". Companion bills have since been dropped in the Senate (S9) by Senator Warren, cosponsored by Sen. Isakson, and the House (HR1652) by Representative Joe Kennedy. The Act will ultimately allow for those with mild to moderate hearing loss to obtain OTC hearing aids most likely without a physician waiver. Please visit entnet.org to access the AAOHNS statement.



Also, the anticipated "audiologists as physicians" bill has been dropped (HR2276) sponsored by Tom Rice (not Price) R-SC. This will grant audiologists the title of "physician" and allow audiologists unlimited direct access to Medicare patients without physician referral. The AAOHNS has been strongly opposed to this bill. In comments to Rep. Rice cc'd to other congressional stakeholders, the Academy stressed that Otolaryngologists "are the only providers with the breadth of training and expertise to treat all aspects of hearing loss". Circumventing the otolaryngologists' evaluation "can lead to misdiagnosis and inappropriate treatment". Also, the comments reflected the concern that including audiologists in the definition of "physician" circumvents the training differences and can be confusing to patients.

Please stay up to speed on the hearing issues noted above as well as other current legislative and regulatory advocacy matters by visiting the advocacy section of the AAOHNS website entnet.org. Sign up to receive The ENT Advocate newsletter by emailing govtasffairs@entnet.org.

Membership Information

**PAY YOUR
2017 GSO/HNS
DUES**

Its time to pay your 2017 dues.

[CLICK HERE TO PAY NOW!](#)

**Not A Member?
JOIN TODAY!**

Become a GSO/HNS Member today!

[CLICK HERE TO ENROLL](#)

**REGISTER NOW for the
2017 GSO/HNS Annual Summer Meeting**



The poster for the 2017 Annual Meeting of the Georgia Society of Otolaryngology/Head & Neck Surgery (GSO/HNS) is displayed. It features the GSO/HNS logo on the left, which includes a stylized face and the text 'The Georgia Society of Otolaryngology/Head & Neck Surgery'. To the right of the logo, the text reads '2017 ANNUAL MEETING' and 'GEORGIA SOCIETY OF OTOLARYNGOLOGY/HEAD & NECK SURGERY'. Below this, a white box contains the dates 'THURSDAY, JULY 27 - SUNDAY, JULY 30, 2017' and the location 'Ponte Vedra Inn & Club • Ponte Vedra, FL'. The bottom left of the poster shows an aerial view of the hotel and surrounding area. The bottom right features a QR code and the text 'REGISTRATION IS OPEN!' with the website 'www.gsohns.org'.

Please click the following links below for additional meeting information:

[ATTENDEE REGISTRATION](#)

[AGENDA](#)

[HOTEL INFORMATION](#)

by: Stil Kountakis, MD, PhD
Edward S. Porubsky, MD Distinguished Chair in Otolaryngology
Professor and Chairman
Department of Otolaryngology-Head & Neck Surgery
Augusta University



Stil Kountakis, MD

Dear Fellow Otolaryngologists,

I hope you are happy spring is here and that you have exciting plans in the works. Here in Augusta we find ourselves trying to recover from yet another great Masters tournament. What is surreal during the tournament week is that traffic is smoother than any other time of the year, not because it is spring break time and the locals are gone since they are multi-replaced by visitors, but because it seems that Augusta National is in charge, and anything they do runs smooth and without hiccups. The only thing that was not under their control was the weather, but the couple of days it misbehaved made the tournament even more exciting.

We did not spend our time during the last 6 months just preparing for Masters week but we were also busy doing great things at the Medical College of Georgia-Augusta University:

Departmental Presence at National Meetings

We participated in the 2016 American Academy of Otolaryngology-HNS and American Rhinologic Society Annual Meetings in San Diego, CA where our faculty, residents and fellows participated in multiple oral/poster presentations, instruction courses and panel discussions. A variety of topics were covered including thyroid and parathyroid surgery, chest metastases in head and neck cancer and recurrent nasal polyps.

At the 2017 Triological Society Combined Sections Meeting in New Orleans, LA faculty and learners participated in multiple presentations and panel discussions. Topics included hypopharyngeal procedures for obstructive sleep apnea, minimally invasive parathyroidectomy and the correlation between Keros classification and body mass index and its effects on skull base anatomy.

Faculty Honors and Awards

Dr. David Terris was elected inaugural chair of the new Endocrine Surgery Section of the American Head and Neck Society. He also received a presidential citation from the AHNS and was selected to receive a presidential citation from the American Academy of Otolaryngology-HNS at the annual meeting this fall. Dr. Terris is also serving as vice chair of the ACGME otolaryngology residency review committee.



David Terris, MD



Stil Kountakis, MD

Dr. Stil Kountakis received the Vice Presidential Citation from the Southern Section of the Triological Society during the Combined Sections Meeting in New Orleans, LA, January 18-22, 2017.

Dr. Jimmy Brown received the exemplary Teaching Award from MCG-AU. Congratulations to Dr. Brown and we thank him for his dedication to medical student, resident and fellow education.



Jimmy Brown, MD

2017 Otolaryngology Residency Program Match



Thomas Holmes, MD

Our program successfully filled our two available positions. We are excited to welcome Thomas Holmes (Medical College of Georgia) and Jacqueline Booth (University of Virginia) to our residency program with both matching in the top 10 of our ranking list. Thomas Holmes completed his undergraduate school at Mercer University where he competed on the school's very successful NCAA Division I golf team. He worked with department

faculty members as a Dean's research scholar and presented multiple abstracts at national meetings as a medical student. We are proud of Thomas and look

forward to his start as a resident in July. Jacqueline Booth completed her undergraduate education at Northern Arizona University and received outstanding reference letter support from otolaryngology faculty at UVA. She is bright and dedicated and we also look forward to her start in July.



Jacqueline Booth, MD

We also had three new residents start this past summer, all matched in the top eight spots of our rank list. This reaffirms the magnitude of the quality of resident education we offer and should make our resident alumni feel confident and proud about the training they received at MCG. Congratulations to our Program Director Dr. Michael Groves and Program Coordinator Jessica Wells for a very successful interview season!

Head and Neck Cancer Screening Huge Success

April is Oral, Head and Neck Cancer Awareness Month, which the Otolaryngology Department marked by holding a free public head and neck cancer screening on Friday, April 21. Our head and neck faculty along with residents and fellows participated in the screening process and examined a total of 94 individuals. Six were referred for further evaluation making this event our most productive screening event ever. During the screening, Dr. Ken Byrd was interviewed by local WRDW channel 12. Many thanks to Dr. Byrd and everyone who participated in the screening.



Dr. Ken Byrd answers questions regarding oral, head and neck cancer.

World Voice Day 2017

Since its inception in 2002 in Brazil to call attention to hoarseness as a presenting symptom of laryngeal cancer, World Voice Day has grown dramatically. World Voice Day is now celebrated in countries on every continent and has drawn great attention to the voice and its importance to our quality of life and as a measure of overall wellness. World Voice Day this year was called "Share Your Voice", took place at Augusta



Gregory Postma, MD

University on April 14, 2017 and was organized by Tonya Currier, the Director of Augusta University's Opera Program. Activities included several performances from The Marriage of Figaro as well as Man of La Mancha, and Les Miserables by various students at Augusta University.

This year's World Voice Day once again called attention to the importance of voice and voice care and the pleasure it can give performers and listeners when the human voice is used in singing performances.



The keynote speaker was Dr. Gregory Postma, Director of the Voice, Airway, and Swallowing Center at MCG. Dr. Postma spoke on the anatomy of the voice as well as professional voice. The talks were filled with many videos demonstrating various singers as well as different types of vocal pathology. The highlight of these talks was a live laryngeal examination of performer Mr. Daon Drisdorn, while he was speaking and singing. Congratulations to Dr. Postma!

Available Faculty Positions

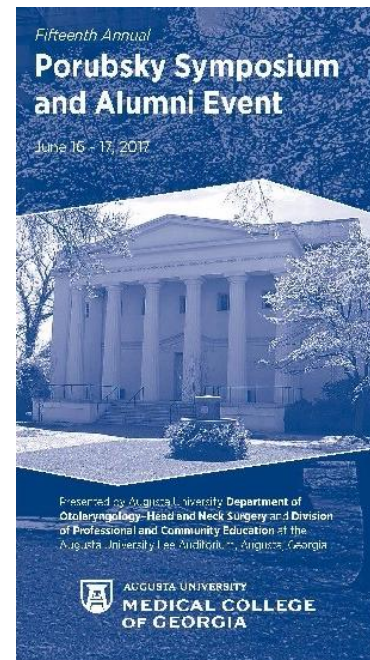
Two positions are available at the Assistant or Associate Professor level in the Department of Otolaryngology. We are recruiting for one full-time fellowship-trained Otologist-Neurotologist, and one fellowship-trained Head and Neck Surgeon who would serve as the VA Otolaryngology Division Chief with a part-time appointment at AU. Interested individuals are asked to send a cover letter and curriculum vitae to Dr. Stil Kountakis at skountakis@augusta.edu.

Upcoming Educational Opportunity

The fifteenth annual Porubsky Symposium and Alumni Event will be held June 16-17, 2017 on the Augusta University campus. This course is **FREE** of charge and offers an update and overview of current concepts in general otolaryngology, laryngology, rhinology, otology, facial plastics, pediatric otolaryngology and head and neck surgery. Our distinguished guest speaker will be Harold C. Pillsbury, III, MD, FACS, Professor and Chair of Otolaryngology-Head and Neck Surgery at the University of North Carolina at Chapel Hill.

MCG Otolaryngology alumni are invited to participate in the social activities planned for the weekend. These include golf on Saturday afternoon at the River Golf Club in North Augusta, and graduation activities at West Lake Country Club on Saturday evening, which will include a reception from 6:00 to 8:00 pm (with fun activities planned such as corn hole and a putting contest) with dinner and presentations following.

For more information or to register for the Symposium visit the website at www.augusta.edu/ce/medicalce/2017/porubsky.php. For more information on social activities, contact Jessica Wells at jeswells@augusta.edu.





Emory University Update

All of us in the Department of Otolaryngology - Head and Neck Surgery at Emory University hope you are having a prosperous and healthy start to 2017. Our department continues to thrive despite I-85's best efforts.

Faculty members deliver cutting-edge care at seven facilities throughout the Atlanta area. Emory University Hospital Midtown Campus continues to serve as our academic and clinical centerpiece. Faculty also practice at Emory University Hospital, Children's Healthcare of Atlanta's Egleston Hospital, Grady Memorial Hospital, the Atlanta VA Medical Center, the Emory Sleep Center, and the Emory Aesthetic Center.

Residency and Fellowship Training:

Under the guidance of Residency Director Sarah Wise, we are pleased to announce another successful residency match. Next year we will welcome four interns to our program. Tyler Halle will continue his education at Emory after graduating from our medical school this May. Micha Gibson comes to us from the University of Texas - McGovern Medical School. Anupriya Gangal will return to her undergraduate alma mater after completing medical school at the University of Chicago's Pritzker School of Medicine. Jackson Vuncannon will join us from Wake Forest School of Medicine.

We will also continue to offer fellowship training in Head & Neck Oncologic Surgery, Laryngology, Rhinology, and Pediatric Otolaryngology. Additionally, we now also offer fellowship training in Sleep Medicine and Sleep Surgery, the first such training program in the state.

Combined Otolaryngology Spring Meetings

Emory had another strong showing at the recent combined meetings in San Diego. Attending physicians, fellows, residents, speech language pathologists, and medical students were involved as moderators, podium presenters, and poster presenters. In total, 21 members of our department had research delivered at the meetings of the American Head and Neck Society, American Broncho-Esophological Association, Triologic Society, and American Rhinologic Society.

Head and Neck Oncology:

Our Head and Neck Oncology division continues to thrive. With seven attending physicians, the division offers care to medically complex patients with benign and malignant diagnoses. Over the last year, the division completed more than 200 microvascular free tissue transfers. In conjunction with the Winship Cancer Institute, the division recently offered continuing medical education to the community with our Updates in Management of Head and Neck Cancer conference. Physicians from six specialties were involved in this conference, instructing attendees in the benefits of multi-disciplinary care.

Multi-disciplinary Approach to Airway Intervention:

In conjunction with colleagues from interventional pulmonology, cardiothoracic surgery, and radiology, our laryngology division is developing a multi-disciplinary approach to patients with complex upper airway disorders. In addition to endoscopic interventions by all three of our laryngologists, Drs. Jeanne Hatcher and Craig Villari perform open airway reconstruction, an intervention sorely missing from the department since the retirement of Dr. William Grist.

Sleep Medicine and Sleep Surgery:

Dr. Raj Dedhia continues to advance the field with cutting edge research and patient care. He has now completed 24 Inspire™ hypoglossal nerve stimulators leading to many nights of great

sleep for his patients. As noted above, he will now be offering fellowship training to educate future generations of otolaryngology trainees.

Mark your calendars for the upcoming education opportunities:

- 1) Temporal Bone Surgical Dissection Course - November 12-16, 2017
- 2) Laryngeal Videostroboscopy and FEES Workshop - February 2-3, 2018

Best wishes to all and please feel free to reach out if we can be of any assistance.

Douglas E. Mattox, MD

Case Report

Genioglossus Advancement: An effective approach to the hypopharynx in OSAHS patients.

by: Calvin Myint M.D. & Jimmy J Brown D.D.S M.D

The jury is now out--surgical treatment with curative intent directed to patients with moderate to severe obstructive sleep apnea hypopnea syndrome (OSAHS) must include a strategy that incorporates procedures to address the hypopharynx. Before the era of sleep endoscopy, our understanding of the key role the hypopharynx plays as one of the levels of increased resistance to airflow during apneic events was lacking. We now know that this site among others must be a part of any multilevel approach to the treatment of OSAHS. Sleep surgeons should appreciate the fact that the Genioglossus muscle is the most influential dilator of the upper airway. Forces that are brought to bear on this muscle will profoundly affect airway compliance in the region of the retro-lingual airway. Some of the surgical procedures commonly employed in this region include: Hyoid and Tongue Suspension; various tongue resection procedures; Tongue Radiofrequency; Partial Epiglottectomy; Mortise Genioplasty; Maxillomandibular Advancement and Genioglossus Advancement. As a standalone procedure, Genioglossus Advancement (GGA) is arguably the gold standard for surgical management of the hypopharynx in OSAHS patients. We present a case in which the technique of Genioglossus Advancement was used to abrogate apneic episodes in a patient with severe OSAHS. We also highlight the salient surgical steps inherent to the procedure.

Case Presentation: 42 year-old male college professor with history of hypertension, married and recently been promoted, complains of daytime sleepiness, heavy snoring and general lack of energy.

His sleep history includes: snoring for the last 8-10 years but worse in the last 7months. His wife reports numerous snoring related 'awakenings' each night. The patient has no difficulty falling asleep but also has nocturia (3-5 trips to the bathroom each night). He drinks several cups of coffee to stay awake during lectures that are not his, but will sleep at 10pm routinely and up before 8am. Patient estimates he gets 6 to 7 hours of sleep per night and never feels refreshed in the mornings. Wife reports apparent apneic episodes of greater than 30secs. At intake, his Epworth sleepiness scale was 16.

His physical examination demonstrated the 'stigmata' of OSAHS: 5 feet 9 inches, 201lbs BMI 29.7, neck circumference of 17 inches, waist of 42 inches, and convex facial profile. Nose was widely patent on anterior rhinoscopy. The tongue was slightly outside the confines of the mandibular arch with 'Freidman Tongue Position' of III. Tonsil size are I out of IV bilaterally. The nasal endoscopy demonstrated an acceptable retropalatal space with a prominent base of tongue and prolapsed epiglottis. On Mueller Maneuver, he had retro-palatal collapse score of

1, lateral pharyngeal wall collapse score of 3+, and BOT collapse score of 4+ in supine position.

Patient did not undergo a sleep endoscopic examination but had an upright and supine Mueller endoscopic examination. A diagnostic Polysomnogram revealed a sleep apnea hypopnea index (AHI) of 56 and Oxygen desaturations ranging from 70 to 80 percent.

Treatment Decisions: Given the patient's relative absence of retropalatal collapse but significant base of tongue collapse, a decision was arrived to address the hypopharynx as a single site. The Genioglossus Advancement procedure was chosen as a standalone procedure with a goal to reduce patient's AHI by fifty percent or an absolute value less than twenty.

The Procedure: The Genioglossus Advancement procedure requires a sound knowledge of the anatomy of the Genial Tubercle, its surrounding area and the attachment of the Genioglossus muscle. The Genial Tubercle is a bony prominence lying on the lingual cortical plate of the anterior mandible, approximately 15mm from its inferior border in the midline and about 12mm from the root apices of the incisors superiorly. The Genioglossus muscle emanates from the Genial Tubercle and fans out posteriorly into three recognizable sets of fibers. Superiorly directed fibers insert into the tip of the tongue while the horizontally directed fibers insert into the dorsum of the tongue and the inferiorly directed fibers insert onto the body of the hyoid bone. This is important as the Genioglossus Advancement procedure impacts the position of the hyoid bone as well as the tongue base. The hyoid bone serves as a fulcrum for the actions of the major dilators and constrictors of the pharynx, thus influencing airway patency and resistance.

The surgical procedure is performed under general anesthesia. Local anesthesia of Lidocaine with epinephrine is infiltrated into the anticipated incision site at the gingiva-labial sulcus anteriorly. The incision extends from canine to canine. There is no need to extend beyond the canines as this could compromise the mental nerves. The incision should be kept above the dependent part

of the gingival-labial sulcus for better healing (Figure 1). The incision is deepened to expose the anterior face of the mandible. A sharp instrument is used to score the periosteum, and the periosteum is then elevated to the inferior border of the mandible in the midline. An area on the anterior mandibular face is exposed to house a rectangular osteotomy.



Figure 1: The dashed line depicts correct placement of the incision and star shows the sulcus

Using a caliper, the dimensions of the rectangular osteotomy are outlined with dental and skeletal midlines as reference points (Figure 2). The dimensions are such that a strut of no less than 8mm mandible is preserved inferiorly. Using the skeletal midline, 10mm distances are measured on either side of this midline, to outline the length of the anticipated rectangle. From the inferior limb, a



Figure 2: Caliber is utilized to accurately outline the dimensions of the osteotomy using skeletal midline as reference

attached Genioglossus muscle.

measurement of 9mm is outlined extending towards the rough alveolar bone superiorly, ensuring the rectangular box does not encroach on the root apices of central and lateral incisors.

The rectangular box thus measures 9mm by 20mm (Figure 3). Bone cuts are made through both the buccal and lingual cortices to complete the three dimensional osteotomies. This rectangular box represents the osteotomized segment of bone that houses the Genial Tubercle with its

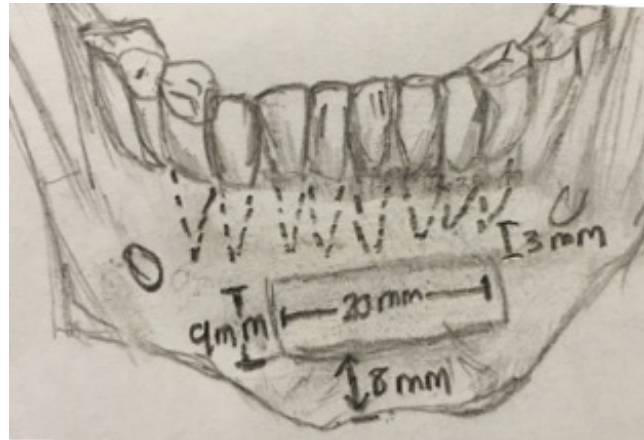


Figure 3: Depictions of completed design of the rectangular osteotomy

Next it is mobilized with the help of a screw placed in the anterior cortical plate to act as a handle (Figure 4).



Figure 4: Completed osteotomy with 2.0 screw placed as a handle

osteotomized segment is slowly retracted until the lingual cortical plate can be turned ninety degrees over the face of the mandible (Figure 5).

Once released, the rectangular

The buccal cortical plate is removed with a small flamed shaped bur and smoothed, especially at its superior part to allow for easy closure of the gingivobuccal incision. The segment is now secured inferiorly with a six-millimeter screw from the 1.2 or 1.5 craniofacial set (Figure 6).

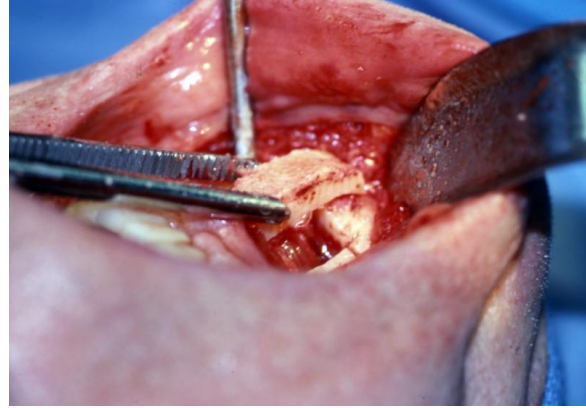


Figure 5: Rotation of the osteotomized segment 90 degree over the anterior face of the mandible

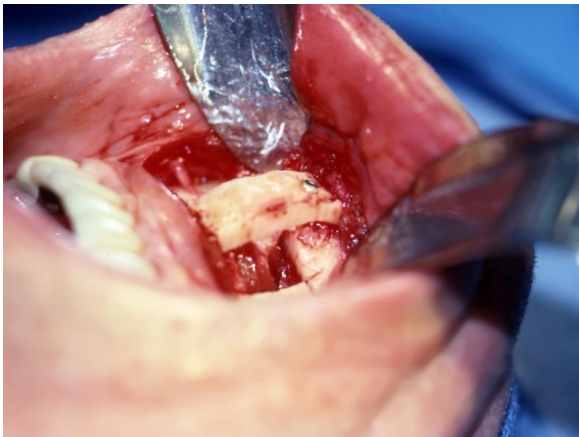


Figure 6: Removal of the buccal plate of the osteotomized segment and securing with small screw to the inferior borders of the mandible.

Hemostasis at the bone cut sites can be controlled with Gelfoam soaked in Afrin or Epinephrine. The wound is copiously irrigated with saline and closed with 2-0 chromic sutures (Figure 7).

This allows for reasonably good healing (Figure 8).



Figure 7: Closure of the gingival-labial incision



Figure 8: Well healed incision at 3 months post op

Results: Our patient did extremely well with reduction in AHI to 6 and oxygen saturations maintained at 91-97 during a repeat Polysomnogram at 8 months. His Epworth Sleepiness Scale fell to 7 during the same period.

Discussion: Managing the hypopharynx in OASHS surgery should be viewed as a key component of sleep surgery. No longer should we consider palatal surgery as a panacea for normalizing the upper airway in sleep disordered breathing. The gold standard for surgical intervention at the hypopharynx still remains the Genioglossus Advancement procedure and this should be a part of the armamentaria for all well trained sleep surgeons. The procedure is technically straightforward and falls perfectly within the purview of surgeries performed by otolaryngologists. We must of course be mindful that OSAHS is a multilevel disease and be prepared to combine palatal and other procedures with hypopharyngeal procedures as dictated by preoperative testing and physical examination. Drug induced sleep endoscopy will provide the most meaningful and directed information in this regard.

Reference:

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