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# SCOPE



**A Quick Trip: The Elko Basque Festival**

**Don Morris: Past and Future**

**2022 Clinical Assembly**



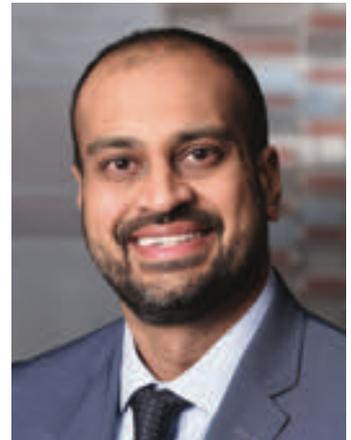
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## president's letter

**WOULD LIKE TO START BY THANKING EVERYONE** who came to the ACA this year in Puerto Rico. I hope everyone enjoyed their time seeing old friends, colleagues, and attending the amazing lectures. Additionally, I would like to thank Monstully for organizing a fantastic event along with our educational committee for bringing in a great group of speakers.

I am excited to begin my term as your next president. As many of you know with the ACGME/AOA merger many responsibilities of our college have changed. One of my priorities this year is to continue our strong connection with our traditional osteopathic residencies and the program directors. I want to ensure we continue to ask what support the college can provide them. My hope is to strengthen our engagement with the residents within our programs. Our osteopathic otolaryngology and ophthalmology residents are our future and keeping them engaged and involved will help sustain the college into the future.



Another critical priority is to address the Complex Pediatric Otolaryngology subspecialty exam. This certification is an acknowledgment of a pediatric specialist doing complex procedures and or doing common procedures on complex pediatric patients. Osteopathic pediatric otolaryngologists are still unable to sit for this exam because they graduated from an AOA certified residency and not an ACGME residency. We have been fervently working with the AOA and trying to change the criteria so that osteopathic pediatric otolaryngologist can sit for the exam.

Our college is here to help our members, so I invite all of you to share with us any ideas, thoughts, or concerns you may have. I look forward to a productive year as your president of the AOCOOHNS, and connecting with you.

A handwritten signature in black ink, appearing to read 'Ankur Patel DO MPH'.

Warm Regards,

**Ankur Patel DO MPH**

# A Quick Trip: The Elko Basque Festival

By **Ralph McClish**

**O**N FRIDAY, JULY 1, 2022 my wife Jennifer, our daughter Amaya, and myself boarded Delta's non-stop flight from Albuquerque (ABQ) to Salt Lake City (SLC). At 1:45 p.m. we were picked up from the airport by my mother-in-law, Stephanie, and we drove Northwest for three hours to a mid-sized town in Nevada by the name of Elko. We were about to spend the next two days celebrating my wife's culture at the 2022 Basque Festival.

The Basque are people who occupy a cross-border area in Spain and France. The Basque have their own language, their own flag, their own customs and traditions, and their own music and festivals. Many people from the Basque region migrated as indentured servants to the United States. One of those people happens to be my father-in-law, who worked as an indentured servant for two years as a sheep herder.

My mother-in-law's family is Basque and they also migrated to the United States, however, they owned and operated a "boarding house" in Salt Lake City, called "Fonda Espanola", which catered to the Basque immigrants. This is how my mother-in-law and father-in-law met. They had two children, a girl, Jennifer, and a boy, Jonathan, and they are one hundred

percent Basque. They were raised attending the Salt Lake City Basque Club, learned the traditional dances, and participated in many of the Basque festivals in Utah, Idaho, Nevada, and California.

Since meeting my wife, I have always wanted to attend one of the Basque festivals to better understand the culture and therefore better understand my wife. After ten years, I finally made time to go to the festival, and it was a weekend where I was immersed in everything Basque. Little did I know that a discussion with my wife about attending the festival would turn into a family affair with 12 people in total. Not only my wife's family but also close friends of her family who are also Basque. With so many traditions to choose from, the festival focused on four of them. Food, dancing, sporting events, and faith.

One of my favorite experiences while in Reno, Nevada a few years ago, was having the opportunity to eat at a Basque restaurant, Louis' Basque Corner, with my wife. I was so excited to have the chance to try another Basque restaurant in Elko. Both of these restaurants serve traditional Basque cuisines such as lamb, beef, fish, oxtail, and tripe. I decided to be adventurous and try the oxtail when I was in Reno. It was delicious! My wife and I were so ex-





cited about our dinner on Saturday at The Star restaurant in Elko, that we woke up early in order to physically go to The Star, confirm our reservation, and inquire about oxtail being on the menu for that evening. The Star Hotel opened in December of 1910 and was a long-time dream of Pete Jauragui to make a home away from home for the Basque shepherders that had immigrated to the United States. The hotel consisted of 11 bedrooms and one bathroom, and the heat was provided by wood-burning stoves. Similar to the boarding house that was run by my wife's family in Salt Lake City, The Star Hotel offered a friendly place with familiar language and customs. The Star continues to be a gathering place for all Basques and all those wishing they were Basque.

Meals are served family-style meaning that everyone sits at a long table and eats the same side dishes while entrees are individualized. Similar to a Thanksgiving Dinner, but all meals are served this way. While I enjoyed my delicious oxtail, we all enjoyed cabbage soup, salad, french fries,

**“The Basques are extremely competitive in nature, all of them originate from mundane agricultural activities.”**

– Ralph McClish

garbanzo beans with chorizo, spaghetti, and french bread. The table shared bottles of red wine and at the end of the meal, everyone fought “family-style” over who would pay the bill. Felix, a long-time family friend of my father-in-law, got so upset when we decided to split the bill three ways, that he told me I was no longer allowed to eat with him. Overall, not only was it a great meal but a fantastic experience.



## A Quick Trip: The Elko Basque Festival

On Saturday and Sunday, the festival was held at the Basque Clubhouse in Elko. It was here that the Elko Basque Club showcased many of the traditional dances and sporting events for the attendees. Basque music consists of a variety of instruments, some of the more common are the txistu (chees-too) a flute with three holes, the tamboril (tam-bo-rill), a small drum that hangs on the left arm by means of a cord, and the accordion. All of the dances we saw used all three of these instruments. The festival kicked off with The Agurra, or the welcome dance, which is traditionally performed by male dancers and is used to mark the beginning of a celebration. Other dances that were showcased were the Jota, a traditional genre of Basque dancing that is common among all provinces in the Basque Country. It's a quick dance that can be done in large groups, as well as other dances that are prominent throughout the different provinces.



Also showcased at the festival were several of the traditional Basque rural sporting events, or Herri Kirolak (erry kee-ro-lack). These are considered the strong man competitions of the Basque Country, and because Basques are extremely competitive in nature, all of them originated from mundane agricultural activities. The first was harri jasotzea (arri ja-sote-say-ah), or stone lifting. The sport consists of two competitors taking turns in one or several attempts, to perform the greatest possible number of lifts. A lift is considered complete when the stone has been properly balanced on the shoulder. The stone is a granite ball that ranges in weight from 248 lbs to 276 lbs. A second lifting attempt is made with a metal





cylinder ranging from 220 lbs to 276 lbs, and finally, a granite cube ranging from 276 lbs to 468 lbs. It was quite impressive watching these competitors be able to complete several lifts. I believe that I developed a hernia just by watching it!

The second sport that was showcased was Aizkolaritza (Ice-coe-la-reetz-ah), or woodchopping. Competitors of Aizkolaritza have several logs that they must chop through first. The catch is they have to do it while standing on top of the log and chopping between their legs. There are two variations: the first is about speed, to be able to chop through each log as quickly as possible. The second is about strength and strategy, with the goal being to chop through the wood with as few swings as possible. As I watched the two competitors at the festival, I was not only amazed at their skill and strength, but also the fact that they were doing this in 90+ degree weather. It truly was an amazing display.

Lastly, the festival displayed just how

important faith is to the Basque culture. The festival kicked off on Sunday with a celebration of Catholic Mass. It was no surprise that basque elements were mixed in with the traditional celebration. Some of the parts were spoken in the Basque language and a ceremonial dance was incorporated. It was a pleasant way to start the day and a great segue into the festivities. There were additional performances of dancing and sporting events as well as a picnic lunch for attendees.

I have to admit that although I know that my wife and her family are very proud of their Basque culture, I never really knew what that meant until I attended a gathering like this. I had never heard of the Basque people before I met my wife and I now understand why she takes so much pride in where she comes from. For one weekend I was surrounded by good people, good food, and an enormous sense of what it means to be a part of a culture with such a rich history. This is one of many Basque festivals that takes place annually each summer. I look forward to next year at a new location with the same old traditions. □





# Past and future

**IT IS STRANGE** to sit down to write an article as the immediate past president of the colleges. My life over the past year has been so busy with college business, committee meetings, Board of Governors meetings, and all of the planning and organizing ACA, that it almost feels too quiet.

I say almost, as I am definitely enjoying the relaxation that comes with the summer and with the satisfaction of wrapping up a truly important and amazing experience. It has been an honor to be the president of the colleges and to serve our membership.

I am so happy that we were able to end this year with an in person ACA. As the first in person meeting of the colleges since the beginning of covid, it was such a special and meaningful event beyond receiving excellent education. It was wonderful to see and hug old friends and make new friends. It was fantastic to see residents and students getting a chance to interact with us and make connections.

I want to thank Zack Pearce, Rizwan Aslam and Lyndsay Madden for putting together such amazing educational programs. The feedback has been so positive for the programs, and the beauty of Puerto Rico added such a wonderful backdrop to the ACA. I am already looking forward to next year's meeting in San Diego.

I have some great memories of the ACA to share with you. The sunrises while eating breakfast before the educational programs are some of the most beautiful ones I have



seen. Getting to go out to dinner in old San Juan with a friend and her husband, that until the ACA, I had only met on Facetime was amazing. Presenting the first A. D Dubin award to its namesake, Dr Alvin Dubin for all of his incredible work for our foundation and colleges was such an unforgettable moment for me. Having my wonderful wife with me at this conference (that has not happened much secondary to our schedules) was such a nice bonus for me. Finally, in the realms of things that can only happen to me,

getting bit by a fish that must have mistaken me for one large worm, only makes the trip more memorable (a bit more painful, but memorable nonetheless). It truly

was a great and memorable ACA.

For the upcoming year, there is still work to be done even for a past president. There are still board meetings to attend, college business to be a part of, and most importantly to be of any help I can to our current president Dr Ankur Patel and to any members of the colleges who want my advice or wisdom on getting involved.

I hope all of you have a wonderful summer and get time to indulge in hobbies and vacations, and spend time with friends and loved ones.

*Respectfully, Don Morris, DO*



# The history of the Colleges

**N 144 IN KANSAS CITY, MO,** C Paul Snyder DO of Philadelphia, PA. was elected the 29th president, but the first president of the new Osteopathic College of Ophthalmology and Otorhinolaryngology. AC Hardy recalled in his "Points of History: This period of our history found us in what appeared to the outsider to be a state of confusion and division. We had three organizations, the EENT Section ( of the AOA ), the American Society ( the O & OL ) and the International Society ( the ISO ). While we as members and workers in these organizations understood that each group had its specific purpose and its particular value in the advancement and training of its members,



**Paul Snyder, DO**

he brings another dimension to those considerations that led to the founding of the OCOO. The January December 1943 issue of

from the neophyte first entering the Section to the finished Specialist who became a Fellow, and was certified, the confusion continued to grow. It seemed wise, therefore, to revise our organizational plans, and to create a master organization, and provide it with classes of membership and associates, so as to include all who had been served by the three previous organizations. AB Crites wrote a history of our organization and in it

the O. & O. L. Journal contained this editorial: In the autumn of 1943 the officers of the O&O L. Society began to plan for a convention in 1944. It was the intention to meet in Chicago immediately preceding the AOA. convention. Good progress was being made in preparation for all phases of the program when in March of 1944 word was received that it would not be possible to conduct surgical clinics in Chicago. When this word was received it was considered too late to make a change of convention city, so it was decided to stage as good a convention as we could without a surgical clinic. However, the officers of the ISO. thought otherwise. They were not pleased with the turn of events. Meantime the ISO. had received invitations to meet in several osteopathic centers where hospital facilities and clinical material were available. After due consideration, the invitation of the Kansas City group to meet there and to use the facilities of the hospital and college was accepted. When the decision of the officers of the ISO. became known to the officers of the O&OL., it was at once realized that not many members of the I.S.O. would attend two conventions--that is, the O. & O.L. in Chicago in July and the I.S.O. in October in Kansas City. It was evident from the beginning that the O. & O.L. program would suffer. So, In spite of the preparations that had been made for Chicago, the joint convention of the O. & O. L. and the I.S.O. will be held in Kansas City, Missouri. Some of our sessions were held at the Continental Hotel and some at the Kansas City College of Osteopathy. S On July 13 to 15, 1944, in Chicago, there was a special called meeting of the officers and trustees of



the ISO and the O & OL Societies. All members of these organizations were invited to attend. The special conference was held for three days to consider a plan for the amalgamation of the ISO and the O & OL into one organization. General plans were outlined

**“It seemed wise, therefore, to revise our organizational plan, and to create a master organization...”**

– Paul Snyder, DO

and tentatively accepted. The Osteopathic College of Ophthalmology and Otolaryngology was thus founded and ratified at the annual convention in Kansas City on October 12, 1944. It would offer various membership positions to reflect the levels of training of each of the three previous organizations. This master organization was to assume all of the functions of its predecessors in matters of education, research, participation in certification and in sponsoring the EENT Section of the AOA convention. The constitution provided for a membership to be divided into Seniors and Juniors with stated qualifications for each. To provide for the beginner, it made provision for Associates who might be admitted without examination, and who might attend all programs and receive the

literature, but who had no vote in the organization. Fellowships in the College were, at that time, made Honorary and were granted only to Senior members of the college who had distinguished themselves through research, teaching, writing, etc. One who became a Fellow of the college was granted the degree F.O.C.O. and was granted the privilege of using this degree after their name. The first elected Board of Governors were: For one year term: C.C. Reid D.O. Denver L.A. Lydic D.O. Dayton T.J. Ruddy D.O. Los Angeles For two year term: L.A. Seyfried D.O. Detroit A.B. Crites D.O. Kansas City J.E. Leuzinger D.O. Philadelphia For three Year Term: C.P. Snyder D.O. Philadelphia A.C. Hardy D.O. Kirksville R.S. Licklider D.O. Columbus President C.P. Snyder D.O. Philadelphia V-pres A.C. Hardy D.O. Kirksville Sec L.S. Larimore D.O. Kansas City Annual dues were: Associate members \$5.00 Junior members 10.00 Senior members 15.00 Some of the lecture titles presented at that meeting were: Modern Anesthesia in Ophthalmological and Otorhinolaryngological Surgery by Richard J Murphy D.O., Detroit, Michigan Fundamental Points in the Diagnosis of Paralytic Strabismus by C.L. Attebery D.O., Kirksville, Mo. Refraction by J.A. Camara D.O. Jacksonville, Fl Pitfalls in Cataract Surgery by Antonia Abeyta D.O. Philadelphia, Pa. Submucous Resection of the Nasal Septum, Indications and Technique by Clyde F. Gillett D.O. Hollywood, CA Sphenoid Sinus: Principals and Treatment by W.V. Goodfellow D.O. Hollywood, CA Sulfa Drugs in EENT by C.C. Foster D.O. Lakewood, OH The Osteopathic College Of Ophthalmology and Otolaryngology continued to elect members for the American Osteopathic Board of



monstully.com

Ophthalmology and Otolaryngology. The OCOO adopted a plan of sponsoring supplements to the A.O.A. Journal instead of publishing a magazine of its own. Such supplements were to contain, among others, the papers given at the annual meeting. Dr. A. G. Walmsley was appointed editor. It was the desire of the College to cooperate effectively with the whole program of the A.O.A. so that we, as a profession, may be united.

Section 5 This article appeared in JAOA apr 1944 regarding postwar deafness Postwar Deafness Robert Henry Veitch, D.O. America postwar is going to be much deafer than prewar. It is my prediction that a least one million men will return from the battlefields with some form of acoustic deficiency. In addition there will be hundreds of thousands on the home front, both men and women, who have been subjected to the effects of prolonged noise as a result of working in war plants. The types of hearing difficulties will range from the slight to the severe. In my opinion there will be five classifications of individuals with deficient hearing: (1) Those who have been

**Hotel Statler, Detroit, Michigan**

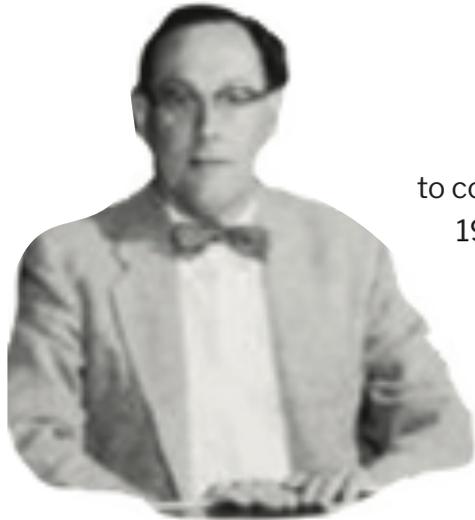


**AC Hardy, DO**

subjected to extremely loud noises, recurrent, or long periods. I refer to tank men, artillerymen, infantrymen, and anti-aircraft gunners. (2) Those who have been subjected to detonation waves from explosions, whether they be six or sixty feet away. (3) Aviators who have been subjected to repeated attacks of aero-titis media, this being due to rapid changes in altitude, in both practice and combat flying.

(4) Those whose hearing has become impaired by the administration of quinine given to counteract malaria. (5) Those workers on the home front who have developed hearing difficulties as a result of their employment in essential occupations of a character in which noise or vibration is abnormal. In 1944, there was interest in affiliating our College with the American College of Osteopathic Surgeons. Dr. Licklider

wrote the following letter on the subject. Dr. Crites, Dr. Goodfellow, and myself met with the executive board of the College of Surgeons and much to our surprise, they were very receptive of our present status. We discussed at length the possibility and stated definitely that the only way that could possibly be considered for our group joining the College of Surgeons, would be for them to take all of our I.S.O. members and for those who are fellows to retain their fellowship. We emphatically told them that we had as much to offer their college as they had to offer us and if we were ever to join the College of Surgeons, we believe now would be the last time that it might be considered. They stated that they could not decide for their College

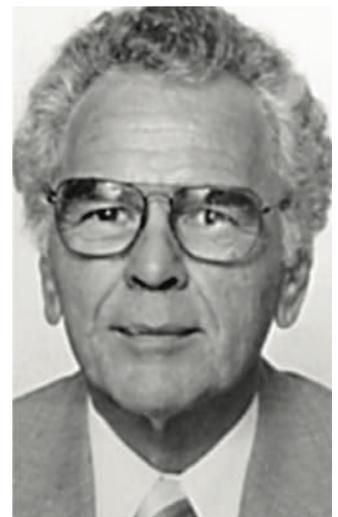


**Dr. Ralph Licklider**

but that a committee could be appointed to investigate our problem and that they would be glad to place this on the agenda for action at the National Convention in Detroit. Dr. Crites and I, when we went to Chicago, did not feel we should consider going to the College of Surgeons but we are now both of the opinion that if it could be worked out as I have stated, that we should give a very careful consideration and study favoring this move. On Monday afternoon we had another meeting of our group with Oral Martin, secretary of the American College of Osteopathic Surgeons. We went into detail, explaining the qualification of I.S.O., how all our members had met the requirements and had passed the oral and written examinations. We discussed the certification of our men and the College of Surgeons expressed a very definite standing, that they did not want any part of that to deal with, that the certifications must remain in our group and be carried on by our certification board. I feel we should give this further study and consideration at our National Convention in Kansas City. I firmly am convinced that all of our surgical groups would be much better under one roof if properly housed. Trusting you will give this careful consideration, I am, Fraternaly yours, Ralph S. Licklider DO There does not seem to be any recorded response to this initiative, and no formal relationship with the ACOS ever occurred. In 1945 C Paul Snyder DO of Philadelphia was re-elected as the 30th resident. He was the second person during the years of World War II to be elected

to consecutive presidencies. In 1945, *Advances in medicine* appeared to be gaining speed as we can now see this early article on antibiotics by Dr Foster. *Sulfonamides* by CCFoster *JAOA* vol 44, 1945 *Sulfonamides in the Ear, Nose and Throat Conditions* C.C. Foster, D.O.

Lakewood, Ohio This article is presented to bring up to date the subject of chemotherapy as used in the ear, nose, and throat specialty. The forerunner of the various sulfonamide products now on the market was sulfanilamide. This was first described in 1908, but it was not until February, 1935, that Domagk of Germany announced that an azo dye called protosil containing the sulfonamide group, was active against hemolytic streptococcus infection in mice. A year later a paper was published in England on the use of prontosil to control streptococic infection in humans. Since that time the use of sulfanilamide and its various derivatives has been used. At present, the balance of evidence would seem to indicate that the sulfonamides exert a bacteriostatic action on the invading organisms, but this is not sufficient to effect sterilization without the cooperation of the defense mechanism of the host. Among the more important infections in which the sulfonamides are indicated are those due to the streptococci, meningococci, gonococci, pneumococci, and



**Joe Wyatt, DO**

clostridium Welchii. Experience over the past three years has shown that topical, oral or intravenous administration of the drug will prevent wound infection. However, there are dangers with its use; such as conditions of agranulocytosis, hepatitis, neurotoxic states, hemolytic anemia, renal irritation and skin rashes which are known to occur. In our opinion there has been too widespread use of the sulfonamides in the eye, ear, nose, and throat conditions. By far the majority of the acute diseases seen in our specialty practice are self-limited and resolve satisfactorily when other proven methods are used. It is only in a small percentage of severe infections that additional help in the way of chemotherapy is necessary to combat bacterial invasion. In these cases, if the organism is one which a sulfonamide compound will affect, it should by all means be used. In 1946 AC Hardy DO of Kirksville, Missouri was elected the 31st president. He had previously been president 19 years earlier in 1927. This was the last



year that practice experience could be submitted, instead of formal training, for consideration for the certification process. Prior to 1946, a candidate was required to have one year of formal training in the specialty and could submit 5 years of practice to qualify for each additional year of

formal training required. At this same time in 1946, Joe Wyatt began his two year residency in EENT at the California College of Osteopathic Medicine and Surgery in Los Angeles. He recalls that he paid \$1,000.00 per year to the Osteopathic School of Medicine in order to train at the Los Angeles County Hospital, At the time the hospital was a very small building in the hospital complex that was staffed by DOs. Later, in the late 1950s they moved into a large modern 500 bed facility. Many of the trainees at the LA County program had private general medical practices and spent time at the hospital learning to be EENT. They slowly grew into specialists and provided the specialty care to their general practices patients. Eventually their practices became specialty only practices. The LA County allopathic programs, of the time, were more formal and more like the programs of today. Wyatt recalled his Osteopathic studies began in Kirksville in 1939. AC Hardy ran a training program in EENT at that time. Hardy's son in law Chet Atteberry, who was Hardy's first resident, later joined him in practice and in the training program. JA Camara was his resident at the time. This was the kind of training program where the trainee paid the trainer \$1,000.00 or so per year of training. Wyatt recalls that Atteberry was a very popular personality. He had been an important member of the Kirksville football team that had gone undefeated for about four years. Other programs where one paid for his education were in Detroit and Kansas City and possibly Philadelphia. In January 1946, Leonard Sells began what may have been the first modern residency in osteopathic EENT. Sells was recently out of



the army. Records from Doctors Hospital indicate that Sells paid a registration fee of \$1,000 to the hospital and Ralph Licklider made him his first resident. Sells was paid a stipend by Doctors Hospital or by way of the GI Bill. The program in EENT was three years in length. Wyatt returned to Detroit in 1948. He joined an established Ophthalmology practice after one of its doctors had passed away in an accident. This arrangement didn't work out well and within 6 months, Wyatt left and opened his own practice. He recalls that he was unable to make a living doing ophthalmology alone and thus practiced EENT for nearly 10 years. In 1947 Lyman A Lydic DO of Dayton, Ohio was elected the 32nd president. He previously served a term as president in 1938. The 1947 convention was held at the Hotel Statler in Detroit, Michigan July 16-19. The program demonstrated a definite effort to separate topics on eye to one session and topics on ENT to another session the next day. The topics in ophthalmology included: Cataract extraction by Dr. Edward Davidson Sympathetic Ophthalmia by Dr. James Walker Binocular vision following Strabismus surgery by Dr. EB Decker The Rhinology and Laryngology section the next day offered: Treatment of Oro-nasal Lymphoid Tissue with Radium by CC Foster DO Chronic Ethmoiditis by Dr Ralph Licklider Summarizing 26 years of experience in Tonsil surgery by Dr Wm H Schultz The next day a session on

Otology was offered and the following were presented: Intracranial Complications of Sinus and Mastoid Infection Personal experience with Fenestration Operations by Lloyd Seyfried DO Experience with sulfa drugs on exposed facial nerves in Mastoid surgery by Dr Samuel E Taylor. Joe Wyatt recalled that 1947 will be remembered as an important year because of the return of many of its non-certified members back to the OCOO for a serious attempt at certification. In 1947, President Harry Truman began an initiative towards national health care. It became apparent that non-certified physicians might be unable to participate in the evolving national plan. In 1948 AB Crites DO of Kansas City, Missouri was elected the 33rd president. He previously served as president in 1939. The annual clinical assembly was held in Portland, Maine. The changing face of medical practice was seen by the topics of presentations at the annual clinical assemblies. Jerry M Waters DO of Newark NJ presented a paper on the Evaluation of Streptomycin and Penicillin in Sinus Infections. Joe Wyatt recalled how the emergence of penicillin and other antibiotics nearly made the specialty of ear, nose and throat unnecessary. Mastoid surgery in his practice fell from about 50 cases a year to zero. There was great concern that the ENT specialty would die out completely as our college became about 75% ophthalmology and about 25% ENT. The rise of interest in facial plastic surgery may have saved the careers of many good ENT men of that day. In 1949 Ralph Licklider DO of Columbus, Ohio was elected the 34th president. He had previously been president in 1940. Live surgery had been an integral portion of



the annual clinical symposium from the outset of our annual meetings. It would be impossible to count the number of live surgical EENT demonstrations and live surgical certification examinations that had been performed at these meetings. Joe Wyatt recalled how candidates for certification were required to perform live surgery at a local hospital during the annual meetings. They were observed by a group of examiners and other observers. They had no idea what procedure they would be asked to perform and on whom they would be required to do surgery. He recalled that at one meeting in Kansas City, while eating dinner, candidate Nordsrom was told by AC Hardy that he would be doing a cataract surgery the following morning at 9:00 AM. Nordstrom, needless to say, had somewhat of a panic attack and didn't finish his meal. 1949 was the year that the unthinkable happened. During a demonstration of a surgical procedure for "pinning back" ears on an 8 year old child, the child developed anesthetic complications and died. The practice of live surgical demonstrations and examinations at the annual meeting was forever terminated as a result of this tragic experience. Thereafter, examining teams would do onsite visitations and observe the candidate perform live surgery on his own patients in his own hospital. This practice eventually was abandoned also and gave way to the current system of chart review for satisfaction of the practical examination. Basic sciences education was addressed by the OCOO in 1949 with the beginning of the OCOO home study course.

**COURSES IN THE BASIC SCIENCES AS RELATED TO OPHTHALMOLOGY AND OTORHINOLARYNGOLOGY** (Prepared under

the direction and supervision of the Osteopathic College of Ophthalmology and Otorhinolaryngology) Two (2) courses, one in the basic sciences as related to Ophthalmology and one in the basic sciences as related to Otorhinolaryngology will be given. No subscriber may participate in both courses concurrently but must signify his selection at the time of registration. The fee for each course was Fifty Dollars (\$50.00) to Osteopathic Physicians in active practice. To Residents or Fellows in Ophthalmology and Otorhinolaryngology, who are devoting full time to their study of Eye, Ear, Nose and Throat and who are as a result not in active practice, the fee was Ten Dollars (\$10.00 due with the application. These courses were designed for home study and were divided into seven (7) subject headings for the Ophthalmology course, as follows: I. Anatomy--including Embryology and Histology--Four weeks II. Physiology--Including Visual Physiology and Optics--Eight weeks III. Pathology--Including Bacteriology--Four weeks IV. Refraction--Including Retinoscopy--Eight weeks V. Neuro-ophthalmology--Including Perimetry--Four weeks VI. Extraocular Musculature--Four weeks VII. Ophthalmological Diagnosis--Including Ophthalmoscopy--Four Weeks For the course in Otorhinolaryngology there will be five (5) subject headings, which are as follows: I. Anatomy--Including Embryology and Histology--Eight weeks II. Physiology--Including Bacteriology--Eight weeks III. Pathology--Four weeks IV. Neuro-Otology--Including Functional Testing--Eight Weeks (a) Auditory--Four weeks (b) Non-Auditory--Four weeks V. Otorhinolaryngological Diagnosis--Eight weeks



# The Goals and Surgical Indications for Levator Muscle Botox Injection

By Veshesh Patel

**T**HE GOALS FOR THE levator muscle Botox injection are straightforward, and can be based on the patient preferences. An experienced clinician should offer Botox injection to the levator muscle given the patient's history and physical exam findings. Initially, a clinician's expertise and judgement are key for the indication of Botox injections. After reviewing the treatment options with the patient, the clinician will discuss the next best step for the intervention accordingly. The main goal for botulinum toxin injection is to induce a protective ptosis and maintain corneal protection.[1-4] When properly utilized, Botox can achieve natural results and major improvements.

A clinician will first assess the entire face, and then evaluate the position of the eyebrows and lid. Indications for botulinum toxin injection may be necessary to lower the eyelid and produce ptosis for corneal protection and healing of the ocular surface.[3] It has been effectively used for the treatment of blepharospasm, strabismus, hemifacial spasm, and upper lid retraction of Graves' ophthalmopathy.[2, 4] Other indications include persistent epithelial defects and chronic corneal exposure from chemical or caustic burns, lagophthalmos, corneal ulcerations, infectious keratitis, and spastic entropion.[4] If excessive plasticity and hyperexcitability are left untreated, it can lead to functional blindness.

The initial decision is whether or not to continue with medications or elect surgical

correction. Most individuals are candidates for Botox injections when other therapies such as medications and physical measures, including glasses with palpebral splints, are unsuccessful.[4, 5] Medical treatment may result in over or under correction, and it may not change the lid contour cosmetically. When discussing other treatment options for individuals with orbital pathologies or corneal epithelial defects, surgery is suggested as a last resort and can be largely unpredictable. One surgical intervention is tarsorrhaphy, which involves splitting the upper and lower lid margins with removal of the distal posterior lamella, but over weeks, can leave permanently scarred lid margins leading to cicatricial entropion and trichiasis.[5] Therefore, a safer temporary alternative that involves local injection of botulinum toxin into the levator palpebral superioris muscle is offered to individuals that do not desire surgery. The patient's understanding about Botox injections should be gauged as well as any inquiries should be addressed before performing the intervention.

## Techniques

It is important to note that the levator muscle belly and the superior rectus are located in close approximation behind the Whitnall's ligament.[1, 6, 7] The lateral border of the superior rectus muscle extends beyond that of the levator muscle in the mid and posterior third of the orbit.[1, 6, 7] This anatomic relation is key to note when inserting the



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needle into the mid-orbit because, if the needle is inserted too deeply, it could result in globe perforation.[1, 6, 7] The dosage varies, but the initial dose of Botox is usually 2.5 (mouse) units for small deviations and 5.0 units for larger deviations.[1, 6, 7] There are two main techniques when injecting Botox to the levator muscle: (1) the transcutaneous route and (2) the transconjunctival route.

### Transcutaneous route

The administration of botulinum toxin is injected via the transcutaneous route into the orbit and into the levator muscle. Transcutaneous is defined as inserting through or across the depth of the skin. This anterior chemodenervation technique utilizes a 25 or 30 gauge needle with a tuberculin syringe into the orbit to approach the levator palpebral muscle belly.[6, 7] The intended volume with some extra is loaded into the tuberculin syringe. A single transcutaneous injection is

administered at the central skin crease of the upper eyelid area within 3mm above the superior tarsal border.[6, 7]

The disadvantages to this technique is inadequate visualization of the needle when injecting into the orbit. If the needle is not inserted deep into the levator muscle, it may lead to incomplete ptosis.[6, 7] Moreover, if the needle is inserted too deep, there may be strong ptosis causing superior rectus weakness.[8] In turn, this can lead to hypotropia and diplopia.

### Transconjunctival route

This simple technique is a relatively novel way to inject botulinum toxin into the levator palpebral superioris muscle. The patient is positioned supine during the procedure. The ocular surface is anaesthetized by using a topical anesthetic such as proxymetacaine drops.[8] Botox is then drawn up into a syringe, and a half-inch 26 or 30 gauge needle attached for injection.[8] Then, an appropri-



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ately sized retractor is used to double evert the upper eyelid.[8] This allows visualization of the superior border of the tarsal plate and Muller's muscle up to the superior fornix.[8] Further topical anesthetic is applied with a cotton tip over the conjunctiva overlaying the Muller's muscle.[8] The needle is then utilized to be injected into the subconjunctiva at the superior aspect of the Muller's muscle.[8] This injection site is the origin of the Muller's muscle which is used as a marker to approximate the levator palpebrae superioris muscle. As the needle advances in a slightly superior and posterior motion, the levator muscle is contacted. Once the muscle is located, a low dose of Botox is injected.

It is important to take into consideration to not advance the needle too deep into the subconjunctiva and pre-aponeurotic fat pad.[6] This technique is advantageous in that there is high chance to produce significant ptosis, and it is a safer modified approach as the needle is at no moment directed into the orbit or at the globe.[8]

## Postoperative Management and Precautions

Botulinum toxin injections are relatively safe and effective. However, there are associated side effects with periocular injections.[2-4] Most of the complications are mild and include dry eyes, blurred vision, tearing, and ecchymosis. Long term use of botulinum toxin is a risk factor.[2-4] It is essential to examine the patient following injection. Other postoperative management include examining the patient for incomplete ptosis and superior rectus muscle weakness.[2-4] Distant spread of the toxin can cause serious side effects and is one of the most important precaution from the use of botulinum toxin. Although, this occurrence is rare because

only a low dose of botulinum toxin is used for the levator muscle.

## Conclusion

Overall, the goals for levator muscle Botox injection are lowering of the upper eyelid for corneal protection, nonsurgical correction for orbital pathologies, relaxation and alleviation of the levator palpebrae superioris muscle, restoration of natural cosmetic appearance, avoidance of functional blindness, and prevention of ocular complications. Although relatively rare, it is essential to manage for any potential serious complications following levator muscle Botox injection. □

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# Internuclear ophthalmoplegia as a result of cerebral metastatic disease: Workup, pathophysiology, and clinical pearls

By Veshesh Patel, Divy Mehra, Yanet Diaz-Martell, Lino Saavedro, Javier Alvarado, Jose Barros

**A**bstract: This case demonstrates an acute case of internuclear ophthalmoplegia (INO) caused by cerebral metastasis from a small cell lung cancer, the only such case documented in the literature. A 54-year-old male presented to the emergency department for worsening headache and diplopia, secondary to INO. On further examination, a CT scan of the chest revealed a 6.1 × 4.8 × 6.8 cm solid mass in the right lower lung consistent with small-cell lung cancer. T2-weighted MRI exhibited bilateral supratentorial and infratentorial lesions interpreted as metastatic cancer. The patient's symptoms, including INO, were caused by the mass effect from the metastatic brain lesions.

## Introduction:

Internuclear ophthalmoplegia (INO) is an ocular movement disorder characterized by impaired adduction of the ipsilateral eye with nystagmus of the contralateral eye. It is caused by functional damage to the medial longitudinal fasciculus (MLF) in the dorsomedial brainstem tegmentum of either the pons or the midbrain.[1] Nearly 80% of INO cases are the result of multiple sclerosis (MS) flare-ups and cerebrovascular disease (CVD) in the form of ischemic stroke, with more rare occurrences due to infectious etiologies,

trauma, mass effect, and others.[2] Suspicion should prompt magnetic resonance imaging (MRI) for evaluation.

## Case Report:

A 54-year-old man with a past medical history significant for adrenal and parathyroid mass resections, chronic cigarette and cocaine use, and multiple ischemic brain stem strokes presented to the emergency department with a one-day history of acute-onset headache and double vision, particularly in the right eye. One week prior, the patient reported that he first noticed an occipital headache that is described as dull, constant, with variable intensity, no radiation, and mildly improved with naproxen. The patient reported double vision in his right eye and his spouse reported that the patient's right eye had laterally deviated. The patient admitted to one episode of non-bloody, non-bilious vomiting. The patient denied any associated fever, myalgias, chest pain, shortness of breath, abdominal pain, changes in bowel habits, peripheral edema, weakness, numbness, or any focal neurological symptoms.

The gentleman was hemodynamically stable with unremarkable vital signs or laboratory workup. On physical exam, there was significant ptosis of the right eye, conjunctival hyperemia, and lateral deviation of the right

eye at rest. Adduction of the right eye was impaired and associated with nystagmus of the left eye on left lateral gaze, findings consistent with INO.

**Figure 1:** Small-cell lung cancer in a chronic male smoker metastasizing to the brain causing internuclear ophthalmoplegia. This illustration shows a magnetic resonance imaging (MRI) of the brain in a chronic male smoker with small-cell lung cancer. This image depicts multiple cannonball lesions (yellow arrows) in the supratentorial and infratentorial areas on the brain consistent with metastatic cancer (a- c). These brain lesions are located in the cerebellum and brainstem (d) causing displacement, and as a result, causing internuclear ophthalmoplegia (INO) for the patient.

**Figure 2:** Horizontal gaze presenting internuclear ophthalmoplegia. This illustration



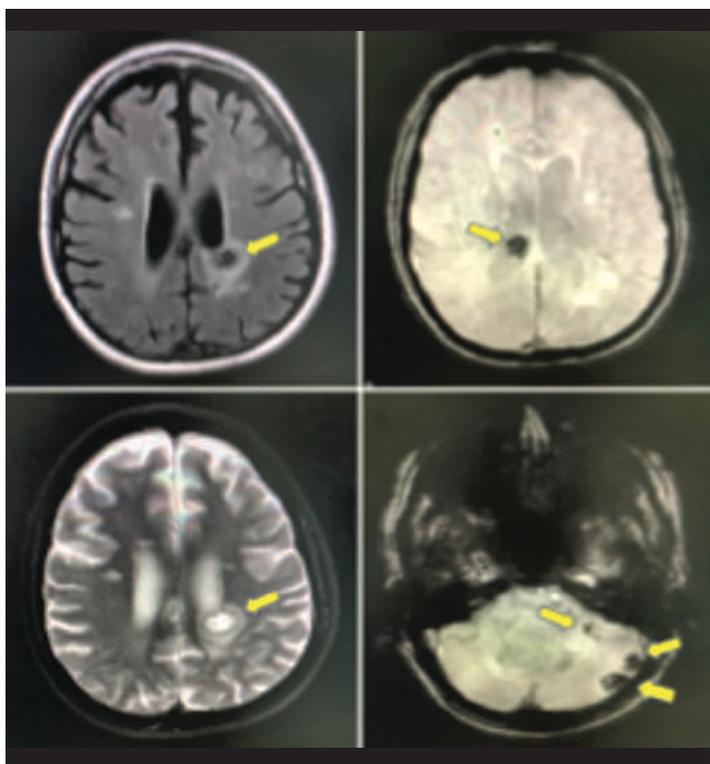
depicts internuclear ophthalmoplegia (INO) upon horizontal gaze. This picture shows an example of impaired adduction of the ipsilateral eye. The ocular movement deficit is defined by the side of adduction impairment, which is ipsilateral to the medial longitudinal fasciculus (MLF) lesion in the dorsomedial brainstem tegmentum of either the pons or the midbrain. (Adapted from the article “Orbital metastasis mimicking internuclear ophthalmoplegia: A case report and review” by Lin et al.)[8]

This prompted several imaging tests, including a chest CT that revealed a 6.1 × 4.8 × 6.8 cm solid mass in the right lower lung highly concerning for malignancy. A brain CT revealed multiple bilateral cortical parenchymal lesions with vasogenic edema [Fig. 1]. A T2-weighted MRI exhibited bilateral supratentorial and infratentorial lesions interpreted as metastatic with the largest lesion in the left posterior frontal lobe measuring 1.8 cm [Fig. 1]. Abdominal and pelvis CT showed no evident hepatic metastatic disease.

Upon evaluation, the patient was administered steroids. Headache and visual deficits resolved in the following few days, and the patient was promptly referred for necessary oncologic management.

**Discussion:**

This gentleman presented to the ED with worsening headache and double vision,



particularly with the right eye deviated laterally at rest. This gentleman was a chronic cigarette smoker and a CT scan of the chest revealed a 6.8-cm solid mass in the right lower lung consistent with small-cell lung cancer. Despite any pulmonary symptoms, the patient had an advanced SCLC that had metastasized to the brain, one of the most frequent metastatic sites for lung cancer. In the current case, it was determined that metastasized lesions in the brain resulted in areas of focal edema that resulted in the patient's INO and headache.

In lateral gaze, the paramedian pontine reticular formation (PPRF), or conjugate gaze center, coordinates the function of the abducens nucleus, which contains two sets of neural tracts.[3] The first set of axons innervates the ipsilateral lateral rectus muscle, and the second set of axons is known as the medial longitudinal fasciculus (MLF), which crosses the midline to innervate a subnucleus of the oculomotor complex. The MLF, critical for visual coordination of horizontal eye movements, are highly myelinated white matter fibers. The MLF tracks near the midline ventral to the fourth ventricle and cerebral aqueduct, extending through the dorsomedial pontine and mid-brain tegmentum.[4] When there is a MLF deficit, adduction on the ipsilateral side of the MLF lesion weakens and results in lateral deviation of the ipsilateral eye [Figs. 2 and 3]. There will also be an abduction nystagmus in the contralateral eye due to skew deviation and alignment dysregulation.

In this case, the patient's previously undiagnosed SCLC metastasized to the brain and the resultant swelling caused a disruption

in the MLF pathway. For this patient, brain lesions likely caused displacement of the brainstem and thus abnormal communication between axons and muscle fibers.[5] As a result of the mass effect, right eye adduction and MLF pathway were impaired. Additional symptoms of INO include horizontal diplopia, vertical diplopia, difficulty driving, visual confusion, oscillopsia, and loss of stereopsis.[6] Additionally, convergence is intact as the medial rectus is unaffected. The imaging modality of choice for INO is MRI and should include axial T2 or proton dense images with 3-mm thickness.

Most etiologies of INO (approximately 70%–78%) are due to multiple sclerosis or cerebrovascular disease. Other cases may be due to infectious etiology, trauma, mass effect, Arnold–Chiari malformation, hydrocephalus, lupus, and others. Diagnosis of INO includes physical exam and, in unclear circumstances, formal oculographic recordings demonstrating the velocity and acceleration of abductive and adductive movements.[7] Optokinetic tape (OKN), which observes saccadic dysconjugacy, is highly sensitive in diagnosing INO. In certain cases, management of the underlying condition is the treatment of acute onset double vision. Prognosis varies depending on the etiology of the INO. It is important to maintain awareness of INO etiologies based on full patient history and consideration of underlying contributors.

### Conclusion:

The prevalence of brain mass causing INO has not been established. Documented cases of mass lesions include medulloblastoma, pontine glioma, lymphoma, epidermoid



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cancers, ganglioglioma, and brain metastases. This case of SCLC resulting in INO exemplifies the rarity but possibility of an oncological root cause of INO. □

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# Rare Extranodal Site of Diffuse Large B-cell Lymphoma in the Nasal Cavity

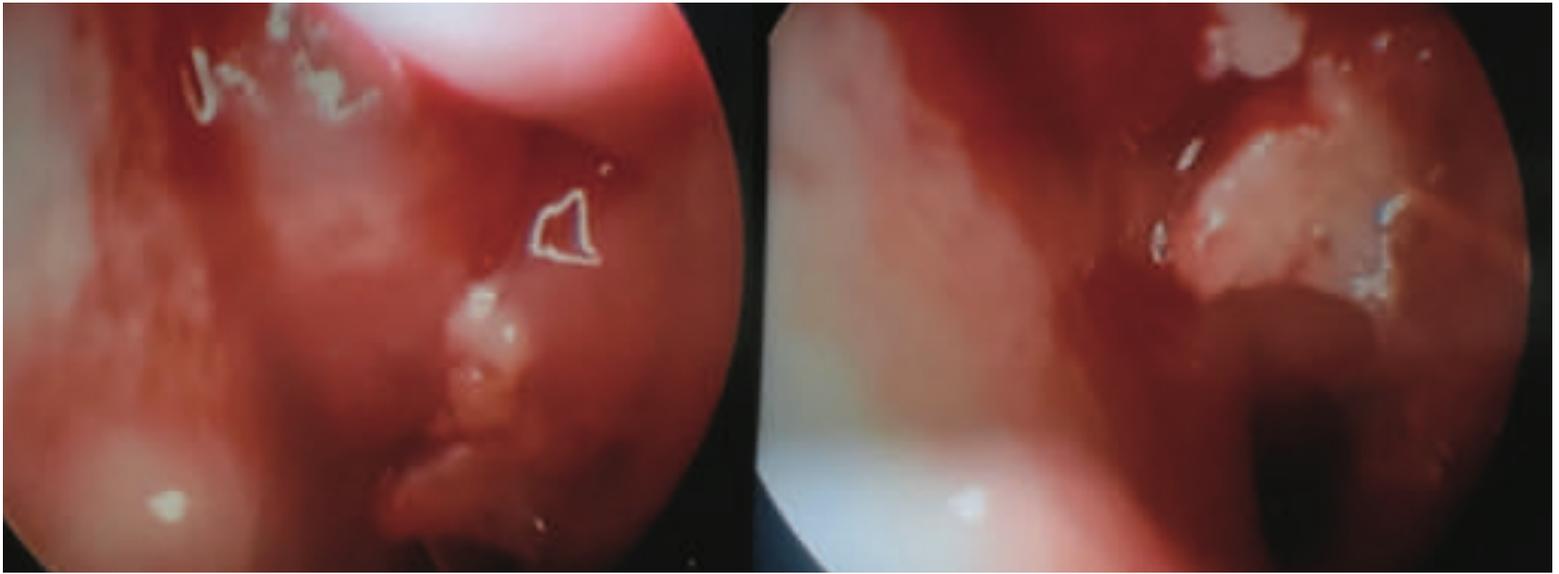
By Veshesh Patel OMS-IV, Trevor Creamean OMS-I,  
Adiraj Sibia BS, Jush Patel OD, Jayesh Patel DO,  
Dr. Kiran C. Patel College of Osteopathic Medicine, Nova Southeastern University

**A**bstract: Diffuse large B-cell lymphoma (DLBCL) is the most prevalent subtype of non-Hodgkin's lymphoma (NHL). This subtype can present in various extranodal sites including the brain, bones, intestines, kidneys, adrenal glands, and other soft tissues. One unique site of DLBCL is the nasal septal cavity presenting as a rapidly enlarging mass, resistant to antibiotics and steroids. Definitive diagnosis involves biopsy, but further workup, such as computed tomography (CT) and fluorescence in situ hybridization (FISH), can help support the diagnosis of DLBCL. While determining the stage of the lymphoma, treatment with R-CHOP chemotherapy (rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone) should be initiated immediately. This case demonstrates a rare presentation of DLBCL in the nasal cavity and describes the significance of urgent examination as well as treatment.

## Introduction:

Diffuse large B-cell lymphomas (DLBCL), which is the most common lymphoma and type of non-Hodgkin's lymphoma (NHL), are estimated to have an incidence rate of 150,000 cases annually worldwide.[1]

Depending on the primary site of involvement, DLBCL can present with a variety of symptoms, but most individuals can experience B symptoms including fever, weight loss, and night sweats. Representing 30% of all cases of non-Hodgkin's lymphoma, patients with DLBCL are typically presented as an aggressively growing mass, lymphadenopathy, extranodal disease, or a combination. Diagnosis is typically made through excisional biopsy of the lymph node or fine-needle aspiration, but computed tomography (CT), positron emission tomography (PET), flow cytometry (eg, CD20, CD22, CD30, CD45), and fluorescence in situ hybridization (FISH) can also support the diagnosis and determine prognosis.[2] One rare extranodal site of DLBCL involves the nasal region, such as nasal septum and paranasal sinuses, which can present with symptoms like epistaxis, sinusitis, headache, and nasal swelling. Nasal involvement of DLBCL is clinically distinct and virtually aggressive due to the risk of airway compression, obstruction, and involvement of adjacent structures, requiring urgent treatment. The mainstay treatment for B-cell lymphomas include R-CHOP immunochemotherapy consisting of rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisone. This case details a presentation of DLBCL at a rare extranodal site.



### Case Description:

A 72-year-old female, with a past medical history of hypertension and hyperlipidemia presents to the clinic with chronic nasal congestion and sinus pressure. Over the last 6 weeks, patient reports no resolution of symptoms with the use of prednisone, azithromycin, levofloxacin, or oxymetazoline nasal sprays. Patient denies any recent surgeries or hospitalizations. Patient denies any complaints of fever, chills, rigors, nausea, vomiting, or any other constitutional symptoms.

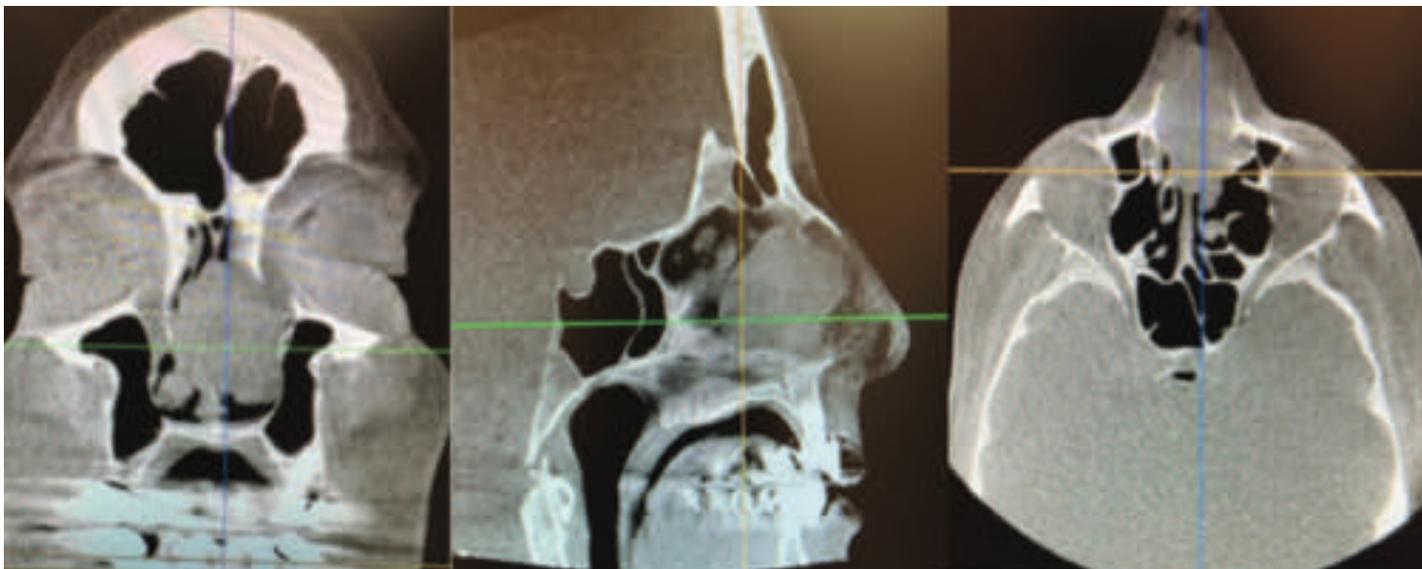
After follow-up with an otolaryngologist, local examination with nasal endoscopy showed a mass in the bilateral nasal septum (Figure 1), which was initially attributed as a polyp. On CT of the sinuses, it was reported there was a large septal bilateral maxillary sinus masses, as shown in Figure 2. After these concerning findings, biopsy of the lesion was performed. The preliminary biopsy results were suggestive of a possible B-cell lymphoma. On further workup, FISH analysis of the sampled tissue found there were positive staining for CD20 and BCL2, and partially positive for MYC (60%), BCL6 (40%), MUM1

Figure 1

(40%), and Ki-67 (70%). It was also noted that tissue sections demonstrated a diffuse infiltrate of medium to large-sized cells with vesicular chromatin, conspicuous nucleoli, and scant to moderate amounts of cytoplasm in a background of scattered tingible body macrophages, necrosis and edema.

**Figure 1.** Demonstrates moderate amount of granular, inflamed tissue on the right and left nasal septum, respectively. The left nasal septum illustrates a more extensive and friable mass, with associated bulging.

Given the findings on CT, biopsy, and FISH, the diagnosis of DLBCL was made for the afebrile patient with antibiotic and steroid-resistant sinusitis. For appropriate staging, the patient was offered further diagnostic options including PET scan of the whole body, which noted no other quantitatively significant hypermetabolic abnormalities except in the anterior nares, nasal cavity, and sinonasal cavity. Taking into consideration of



**Figure 2**

no distant spread, final staging was consistent with stage 1A non-bulky lymphoma for this patient. Treatment with 3 cycles of R-CHOP chemotherapy was initiated, with the option for undergoing radiation following completion. On final follow-up, patient reported to achieve a remarkable response to treatment with minimal side effects.

**Figure 2.** Computerized tomography imaging reveals a large mass in the right and left nasal cavity on coronal, sagittal, and axial view, respectively. Coronal view (on the left) depicts a greater left sided nasal cavity involvement of the mass compared to the right nasal cavity.

### Discussion:

Multiple studies in the literature have reported T-cell and Natural Killer (NK) cell lymphomas involving the nasal cavity.[3] However, our case reports nasal septal involvement of a common B-cell lymphoma.

Additionally, most NHLs involve the sinuses, without nasal disease, or the Waldeyer's ring, which is made up of the tonsils, adenoids, and other lymphoid tissue.[4] Although the median age of presentation for a B-cell lymphoma is 50 years and more predominant in males, our older female patient had the most common subtype of NHL in the anterior nasal septum without any constitutional symptoms. Definitive diagnosis was made through biopsy and then supported by characteristic histopathologic features and immunohistochemistry markers of the tissue specimen.

A presentation of a nasal cavity lymphoma can be characterized as a ulcerative, necrotic, or inflamed mass with potential extension to adjacent structures, such as facial, palate, cartilage and bony structures. On examination with nasal endoscopy, it is likely to see extensive pale, friable, granular tissue with associated pus, crusting, or hemorrhage.[5] These findings can lead to the symptoms found in our patient (eg, nasal congestion, sinusitis, nasal pressure). It is imperative to treat the underlying cause of these symptoms to prevent complications



such as fistula formation, osseous necrosis, and mucosal ulceration. Our case demonstrated similar clinical manifestations described above, but with no evidence of complications.

The prognosis of the nasal involved DLBCL lymphoma is dependent on the extent, staging, and spread of distant structures of the disease. It has been found that two-thirds of patients remain in the remission phase after initial therapy, while other third of patients experience relapse.[6] In particular to DLBCL, the cumulative five-year survival rates are 55% due to the aggressive behaviors of these lymphomas. However, in one study from Japan, 114 patients had a 5-year survival of 25% if the nasal cavity was the primary as compared to 85% if the paranasal sinuses were the primary site, and 88% of the patients had DLBCL subtype.[7] This study patient did not have distant spread and had a favorably low stage of disease which contributed to a favorable response with chemotherapy. If chemotherapy did not resolve the disease, then other treatment options include radiotherapy (eg, distant spread of disease) and surgery (eg, cases with life-threatening complications such as obstruction of the upper respiratory system).[8] Surgical intervention would typically involve decompression of the nasal passage, opening of the paranasal sinuses, and relieving pressure in the orbits.

## Conclusion:

This case demonstrates an atypical presentation of DLBCL at the nasal septum with no constitutional B symptoms (eg, fever, weight loss, night sweats). The diagnosis was found to be DLBCL on biopsy, which was

further supported by findings on CT of the sinuses and FISH. The patient's early detection of the lymphoma was essential in prognosis, yielding a favorable stage of the disease and treatment response. Although most NHLs involve the nasal sinuses and Waldeyer's ring, this case illustrates the importance of possible extranodal involvement of DLBCL to the nasal septum. It is essential for clinicians to familiarize head and neck manifestations of lymphomas, especially rapidly growing subtypes such as DLBCL. □

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# The 2022 Clinical Assembly

**T**HE 2022 CLINICAL ASSEMBLY took place in beautiful San Juan, Puerto Rico. It was nice to see familiar faces and enjoy quality time together. As we planned for the 2022 Annual Clinical Assembly, we wanted to incorporate time for our members to explore the gorgeous landscape and see all that Puerto Rico has to offer. We recognized the importance of spending time with one another, especially coming out of Covid-19. Our executive director, Ralph McClish had a great idea to offer experiential continuing medical education. Experiential continuing medical education is a way to include CME credit while on an excursion or

during an activity outside of the typical conference room space. We did this by having a physician speaker attend the excursion and he or she would speak on their topic, on the way to and from the excursion, during breaks or include their lecture in a creative way during the activity.

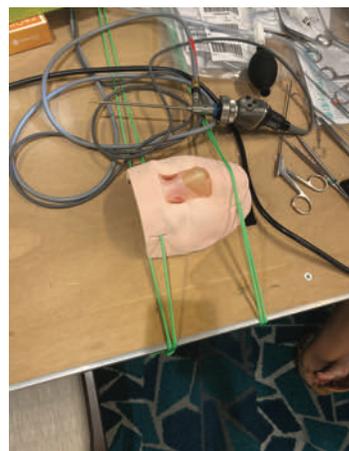
Our first experiential CME activity was yoga out on a beautiful terrace overlooking the ocean. It was such a hit that

we ran out of yoga mats! Yoga was a great way to start our day and to get a lesson on physician wellness while listening to the beautiful sounds of the ocean.

Also, to kick off our 2022 ACA we hosted our Annual Sinus Cadaver Lab which was led by Ian Humphreys, DO. The lab went all day Wednesday and was attended by many of our members. Thank you Dr. Humphreys for the amazing hands-on medical education.

We can't forget our annual botox and fillers hand-on course that is always well attended and never has a dull moment. Thank you Sirtaz Sibia, DO, Sandy Llamas, MD, Anthony Corrado, DO and Leslie Kim, MD for leading the way during this educational experience.

While everyone was enjoying experiential





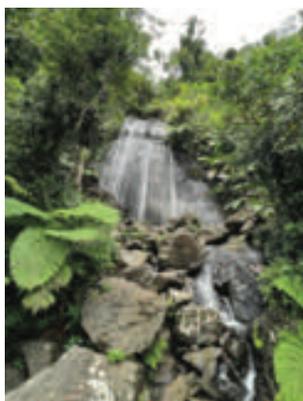
the “Taste of Puerto Rico.” Our attendees joined together in Old San Juan where they learned the in’s and out’s of Puerto Rican cuisine, walked the streets of famous old San Juan and learned how to make their own Mofongo. Mofongo is a well known Puerto rican dish made with plantains. We geared up Friday evening for the



CME and hands-on labs our board was hard at work. We are very thankful for all the hard work this past year from our 2021-2022 President Donald Morris, DO and the rest of the AOCOO-HNS board members.



Thursday was jam packed with exciting lectures and more experiential CME. We jumped on a bus and made our way to the El Yunque National Rainforest Tour with our colleagues, friends, spouses and partners. Friday’s experiential CME was



AOCOO-HNS Annual Awards Banquet. It is truly wonderful to see so many of our members receiving awards during the banquet. We are very thankful for the amazing people who make up the AOCOO-HNS. Thank you for all that you do!



# 2022 Clinical Assembly



Thank you to all of our past presidents who have worked so hard to make AOCOO-NHS what it is today



And to our 2021-2022 AOCOO-NHS President, Donald Morris, DO who worked tirelessly this year to support, collaborate with and to lead our board to make decisions that better AOCOO-NHS's future, Thank you, Dr. Morris!

President Donald Morris, DO with the past President Carl Shermetaro, DO





Thank you to all who attended the awards banquet. It was a night of celebration!



Dr. Shermetaro presenting bells to our 2022 Education Committee Chairs: Zachary Pearce, DO: Ophthalmology Chair, Rizwan Aslam, DO: Otolaryngology Chair (Dr. Lyndsay Madden receiving the award on behalf of Dr. Aslam)

2022 Fellows

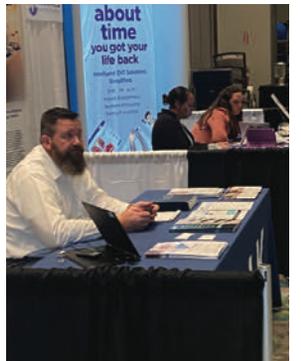
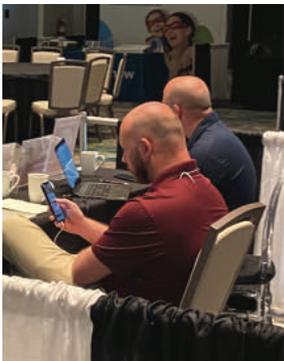




## 2022 Clinical Assembly



We ended Saturday with CME while aboard a private charter sunset sail dinner and a farewell to our friends and colleagues.



We started Saturday Strong with our residents reception and Happy Hour by the Pool CME.

A huge thank you to our exhibitors and sponsors. We could not do ACA without you. Your continued support and partnerships mean the world to us.



We are looking forward to ACA 2023. Till next years ACA, continue to explore and learn a bit along the way!

If you would like to view more pictures from 2022 ACA visit:

<https://monstully.passgallery.com/-2022aca>





2022  
**MIDYEAR**  
*Symposium*

A VIRTUAL EVENT  
SEPTEMBER 23-24

# WELLBEING

*Made easy*

Dr. Harjot Singh, M.D.

How physicians can:

- Beat burnout
- Find happiness
- Look forward to every day with joy

12 hours of CME

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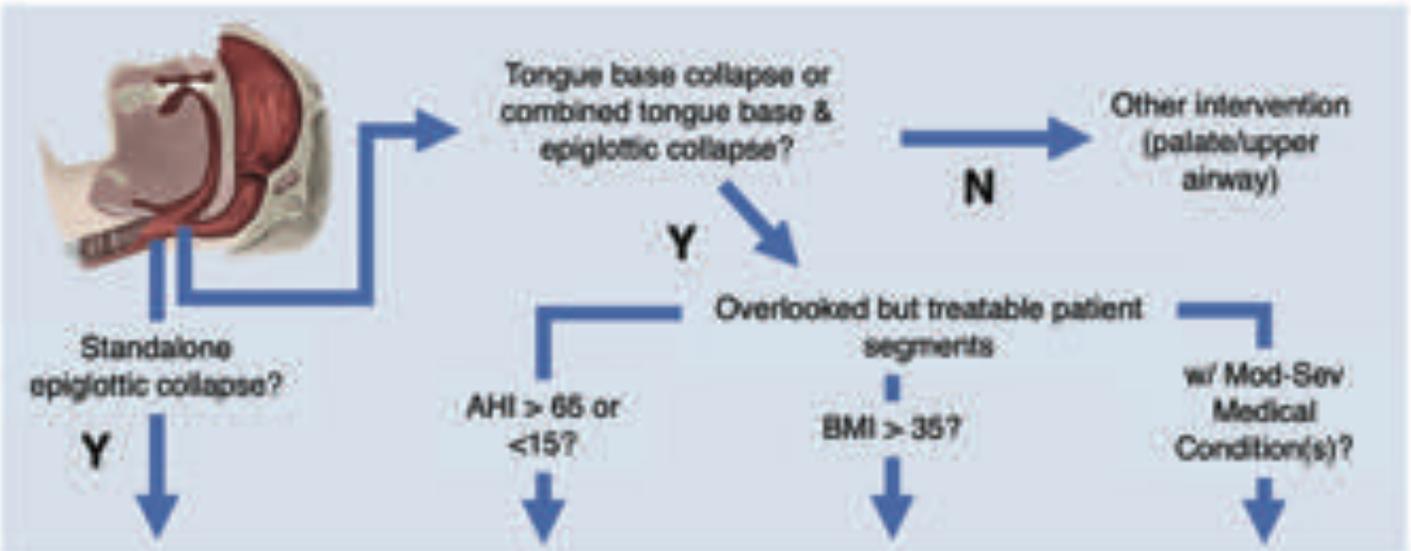


# PATIENT SELECTION

## Lower Airway Collapse in OSA - A Comprehensive Treatment Paradigm: Filling the Treatment Gaps of Hypoglossal Nerve Stimulation (HNS) With AIRLIFT Hyoid Suspension Using Drug-Induced Sleep Endoscopy (DISE) Evaluations

In my practice, all OSA patients undergo a DISE examination. When DISE demonstrates predominantly tongue base and/or epiglottis collapse with minimal upper airway (velum/ oropharynx) collapse:

Thomas Heinerman, MD  
Physician's Clinic of Iowa  
Cedar Rapids, IA



### Epiglottic Collapse



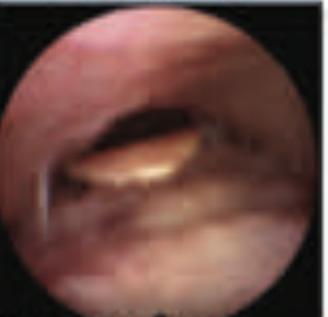
**Patient:** 44-year-old male. DISE showed predominant epiglottic collapse, without notable tongue base collapse.  
**Intervention:** AIRLIFT hyoid suspension.  
**Result:** Preop AHI 28. Post Airlift AHI 10.

### High AHI



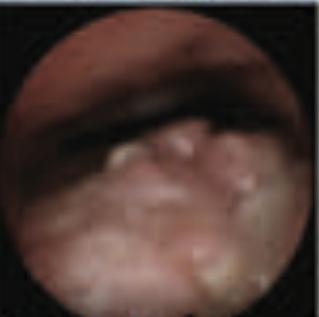
**Patient:** 68-year-old female. DISE finding of upper & complete lower airway collapse.  
**Intervention:** AIRLIFT hyoid suspension.  
**Result:** Preop AHI of 95.8. Post Airlift AHI 21.2. Patient now HNS eligible.

### High BMI



**Patient:** 44-year-old male with a BMI of 37. Patient unable to lose weight. DISE finding of upper & significant lower airway collapse.  
**Intervention:** AIRLIFT hyoid suspension.  
**Result:** Preop AHI 18.9. Post Airlift AHI 6.5.

### Down Syndrome



**Patient:** 23-year-old male with Down Syndrome. Post-HNS management concerns. DISE showed predominant tongue base collapse.  
**Intervention:** AIRLIFT hyoid suspension.  
**Result:** Preop AHI 42.5. Post Airlift AHI 5.7.





# PATIENT SELECTION

## Additional AIRLIFT hyoid suspension patient candidates

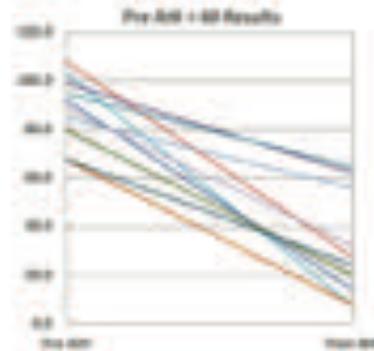
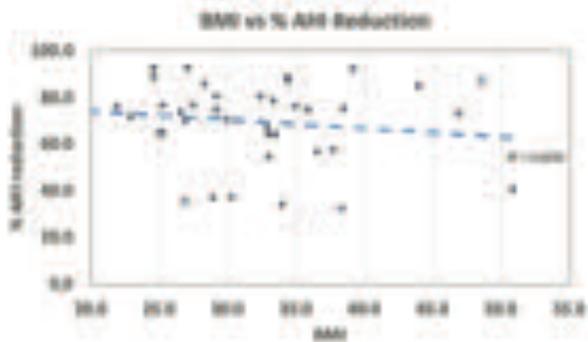
- Insurance coverage for other options is limited
- Need to limit the perioperative suspension of patient anticoagulation
- Post-procedure compliance concerns
- With significant upper & lower airway collapse, consider adding UPPP either simultaneously or staged.



Thomas Heineman, MD  
Physician's Clinic of Iowa  
Cedar Rapids, IA

## Literature on Treating High BMI, High AHI and Epiglottic Collapse Patients

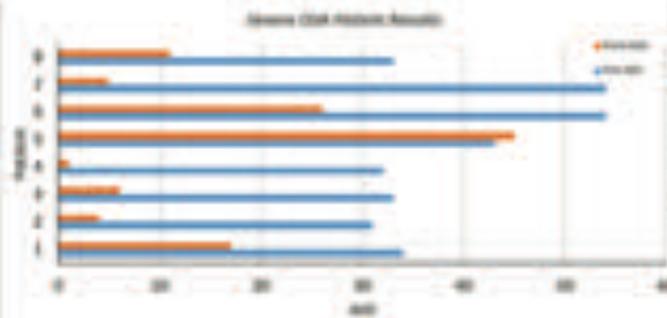
Study of 39 patients treated with AIRLIFT hyoid suspension and modified UPPP<sup>1</sup>. Overall study results showed 74% median AHI reduction, 77% Surgical Success per Sher criteria, and 100% compliance. Overall results achieved showed no correlation with BMI. For patients with a pre-AHI > 60, the mean AHI reduction was 64%.



Article Link:



Study of 19 patients treated with AIRLIFT hyoid suspension targeted hypopharyngeal collapse with retroflexion of the epiglottis<sup>2</sup>. Overall study results showed 43% mean AHI reduction, 47% Surgical Success and 100% compliance. 62.5% Surgical Success was found in Severe OSA patient subgroup.



Article Link:



# AIRLIFT.

Your New Approach to Hyoid Suspension

- Fast
- Simple
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- Effective

Learn more at our website:



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email: [info@sivestamedical.com](mailto:info@sivestamedical.com)  
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Contact us to schedule a demo:





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