SPRING/SUMMER 2024

SCOPE

The Annual Clinical Assembly 2024

Nurturing Aspirations:

The encouraging community of Otolaryngology from the perspective of the medical student

HYPAR: Gratefulness

AMERICAN OSTEOPATHIC COLLEGES OF OPHTHALMOLOGY AND OTOLARYNGOLOGY–HEAD AND NECK SURGERY

contents

HYPAR: Gratefulness 4

The hype 7

New book – “The Opthalmic Handbook” 10

The Annual Clinical Assembly 2024 12

Helping the kids 16

Nurturing aspirations 20

The incredible leading force 19

Myospherulosis of the head and neck 24

High-flow arteriovenous hemangioma 26

Chronic eye disease 30

Happy moo year! 38

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We are excited to announce a new member benefit that underscores our commitment to supporting you not just professionally, but personally. The American Osteopathic Colleges of Ophthalmology & Otolaryngology Head and Neck Surgery (AOCOO-HNS) Foundation is now offering an exclusive online estate planning service to our members.

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HYPAR: Gratefulness

Encouragement for all of us to be better physicians

By Drew Philips, DO & Christopher Lenkeit, DO

Allergy and Rhinology are consistently high-yield topics year after year on our Otolaryngology-Head and Neck Surgery Inservice Training Exams. The 2024 High Yield Primer: Allergy and Rhinology Conference in Houston, TX was extremely well organized, fun, and interactive. Not only did this conference help with exams, but all speakers involved made the information clinically relevant and encouraged us to be better physicians. Whether it is ensuring our patients' asthma is adequately treated or spotting an inconspicuous immunodeficiency, this conference and the speakers involved expanded our awareness and inspired us to be better. There was also an opportunity to converse with medical company representatives lecturing on their innovative products such as monoclonal antibodies for chronic sinusitis with polyps and allergic rhinitis, treatments for hereditary angioedema, or surgical management of internal nasal valve collapse. I appreciated the opportunity to learn more about these products all in one space with my colleagues.

Furthermore, I appreciated the interactive sessions where we would walk through cases and discuss, as a group, our workup/treatment plans. One of the lectures had a Dungeons and Dragons theme which was both entertaining and interactive. I appreciate the effort the lecturers put into their presentations and making the conference fun/interactive. Lastly, the hands-on skin prick testing was helpful from a practical standpoint and many of the lectures discussed implementing allergy testing into your practice, which I found very helpful. Thank you to all of the lecturers, medical representatives and sponsors for making this excellent conference possible. I will definitely recommend this conference for upcoming residents within my residency program to attend. Also, thank you to The American Osteopathic Colleges of Ophthalmology and Otolaryngology–Head and Neck Surgery (AOCOO-HNS) for helping sponsor this event and covering travel/hotel costs. Without AOCOO-HNS, this high-quality conference and all of the knowledge obtained would not have been possible for me, and therefore I am very grateful!

Ben Gillette, DO

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As I was traveling down to Houston for this year's High Yield Primer: Allergy & Rhinology (HYPAR) conference this past February, I honestly didn't know what to expect in terms of content and format. No previous resident has attended from my program at Dayton-Kettering. I had just first heard of

the conference this past October. I was eager to attend as I feel that allergy management has always been a weakly taught subject throughout my ENT residency. What I came to find out within the first couple lectures on Friday afternoon was that this was not going to be like any other academic conference that I've attended before.

What was readily apparent from the get-go was the time and dedication both Drs. Cecelia Damask DO and Christine Franzese MD had put forth in planning this conference. Each lecture was meticulously crafted to be both high-yield yet fun and interactive. Lectures routinely were themed to include popular movies and games, but at the end you felt much more informed on certain subjects within the allergy/rhinology realm than before. Lectures ranged from Asthma to atopic dermatitis, Immunodeficiencies to sinus migraines (and everything else in-between). Even the meals were educational, as each were sponsored by various venders with accompanying guest speakers.

This past weekend (March 2nd) was the ENT resident in-service exam, and I can assure you that many questions that I would have struggled with were a breeze on account of attending the HYPAR conference. We were very fortunate this year that the AOCOO-HNS fully supplemented DO ENT resident's airfare, board, and registration. Without their commitment to resident education and engagement, it would have been difficult to attend this high-yield conference. Next year, I will certainly encourage other residents from my program to attend. Generous acts like this by the AOCOO-HNS compel me to want to be more actively involved in other events put on by the college, as well as remaining a member and contributing to resident education in the future.

Drew Phillips, DO PGY4
Grandview-Kettering ENT
Dayton, Ohio

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Due to the generous funding from the AOCOO-HNS board I was able to attend the High Yield Primer: Allergy and Rhinology course in Houston Texas February 16-18. It was a very well-organized course which really expanded my knowledge about both allergic and rhinology disorders. It was a good combination of typical lectures as well as case-based learning exercises. Each instructor was able to add a unique flair to the course as well which helped the (sometimes) mundane topic of immunology be much more interesting, engaging, and memorable. There was also an emphasis on broadening the understanding about the indications and implementation of biologic medications. Courses like this allow the unique opportunity to learn more about emerging medications that otherwise I would not get significant exposure to during residency. The knowledge from this course will play a large role in my further patient care as an osteopathic otolaryngologist. I again want to thank the board for the help with funding my participation in this course as I would have otherwise been unable to attend.

Christopher Lenkeit, DO

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This past February, I had the opportunity to attend the High-Yield Primer on Allergy and Rhinology (HYPAR) conference in Houston, TX with two of my co-residents from McLaren Oakland Hospital. The course was a wonderful and engaging learning experience, with education leaders and sponsors from across the country giving us significant insight Into implementing an allergy practice into both academia and private practice. We found the lectures to be insightful and up-to-date with current evidence-based medicine. The educators took the time to answer all questions and create Interactive and entertaining lectures throughout the weekend with prizes, games, hands-on workshops, and clinical scenarios. We were provided with educational handouts as well as an allergy textbook which has already been fruitful. The ability to go to the course was due to the generosity of the AOCOOHNS via their resident travel grant. It is an honor and a privilege to have been selected for this opportunity. This grant not only allowed me to expand my knowledge in the field but also provided me with invaluable networking opportunities and insights into the latest advancements in allergy and rhinology. Your support has truly been instrumental in furthering my professional development, and I am incredibly grateful for your investment in my education and career. In February of this year, I had the distinct honor of attending the High-Yield Primer on Allergy and Rhinology (HYPAR) conference in Houston, Texas, along with two of my co-residents from McLaren Oakland Hospital. The conference provided a comprehensive and engaging educational experience, with renowned experts and sponsors from across the country sharing their insights and experiences on the implementation of an allergy practice in both academic and private settings. The lectures were highly informative and up-to-date, reflecting the latest evidence-based medical practices. The educators demonstrated their dedication and expertise by taking the time to answer all questions and by creating interactive and engaging lectures throughout the weekend, which included prizes, games, hands-on workshops, and clinical scenarios. In addition to course materials, we were also provided with an allergy textbook, which has proven to be an invaluable resource. The opportunity to attend this conference was made possible by the generosity of the AOCOOHNS through their resident travel grant. The grant not only enabled me to expand my knowledge in the field but also provided invaluable networking opportunities and insights into the latest advancements in allergy and rhinology. I sincerely appreciate the support of the college and it's role in my professional development.

Daniel Lofgren, DO PGY-5

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The Hype

By Donald Morris, DO

As I sit at my desk writing this article, the plow trucks have just finished going by and the roads are clear again. We have had our first real week of winter weather here in Pittsburgh. You would think by listening to the news coverage that a blizzard had hit us. There were wall to wall news cycles of how bad it was going to get and to be prepared. Then you would hear the weather forecasters say, "Well we expect 2-6 inches of snow over a 48 hour period." Then it was right back to hyping how bad things would be and showing the road crews preparing and the crowds at grocery stores.

The hype was crazy. So what was the reality of all of this? We woke up with an inch or so of snow on the ground that was treated by the road crews. There was some light snow during the day that again was easily treated, and finally around 7 pm at night we got the majority of the snow.

The result of all of this was that schools and activities were canceled. I had a very slow office day, with many patients having called and canceled the preceding day. This was all done based on the hype without any real facts. In my mind,the vast majority of all of these cancellations were for nothing. The roads were fine most of the day and the amount of lost man hours is incredible.

If the news had come out and said, there will be a little snow in the morning and through the day and it won't be that bad, we would all have been better off. However, the ratings would have been bad for TV and no one would have watched. This is the difference between hype and reality.

There are times when all of this caution is warranted,

and I know that predicting weather is a challenge, but still we, the viewers, need to understand that there is hype, and realize that we may not be getting the actual facts, or are getting a biased view.

How does this connect with medicine? We are constantly barraged with information on new medications, procedures, and devices. I think that it's fantastic that there are always new things coming out. However, we do need to be aware that like everything else there is hype surrounding these things. In the case of some of these, we have things being overpromised and under delivered. We do need to remind ourselves that there is business associated with medicine, and with that will come hype.

I think innovation is wonderful, and there are many new procedures and medications that are useful. I think it is certainly worthwhile for us to listen to the reps and to use our intellect to determine if the products that are being hyped will be useful to our patients. I think it is worth trying them in the right circumstance. However, I do think it is important to remember in our world that everything runs on hype. The medicine or procedure that is the answer to everything we do and should be used on everyone, probably isn't the answer to everything and there are likely more specific instances when it should be used. Sometimes these things work and then there is no way the patients can afford them even though we have been guaranteed that the patients will get them for a certain cost, all more of the hype.

I believe that innovation and invention are good, and that bringing new products to our patients is fantastic. I just want us to remind ourselves that everything runs on hype, and we need to sift through what is being presented to us and to use our intellects to determine what we want to try with our patients and what is in their best interests. I think that this is an obligation we have to our patients. □

DID YOU KNOW?

70% of Americans don't have an estate plan, potentially leaving their legacy and loved ones unprotected? The issue multiplies. The average cost of probate can deplete nearly 3-7% of your estate's value, a significant loss that thoughtful planning can prevent.

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By considering AOCOO-HNS in your estate plan, you are not just protecting your legacy; you're contributing to the advancement of resident training, education, and research, impacting the healthcare community profoundly.

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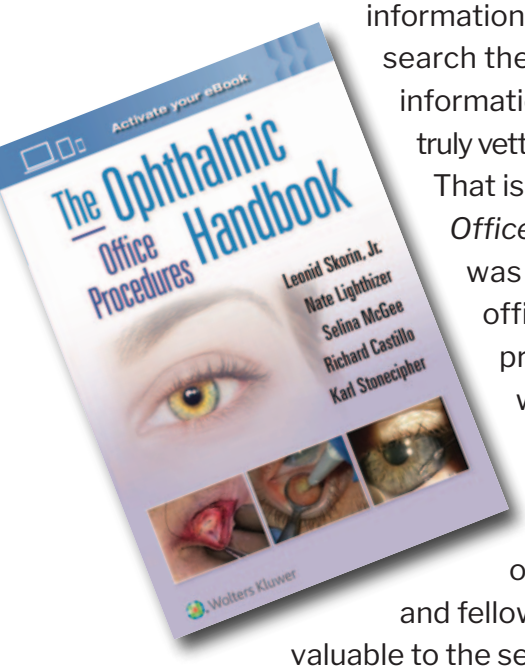
New Book!

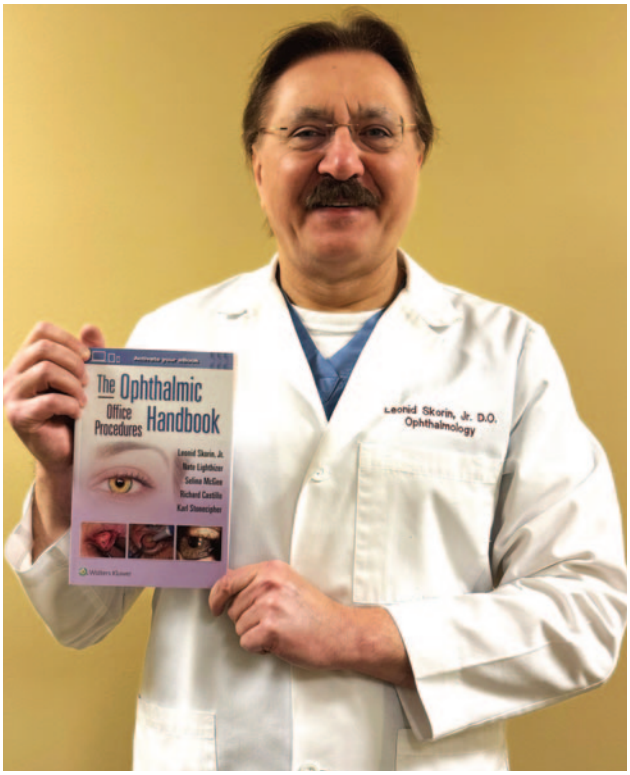
AOCOO-HNS Member, Leonid Skorin, Jr., DO, Publishes Office Procedures Handbook

It has always been somewhat of a dilemma, how does an ophthalmic surgeon attain and build their procedural and surgical skills? Traditionally, formal training programs and continuing education skills-transfer lectures and hands-on workshops have been utilized. But what if you need this information quickly? One can search the internet. But has the information on the internet been truly vetted and is it even accurate? That is why *The Ophthalmic Office Procedures Handbook* was conceived. It covers office-based surgical procedures available in written, pictorial, and video presentations. It should be especially beneficial to the ophthalmology residents and fellows in training yet equally valuable to the seasoned practitioner.



The Ophthalmic Office Procedures Handbook has been devised to equip the reader with detailed and relevant surgical information constructed in a consistent and easy-to-use format. Most of the chapters contain specific key indications, contraindications, preoperative considerations, and procedural points. Postoperative considerations, including potential complications and their treatment, are also thoroughly addressed. Pertinent coding, billing, and if indicated, modifier usage is explained in each chapter. This textbook is available as both a soft cover text and eBook. The eBook (which is included in the purchase of a print copy) contains all the material found in the soft cover text and an extensive collection of procedural and surgical videos.

The publisher, Wolters Kluwer is offering SCOPE readers a discount of 25% off with free shipping. To take advantage of this offer simply go to shop.lww.com, type in Skorin in the Search Author, Title, ISBN or Keywords box which is next to All Products, click on *The Ophthalmic Office Procedures Handbook* and enter discount code WQA001AA at checkout. □



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Top 5 Moments to Consider an Estate Plan

Did you know 70% of Americans lack an estate plan, leaving their legacy uncertain? Here are five critical moments when creating an estate plan is essential

Homeownership

As a homeowner, it's vital to decide the future of your property.

Parenthood

Protect your children's future by outlining guardianship and financial provisions.

Marriage or Divorce

Ensure your spouse's security and clarify asset distribution; it's critical to update after a divorce too.

Business Ownership

Safeguard your business and its succession.

Health Changes

Prepare for unforeseen circumstances with clear medical directives.

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If any of these resonate with you, it's time to act. AOCOO-HNS provides complimentary online estate planning services to our members, helping you secure your assets, wishes, and especially your loved ones. Take advantage of this valuable benefit today.

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Sun, Sand and CME in Myrtle Beach!

The Annual Clinical Assembly 2024

Myrtle Beach, South Carolina, proved to be the perfect backdrop for our 2024 Annual Clinical Assembly (ACA). The sun was shining, the ocean waves were crashing, and the medical minds were buzzing. As your fearless leader, my mission was to craft an unforgettable experience where top-tier continuing medical education (CME) could seamlessly mingle with well-deserved fun in the sun.

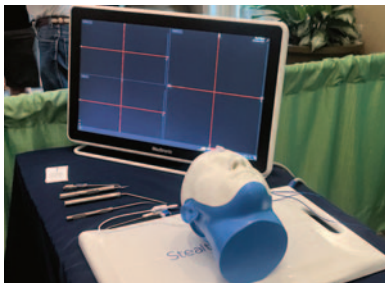
The Evolution of the ACA

A huge shout-out to the dedicated education committee for their flexibility and willingness to try new things! We've been on an exciting journey, finding the perfect balance between learning and leisure.

It's no secret that the world of medicine demands constant learning. Our ACA delivers cutting-edge lectures and hands-on workshops that not only meet but exceed the AOA's rigorous standards. But we also know that networking, unwinding, and simply having a good time are crucial for our members.

In 2022, we introduced a game-changer: experiential CME. Imagine earning credits while exploring a new city on foot! This innovative concept proved a huge hit, and we've been expanding on it ever since.


PLEASE
BEWARE
OF
ALLIGATORS



Myrtle Beach: A Perfect Match

For our 2023 ACA in Carlsbad, California, we added a fun golf tournament and offered tennis lessons, CME workshops, or poolside relaxation for non-golfers. The energy was incredible, and we knew we had something special.

Fast forward to Myrtle Beach, our 2024 destination. With the hotel just steps from the Atlantic Ocean, the setting was simply unbeatable. The golf tournament made a triumphant return, and the overall atmosphere was one of camaraderie, learning, and pure enjoyment.

Congratulations to our winning golf team, Yaktown Bois: Carl Shermetaro, Jeff Singh, Eytan Keider, and Austin Landis.

A Look Ahead

I'm absolutely thrilled with the direction the ACA is heading. We're building an event that's not only medically enriching but also personally rewarding. Be sure to check out the photos of our Myrtle Beach adventures! You might even spot a familiar face or two.If you missed out on Myrtle Beach, don't despair. The vibrant city of New Orleans awaits us in 2025, and we can't wait to see you there! In the meantime, stay tuned for updates, and keep that passion for medicine and fun alive! ☐

P.S. – Special thanks to Mackenzie Enriquez, Jennifer McClish, and the entire staff for their tireless efforts in making each ACA a resounding success!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PALISADES C
OPHTHALMOLOGY EDUCATION
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REGENERON

Helping the kids

The impact of Osteopathic treatment on Tympanogram results in pediatric patients

By Rosh Barthi1, Matthew C Bushik1, Christa Foss1, Mohammad Qureshi1, Maya Srkalovic1, Alexa Werb1, Westin Yu1, Ashwin Shankar, DO2
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Abstract

Acute otitis media (AOM) is a common pediatric upper respiratory infection, especially for younger children often leading to doctor's visits. The pathophysiology involves an inflammatory response, leading to fluid accumulation and microbial growth in the middle ear due to the pharyngeal connection of the respiratory tract to the ear through the eustachian tube. Long-term complications, such as hearing loss and developmental delays, underscore the importance of eCective treatment. The conventional approach includes antibiotics and anti-inflammatories, progressing to surgery if antibiotic eCicacy wanes.

Osteopathic manipulation has emerged as a potential adjunct for recurrent AOM, encompassing techniques like the Galbreath maneuver and auricular drainage. However, limited studies hinder widespread adoption. The scarcity of osteopathic-trained physicians and varying utilization of osteopathic manipulative treatment (OMT) present additional challenges.

Our meta-analysis, based on existing studies, underscores OMT's safety and demonstrate potential eCicacy in reducing recurrent AOM occurrences and complementing standard medical treatment. These findings suggest OMT's potential as a preventive measure, particularly as the osteopathic profession grows. Addressing these insights may reshape AOM management by improving patient outcomes in the evolving landscape of pediatric healthcare.

Introduction

AOM is a widespread pediatric emergency, making up the 2nd most common cause of ED presentations [1]. Up to 80% of children will experience at least one case of otitis media during their lifetime [1]. The standard treatment of AOM in the United States is antibiotics and Non-steroidal anti-inflammatory drugs (NSAIDs) [1]. However, immediate treatment of AOM with antibiotics remains controversial. Other countries, such as the Netherlands, utilize a period of watchful waiting before prescribing antibiotics due to the potential side eCects of antibiotics [1].

In the United States, immediate antibiotic use remains the mainstay of treatment due to the potentially dangerous complications of AOM [1]. As a consequence of these complications, it becomes important to develop adjunctive treatment modalities, such as OMT for AOM.

This meta-analysis aims to examine the

current data available on OMT as a treatment modality for AOM in relation to tympanograms. Tympanograms are used to determine the freedom of movement of the tympanic membrane. This instrument qualifies the eCect of AOM on the tympanic membrane and is thus a useful tool in measurement of the presence of AOM and its aftereCec that OMT as a treatment modality will be eCective in preventing recurrence and decreasing recovery time for patients with AOM.

Hypothesis

There is no significant diCerence in the quantity of normal tympanograms in pediatric patients who received OMT as adjunctive treatment compared to those who have not.

Methods and Materials

Our research group queried studies from Journal of American Medical Association (JAMA), Journal of Osteopathic Medicine, and DeGruyter published from September 2003 to June 2014. The search criteria included "OMT AND AOM" and "Alternative medicine AND AOM." Randomized controlled trials on OMT vs. the standard treatment of AOM in relation to baseline and post-treatment tympanograms were included. Tympanogram readings were categorized as normal (movement of the tympanic membrane) or abnormal (no movement of tympanic membrane/exudate present). Literature reviews and meta- analyses that focused on the duration of illness, recurrent antibiotic use or surgical intervention, were excluded.

Data from each of the studies was extrapolated based on the sample size (number of ears), OMT vs. the standard treatment of AOM, and baseline vs. post-treatment tympanograms and compiled into a comprehensive data sheet. The sample size was 102 ears for the OMT group and 112 ears for the standard treatment group. Tympanograms were obtained in each ear pre-treatment, and after at least 3 treatments by an audiologist. These absolute tympanogram values were assessed and analyzed through McNemar's test. This test is a variation of the chi-square test and is useful when comparing the eCectiveness of a treatment within a single patient population. For this test, statistical significance was set at $p<.05$.

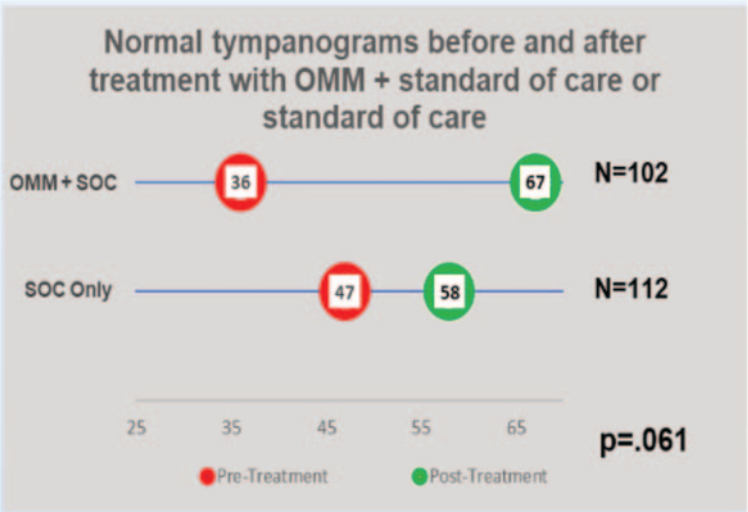
Results

	Study 1		Study 2	
Normal Tympanogram	Standard of Care Only	Standard of Care + OMT	Standard of Care Only	Standard of Care + OMT
Pre-treatment	37	22	10	14
Post-treatment	32	35	26	40
Difference	-5	13	16	26

Table 1: Pre and post-treatment data for each individual study regarding normal tympanograms before and after treatment

X^2	3.509
p value	0.061

Table 2: Results of McNemar's test for combined dataset



Discussion

AOM is a disease that can be treated with traditional medical practices and OMT as an adjunct therapy. The pathophysiology of AOM involves a heightened sympathetic response which can allow for facilitation of OMT to restore the body's self-regulation and self-healing mechanisms [1,2]. A variety of OMT techniques can be utilized to complement the traditional antibiotic treatment, leading the osteopathic physician to have a plethora of physical skills, along with clinical knowledge, to achieve the best clinical outcome for their pediatric patients.

Risk factors in the development of AOM include exposure to tobacco smoke, low socioeconomic status, and allergies [3]. Long-term complications can include middle ear edema, hearing loss, developmental delays, facial nerve palsy, or vestibular problems [3,4].

Typical treatment for AOM is antibiotics and anti-inflammatories targeted to control fever and reduce the risk of tympanic membrane rupture and subsequent hearing problems [3]. If antibiotics are not eCective, the next step in treatment is surgery with myringotomy with tympanostomy tube insertion [3].

Osteopathic techniques may be a useful adjunct to limit antibiotic use while still promoting healing. Techniques include manipulation of cranial bones, sinus and lymphatic drainage, and normalization of sympathetic tone and eustachian tube function [5]. Commonly used techniques include the Galbreath maneuver and eustachian tube manipulation, which focuses on a pumping action to aid in fluid drainage [6,7]. However, many limitations currently exist to the widespread use of osteopathic techniques in the treatment of AOM.

Currently, the number of studies and participants that document the eCectiveness

of utilizing OMT for treatment is scarce, with the largest study available involving only 90 patients at one medical center [3,4,8,9]. While these studies have encountered success utilizing OMT, larger studies are required to establish OMT as a mainstay of treatment.

Another limitation is the current ratio of practicing allopathic-trained physicians to osteopathic-trained physicians. An over-whelming majority of physicians in the U.S. currently do not have the medical training needed to perform OMT on these patients. There are also some osteopathic-trained physicians who choose not to perform OMT in practice, leading to even less utilization of clinical OMT.

This lack of evidence was our main obstacle in this study, which measured an improvement in tympanogram readings over the course of 3 treatments. Although each of our studies demonstrated improved tympanograms with OMT, they were not statistically significant.

A further analysis showed that our study was underpowered, and that increasing study population by 25% would potentially show statistical significance. As such, it is prudent to continue trials of OMT on pediatric AOM to further demonstrate potential safety and eCicacy.

Current research also supports the possibility of OMT as a preventative treatment for AOM in suitable candidates and should be explored as the osteopathic physician profession grows.

Conclusion

We performed a meta-analysis to assess the impact of OMT on tympanogram results in pediatric patients being treated for AOM. Given the lack of consistent data regarding eCicacious treatment of pediatric otitis media, it is clear that adjunct treatments are

needed. This is to not only minimize the economic cost, but to prevent future sequelae due to repeated infections, such as permanent hearing loss.

Additionally, antibiotic stewardship is becoming an increasing concern as resistance grows, and techniques to minimize or eliminate antibiotic use are becoming more necessary. Though our meta-analysis did not reject the null hypothesis, it is evident studies on both the eCicacy and types of OMT that can be used in otitis media are necessary to implement alternative options in the AOM treatment regimen. □

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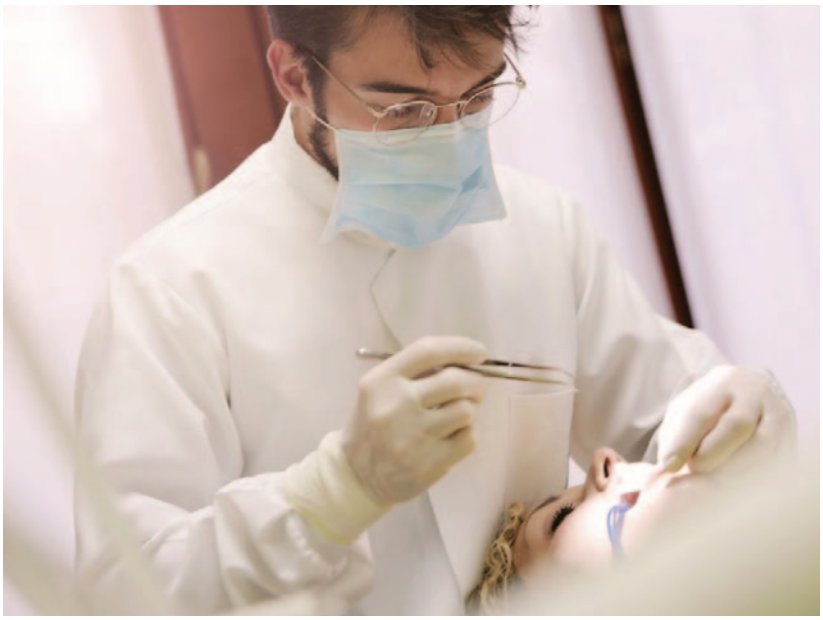
Nurturing Aspirations:

The encouraging community of Otolaryngology from the perspective of the medical student

By Brenton Stucki, OMSII, UNTHSC Texas College of Osteopathic Medicine

Sometimes, I feel as though otolaryngology and all of its nuances remain a hidden gem amongst the more commonly highlighted medical disciplines. For this reason, I like many others, was initially intimidated by attempting to pursue a career in such a specialty. As an osteopathic medical student who discovered an early aspiration to become an otolaryngologist, I, similarly to other students, found myself facing the challenge of limited exposure to the field. At first, the perceived lack of resources and assistance that were available to me to pursue this specialty felt defeating and disheartening. However, after some metaphorical digging, buried beneath the surface of a challenging landscape, a heartening truth could be found: the otolaryngology community is marked by kindness, generosity, and mentorship, and the community plays a pivotal role in illuminating the path to a future career for not only myself but also for my fellow medical student peers.



Although the specialty may be niche, I have found that the otolaryngology community in all of its forms is a beacon of support that actively welcomes aspiring individuals into its fold. I was happily taken by surprise by the openness of amiable physicians, mentors, and organizations that now serve as a source of guidance and assistance for me and my university's otolaryngology interest group. It is through this partnership with patients, physicians, volunteer foundations, and academic organizations that I have been exposed to invaluable relationships and opportunities that have helped me transcend previously intimidating barriers.

As I continue to navigate the challenging landscape, I'm confident that the otolaryngology community will continue to shape my journey. It is through connections with this community that my beliefs are affirmed: that within this specialty, passion, persistence, and shared engagement can help students overcome daunting obstacles on their path to becoming model physicians. □

The Incredible Leading Force

By Kelsey J. Eaton, DO

In November of 2023 I held a duffel of hospital shoes, scrubs, loupes, and a headlight while lugging two suitcases filled to the brim with medical supplies. It was the start of a 20-hour journey to Blantyre, Malawi "The Heart of Africa". While I'm known for an active imagination, my mind never prepared me for how my understanding of our global fortune and responsibility would be altered.

Queen Elizabeth hospital is the largest medical facility in Malawi. Dr. Wakisa Mulwafu is the sole ENT surgeon in a country of 21 million people. He is an incredible leading force for increasing medical knowledge and skillset amongst multiple trainees. Our team combines with his and share knowledge and approaches while steadily building a self-sustaining otolaryngology presence and influence.

Malawi is the third poorest country in the world, with the average citizen living on two American dollars a day. This leads to mind-bending multi-day journeys on foot or motorbike to arrive at a hospital where you

may then sleep on a cot in a room with 30 other individuals. 50% of the populace has HIV and multiple public health barriers. Otolaryngology skillsets are developing but still very much at a rarity within the medical populace. This lends to advanced pathological states and pinned hopes. Overall, this is a daunting metaphorical ascent to overtake but is a landscape that is softened by the incredible light of the people who live within this community. The staff is tireless, working astoundingly long shifts that would make the Dr. William Halsted blush. The population is full of smiles and grace, supporting each other and embracing our care and efforts with open arms. This is seen through fanning post operative (non-familial) patients in a 90-degree ward, watching each other's children, or interpreting for each other via one of the many dialects.

"Medical Tourism" is an ever-present concern when embarking on a mission such as these. The team makes concerted efforts to work alongside the Malawi medical residents and professionals, working on cases in concert, sharing expertise, and surgical skills training. Each patient is carefully reviewed as a team with imaging review and group discussion with the visiting members and the local members. Equipment is brought in a means to supply maintained access rather than isolated drop ins of available technology.

Our setting is one that is made possible by the efforts of the giants before us. Many years have been put into creating the system which we now function. Drs. Madgy and Wakisa Mulwafu alongside the help of many others have created a center to bring ENT care and education to the region. Each year, attendings from across the country donate their time, finances, and energy into this effort. They empower the local team members and the residents into taking autonomy and ownership over patients. This creates a truly educational experience while still ensuring the utmost scrutiny and care of the patients.

There is a lot of work still to do, with acknowledgment to the impedances of the setting. Electrical systems are unable to support both an anesthetic machine and overhead lights creating reliance on headlights. Health insurance rates are quoted as low as 1% creating financial obstacles, requesting contrast on for CT scans can cost three months wages. Sustaining preventative or maintenance care is challenging and an utmost importance is placed on patient education and resource assessment. Each year, there is a focus on creating a sustainability of the care provided. This is created through improving infrastructure, ensuring training, and frequent communication during the months between expeditions.

I am incredibly thankful for the guidance by the attendings who provided their expertise on this mission, the welcoming spirit of the Malawi people, and for the absolute viewpoint shift that this experience created. □

Kelsey J. Eaton, DO

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Myospherulosis of the head and neck:
A unique chronic inflammation complication

By Jaswanthi Dogiparthi, BS, OMS-III; Smaran Teru, BS, OMS-III

Introduction:

Myospherulosis is a chronic idiopathic inflammatory reaction characterized by distinctive spherules seen under histology, often described as a “bag of marbles”. This condition was first reported in 1929 by McClatchie et al. in East Africa as a unique subcutaneous nodular lesion.1 The first reported cases in the head and neck region were described in 1977 by Kyriakos, involving 16 patients in St. Louis who had lesions in the paranasal sinuses, nose, and middle ear.2

Epidemiology:

Myospherulosis remains a rare condition with limited documented cases. A systematic review highlighted the distribution of cases:

- Paranasal Sinus: 6 cases
- Maxillary Sinus: 10 cases
- Mandible: 10 cases
- Nasal: 2 cases
- Ear: 8 cases

Pathogenesis:

The etiology of myospherulosis is idiopathic but is thought to involve an interaction between erythrocytes and lipid-based substances, leading to a prolonged fibroinflammatory reaction. It has been associated with the use of petroleum-based ointments, such as Terra-Cortril, a paraffin-based tetracycline /steroid ointment.

Clinical Manifestations:

Patients typically present with nonspecific symptoms that can pose diagnostic challenges. Timely diagnosis is crucial and often requires a biopsy since clinical indications alone may not be clear. Common presentations include:

- Paranasal Sinus: Recurrent sinusitis, rhinorrhea, facial fullness3
- Maxillary Sinus: Facial pain and fullness4
- Mandible: Nodular lesions, often with a history of molar extractions5
- Nasal: Firm lesions, often following rhinoplasty6
- Ear: Recurrent otorrhea, conductive hearing loss7

Case Example:

A notable case from Coulier et al. involves a 79-year-old female with a history of Functional Endoscopic Sinus Surgery (FESS) to address recurrent acute sinusitis and productive cough.8 Postoperative care included packing the sinus cavities with gauze coated in Terra-Cortril to improve hemostasis and prevent infection. Eight months later, she presented with persistent recurrent sinusitis, rhinorrhea, and left hemifacial fullness. CT imaging revealed well-circumscribed hypodense sinonasal cystic masses with characteristic fat density.

Diagnostic Imaging and Histopathology:

Radiographic imaging often shows hypodense masses in the sinuses, while histopathology typically reveals clear cystic spaces in the sinonasal mucosa, a “swiss cheese” pattern, fatty vacuoles surrounded by macrophages, and characteristic spherules.

Conclusion:

Awareness of myospherulosis, particularly its association with petroleum-based ointments, is essential for healthcare providers to prevent iatrogenic causes. Diagnosis should be supported by imaging and histopathological evaluation to ensure timely and appropriate management. This article provides a comprehensive overview of myospherulosis in the head and neck, emphasizing the importance of awareness and timely diagnosis to prevent and manage this rare inflammatory condition effectively. □

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High-flow arteriovenous hemangioma

By Jaswanthi Dogiparthi, BS, OMS-III; Smaran Teru, BS, OMS-III, Ashalata Gannepalli, DO

Hemangiomas are most commonly of infantile type, appearing as a superficial vascular lesion composed of rapidly proliferating endothelial cells during the first few years of life.1 These tumors are often solitary and typically occur in females of Caucasian descent.2 Hemangiomas are largely found in the mucosa, skin, or muscles of the head and neck region and less often in the trunk or extremities. Infantile hemangiomas appear after birth or proliferate during the first few years of life. The tumors often involute naturally during childhood and rarely need therapeutic intervention or management.2

Hemangiomas are characterized by the depth of the lesion and are named as superficial, deep, or compound hemangiomas.2 The management of the lesion is based on the depth and invasion of the tumor. Classification of hemangiomas is debated as many subtypes exist and are often misleading as they are sometimes more so vascular malformations than tumors. Intramuscular hemangiomas differ as they are more commonly present in the head and neck region in the third decade of life, and central hemangiomas of the jaw are typically present in the second decade of life.2

Contrary to the typical characteristics and presentations of hemangiomas, here we present a rare case of a high-flow arteriovenous hemangioma found deep in the interscalene space in a 13-year-old female. This case presented with a vascular lesion arising from the anterior scalene muscle, displacing the brachial plexus, internal jugular vein, and the internal carotid artery and vein. Although very rare cases of hemangiomas manifesting as brachial plexopathy have been described, this is the first case of space-occupying arteriovenous hemangioma in the brachial plexus region.3 Magnetic Resonance Imaging (MRI) with contrast and Computed Tomography Angiography (CTA) were necessary to determine the characteristics of the lesion and rule out intramuscular and neurofibromatosis types.4 This case represents a rare presentation of arteriovenous type hemangioma presenting with symptoms mimicking a Pancoast tumor consistent with neck swelling, pain in her right hand, and tingling in the fingers secondary to compression of the brachial plexus and arterial supply of the right upper extremity.

Case Report

We present a 13-year-old female with the chief complaint of progressive right-sided neck swelling, pain in her right arm, and tingling in her fingers. One year before this presentation, the patient visited her physician with mild right-sided neck swelling, which had since progressed to moderate to severe swelling. An MRI of the brachial plexus with contrast showed evidence of a large lobulated heterogeneous signal intensity mass measuring 56x30 mm situated in the right interscalene space. The mass was found to be isointense to muscle on T1 and intensely hyperintense on T2W images. The lesion displaced the anterior scalene anteriorly and the middle scalene muscle was found to be coursing through the mass. The roots of the brachial

plexus were displaced posterior to the mass, and the right internal jugular vein and artery were compressed and displaced anteromedially. The right common carotid artery was found in course and caliber, while the right subclavian artery was compressed and mildly displaced inferiorly by the mass with well-maintained fat planes between the artery and mass. The lesion did not encase the brachial plexus roots. The results of the MRI revealed no flow voids within the lesion and homogenous post-contrast enhancement which favors a venous malformation rather than a high-flow malformation.

A CTA of the mass showed evidence of a predominantly plexiform compact vascular nidus in the right supraclavicular fossa anteroposteriorly separating the scalene muscles, as seen in Figure 1A-B. The predominant arterial supply to the lesion was from the dorsal scapular branch from the distal portion of the first part of the subclavian artery, and the ascending cervical trunk. Venous drainage was found to be predominantly into the right vertebral venous plexus. The results of the CTA provided evidence of a high-flow vascular malformation. Due to discordant findings between the CTA and MRI, a Doppler examination was performed. The results of the Doppler showed low resistance arterial flow within the lesion, pointing towards the final multi-imaging correlative impression of a high-flow arteriovenous vascular malformation.

A histopathological report of immunohistochemistry was done with 6 markers. Histopathological images are seen in Figure 2A-C. CD31 is an antibody glycoprotein that strongly labels endothelial cells and circulating and tissue-phase hematopoietic cells.5 CD31 aids in the classification of neoplasms of endothelial cells and the determination of vascular invasion and tumor microvessel density in tumors. CD34 is a cell-cell adhesion factor and cell-surface glycoprotein expressed on immature hematopoietic stem cells, capillary endothelial cells, embryonic fibroblasts, and rare glial cells in nervous tissue.6 The antibody aids in the classification of vascular and lymphatic tumors. CD31 and CD34 were positive and highlighted compressed capillaries, further suggesting a vascular lesion in this case.

The patient underwent preoperative angioembolization by interventional radiology. This was followed by complete surgical excision under general anesthesia. Preoperative angioembolization helps with surgical success by ensuring proper excision and dissection of the mass.7 The surgical excision was successful and was uneventful intraoperatively. The patient was stable postoperatively and had no postoperative complications.

Histopathological report of the biopsy post-surgical excision revealed a 4.5 x 3.5 x 2.5 cm solid pale white lesion cut section. Microscopic examination of the sections described a well-circumcised lesion composed of lobules of proliferating capillaries lined by plump endothelial cells with vesicular nuclei. Dilated and thick-walled vessels showed congestion and intraluminal gelform material was found intervening. Few of the vessels showed muscularization of the vessel wall and hyalinization. Focal lymphoid aggregates were noted. Peripherally a few skeletal muscle bundles were seen along with f ibroadipose tissue. No atypia, pleomorphism,

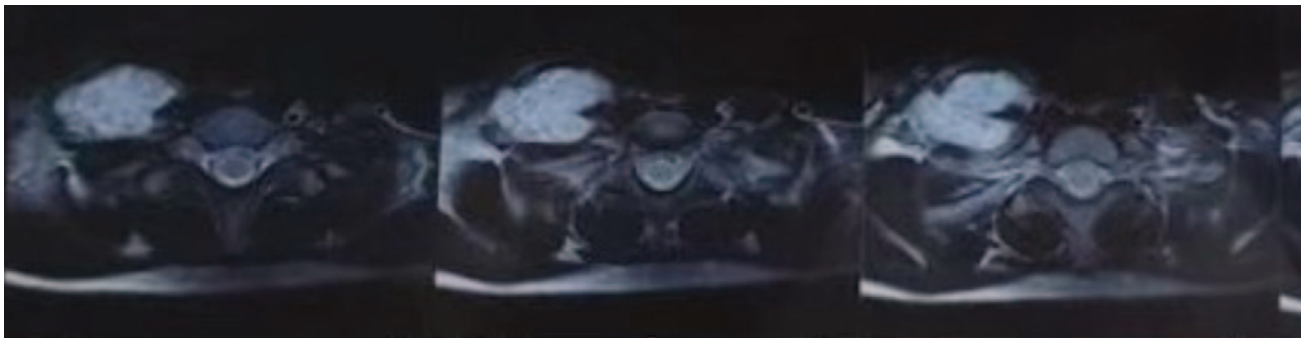
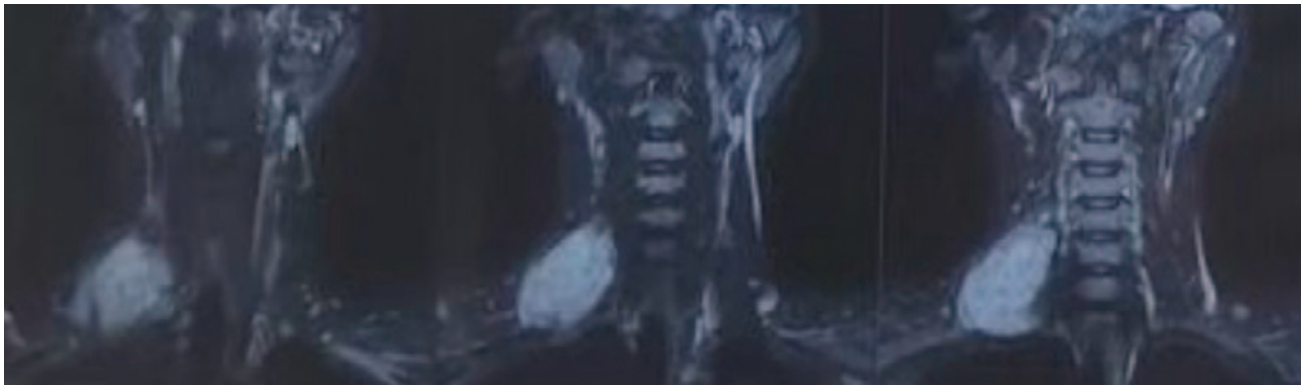


Figure 1A (above), Figure 1B (below)



or necrosis was noted. Mitotic activity was found to be scant. Features of the biopsy were suggestive of a vascular lesion, and morphology favored an arteriovenous hemangioma consistent with imaging.

Conclusion:

This report serves to highlight a rare presentation and clinical findings of a high-flow arteriovenous hemangioma in the interscalene space of a 13-year-old female. The detailed case presentation emphasizes the importance of a comprehensive diagnostic workup using multiple imaging modalities such as MRI, CTA, and Doppler ultrasound, which were used to accurately characterize the lesion and differentiate it from other vascular anomalies and hemangioma subtypes. The workup also highlights the use of immunohistochemical markers in identifying vascular tumors, as the histopathological exam further confirmed the diagnosis in this patient.

The successful management of this case through preoperative angioembolization and complete surgical excision displays an effective approach for treating complex vascular lesions. Due to the rarity of such a lesion, this report aims to provide clinicians with a guideline for the initial presentation, diagnostic workup, imaging findings, and therapeutic strategies for similar cases. It emphasizes the need for a multidisciplinary approach in diagnosing and treating atypical hemangiomas, ensuring precise intervention and optimal patient outcomes.

Figures 1A-B: Transverse (1A) and coronal (1B) CTA sections highlight the findings of a plexiform compact vascular nidus in the right supraclavicular fossa anteroposteriorly separating the scalene muscles. □

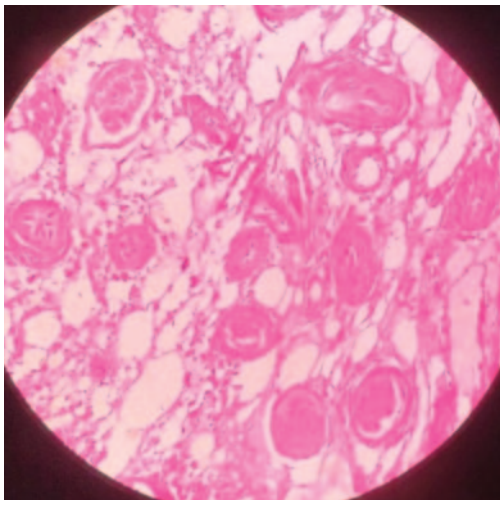


Figure 2A: Various arterial and venous spaces.

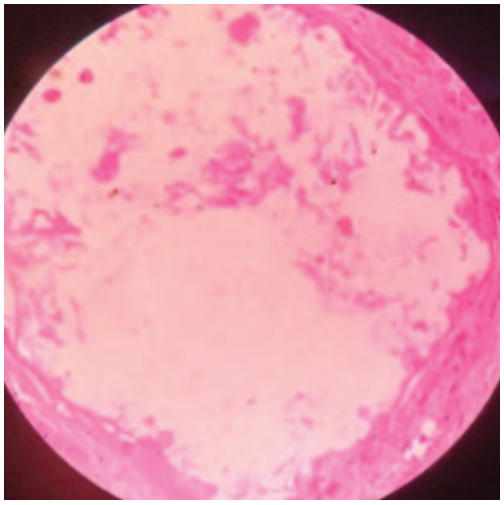


Figure 2B: Cavernous space and endothelial lining.

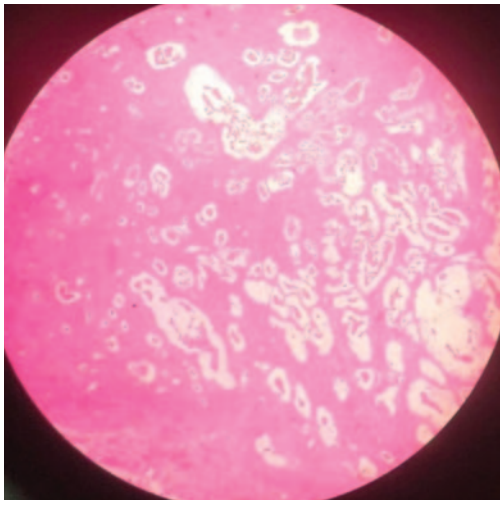


Figure 2C: Cavernous spaces of varying sizes distributed and extending intramuscularly.

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Chronic Eye Disease:

A synopsis of a cross-sectional observational hospital-based study at a multi-tier opthalmology network in India

By Smaran Teru, BS, OMS-III, Jaswanthi Dogiparthi, BS, OMS-III; Anthony Vipin Das

Introduction:

According to the World Health Organization (WHO), non-communicable diseases (NCDs or chronic diseases) are a result of genetic, environmental, and behavioral factors that globally affect clinical outcomes in a variety of patient demographics [1]. Comorbidities such as cardiovascular diseases, cancers, and chronic respiratory diseases are among the most common non-communicable diseases that disproportionately affect those in low-income countries [1]. Chronic eye conditions pathologies including refractive errors, cataracts, diabetic retinopathy, glaucoma, and macular degeneration burden nearly 2.2 billion people globally according to the WHO [2]. Although the most common chronic eye conditions worldwide are well known and identified by various global organizations, pathologies that have the largest burden of care are yet to be characterized and analyzed. Therefore, this study aims to identify patients having eye pathologies that require the highest number of return-to-office visits and analyze their demographics. Analyzing such data provides insights into the barriers to eye care, thereby improving patient outcomes globally.

Materials and Methods:

This cross-sectional observational hospital-based study included a total of 3,947,881 new

patients presenting to tertiary and secondary centers of a multi-tier ophthalmology network between August 2010 and August 2023 [3]. The eyeSmart EMR screened for patients who had ≥53 visits to the clinic. This represented all patients beyond the 1st quartile of the number of visits with a median of 107 (IQR 53-185). A total of 1783 patient records were identified using this search strategy and were labeled as cases. A total of 3566 eyes were further analyzed for data collection. The study adhered to the Declaration of Helsinki and was approved by the Institutional Ethics Committee.

Data Retrieval and Processing: The data of 1783 patients included in this study were retrieved from the electronic medical record database and segregated into an Excel sheet. The columns included the data on patient demographics, clinical presentation, ocular diagnosis, and treatment information and were exported for analysis. The Excel sheet with the required data was employed for analysis using the appropriate statistical software. Chi-square tests (StataCorp. 2015. Stata Statistical Software: Release 14. College Station, TX: StataCorp LP) were used for univariate analysis to detect significant differences in the distribution of demographic features between patients with chronic visit history and the overall population.

Results:

In this retrospective cohort study, 0.5% (1783 of 3,947,881 patients represented in the EMR) met the inclusion criteria for chronic eye care visits. Of the 1783 patients, 1197 (67.13%) were male and 586 (32.87%) were female. The overall distribution of patients was greater in males (0.06%; 1197/2,113,924) as compared to females (0.03%; 586/1,833,957), and this difference was statistically significant (p=< 0.00001). The overall distribution of patients was greater in the pediatric (≤16 years) age group (0.09%; 507/533,797) as compared to adults

Figure 1. Operating theater at LVPEI

(0.04%; 1276/3,414,084), and this difference was statistically significant (p=< 0.00001). Further analysis by age distribution showed that 60.35% of patients were 0 to 30 years of age.

The number of visits was arranged by individual departments. 81,383 visits (53.2%) were to the Institute of Vision Rehabilitation department. The most common etiologies requiring rehabilitation were retinitis pigmentosa (n=288 eyes, 13.28%), optic atrophy (n=245 eyes, 11.30%), and secondary glaucoma (n=203 eyes, 9.36%). 30,086 visits (19.66%) were to the cornea and anterior segment department followed by 15,182 visits (9.92%) to the retina department.

Cornea and anterior segment (n=1089 eyes, 30.54%), retina (=1037 eyes, 29.08%), cataract (n=757 eyes, 21.23%), glaucoma (n=721 eyes, 20.22%), neuroophthalmology (n=592 eyes, 16.60%), and anopthalmic socket (n=29 eyes, 0.81%) represented the most prevalent etiologies. The average number of visits within the cornea and anterior segment, retina, cataract, glaucoma, neuro-ophthalmology, and anopthalmic socket pathologies were 76 ± 60, 82 ± 67, 74 ± 70, 78 ± 71, 127 ±143, and 100 ± 105, respectively. The distribution of etiology by gender was representative of the distribution of males to females in this study. The representation of pediatric, adult, and elderly populations was similar within each etiology category except neuro-ophthalmology which was largely represented by the pediatric population with 373 eyes (63.01%). This was further supported as patients aged 0 to 30 represented 92.91% of pathologies related to neuroophthalmology. 894 eyes (25.07%) presented with multiple etiologies.

Of the 3566 total number of eyes, 1721 (48.26%) required surgical intervention. 1167 (67.81%) male eyes required surgery compared to 554 (32.19%) female eyes. Patients aged 0 to 10 years represented the greatest age group who underwent surgery with 316 eyes (18.36%) followed by the patients aged 41 to 50 years with 264 eyes (15.34%), and patients aged 51 to 60 years with 253 eyes (14.70%).

Discussion:

In this study, 67.13% of males and 32.87% of females met the chronic inclusion criteria. When analyzing the most frequently represented pathologies by gender, more males had each pathology listed than females. For example, 68.30% eyes of men had cataracts when compared to 31.70% eyes of women. This trend is seen with pathologies related to cornea and anterior segment, retina, glaucoma, trauma, and neuro-ophthalmology. However, the calculated proportion of females represented in the EMR from the respective footfall criteria is 46.45%. Gender disparities in eye care from developing countries such as India are well characterized. According to the International Agency for the Prevention of Blindness, their GBD (global burden of disease study) from 2020 estimates that women are 12% more likely to have vision loss than men [4]. This inequality in eye care specifically can be explained in a cultural context as women assume certain societal expectations, hindering their access to equal health care [5,6]. Therefore, an unequal

representation of females exists in the context of chronic eye care, requiring further investigation into the barriers to compliance in this demographic.

Further analysis by age distribution showed that 21.03% of patients were 21 to 30 years of age, and a total of 60.35% of patients were 0 to 30 years of age. These statistics likely indicate that younger patients are more likely to continue their progressive eye care to preserve or reverse their visual acuity. Additionally, 53.2% of the total patient visits were to the Institution of Vision Rehabilitation (IVR) as most of these patients requiring chronic eye care must repeatedly attend rehabilitation sessions for blinding conditions which include retinitis pigmentosum (13.28%), optic atrophy (11.30%), and secondary

glaucoma (9.36%). Since pathologies with the most visits to the vision rehabilitation center are acutely blinding, determining patient compliance and identifying controllable and uncontrollable barriers to appropriate care in these populations would allow for improved patient outcomes. However, barriers to patient compliance have been well-documented in certain Indian populations. For example, a case-control study of 300 patients with established glaucoma in South India found that after adjusting for age and sex, predictors of poor compliance with follow-ups largely included a lack of formal education and escort [7].

Figure 3. Herd of sheep in Keshampet

The most common eye pathologies requiring chronic eye care included the following categories: cornea and anterior segment (30.54%), retina (29.08%), cataract (21.23%), glaucoma (20.22%), and neuroophthalmology (16.60%) each with an average of 76, 82, 74, 78, and 127 office visits respectively. The distribution of pathology by pediatric (0-16 years), adult (17-59 years), and elderly (60+ years) patients was similar in patients with cataracts, cornea and anterior segment, retina, glaucoma, and traumatic pathologies. However, the pediatric population disproportionately represented pathologies related to neuroophthalmology including optic atrophy, nystagmus, cerebral visual impairment, etc. Patients aged 0 to 30 years represented 92.91% of the eyes affected by pathologies related to neuroophthalmology. Patients aged 0 to 30 years represented 87.50%, 98.14%, and 100% of eyes affected by optic atrophy, nystagmus, and cerebral visual impairment, respectively. These results closely mirror that of a study characterizing the demographic of 1597 patients referred

for neuroophthalmology evaluation at a tertiary care center [8]. The mean patient age was 30.8 ± 19.5 years with a 2:1 male preference and 63.8% of these patients had an optic nerve disorder, 7% of these patients had a cranial nerve palsy, and 6.5% of these patients had cortical visual impairment [8]. Additionally, patients aged 0 to 30 years represented 61.62% of the eyes affected by pathologies related to the retina. Further analysis revealed that this demographic represented 87.41% of eyes affected by retinitis pigmentosum. These findings suggest that younger patients were most affected by pathologies involving the optic nerve (or its related cortical processes) and the retina that likely resulted in progressive and debilitating vision loss, requiring continued need for care to restore vision in the pursuit of daily living. Depending on the demyelinating, inflammatory, ischemic, or traumatic etiologies of optic nerve pathology, visual loss can be rapidly progressive requiring more urgent and diligent compliance if vision reversal is possible [9]. On the other hand, the progressive vision loss seen in retinitis pigmentosa has no current treatment, therefore requiring continued care for the maintenance of visual status [10]. This is further explained by the distribution of visits to the IVR as retinitis pigmentosum and optic atrophy represented

Figure 2. Primary center of care located in Keshampet

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the greatest number of visits among all patients. Of note, pathologies related to neuroophthalmology and the retina represented the two highest average numbers of visits (127 and 82, respectively).

In this study, an analysis of surgical overview was performed. 48.26% of the total number of eyes required surgical intervention, 67.81% of which were male eyes and 32.19% were female eyes. This distribution was representative of the males and females in this study, further emphasizing barriers to chronic eye care among females. In patients above 50 years of age, cataracts are the leading cause of blindness [11]. However, a systematic review and meta-analysis of cataract-related blindness in individuals above 50 years of age found that women were 27% less likely to receive cataract surgery despite being 69% more likely to develop cataract-induced blindness [12]. These findings further emphasize the need

to pursue interventions to diminish gender disparity in preventable blindness as well as chronic eye care in women. Patients aged 0 to 10 years represented 18.36% of the total number of eyes that received surgery. Therefore, patients in this demographic who require surgery were more likely to require chronic follow-ups to ensure normal eye development throughout early adolescence.

Conclusion:

In conclusion, this study characterizes 1783 patients who required chronic eye care based on their demography and etiology of disease in a multitier ophthalmology hospital network in India. This study accentuates a gender disparity for females seeking chronic eye care and urges for strategies to mitigate barriers to appropriate health care. Characterizing these patients by various metrics provides insight into the patients requiring repeated eye care. The data from this study provides further information into the demographics of patients with a high burden of blinding and preventable blinding pathology, which can be used to understand ways in which this burden can be alleviated based on who the patients are and what blinding pathology they suffer from. Future investigation is needed to evaluate patient compliance to better understand and mitigate barriers to chronic eye care. □

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Happy Moo Year!

By Donald Morris, DO

I hope all of you had wonderful holidays and are having a happy new year. This year we had all three of our children at home together for the first time in ages. We went from empty nesters to having a full house very quickly. We loved the excitement and energy in the house and being all together. What my 24 year old son did not love was the slow internet and the smaller tv. So of course both of those things were remedied. He did all of the work on that, and I have to say that he was right in both circumstances. I am truly enjoying the faster internet speeds, and watching the playoff and national championship games on the larger screen was a better viewing experience. (GO BLUE). While I was not having any major issues with either the internet or the TV, sometimes a different perspective does have some great rewards. Plus now that the kids have gone, I still have faster internet and a larger tv.

My adult daughter and her partner Hannah decided to play a joke on us while they were here. They bought 100 plastic cow figurines of 10 different colors on Amazon. Then while we were asleep, they hid them all through the house. The next day we woke up and my wife exclaimed, “what are all of these things (she hadn’t picked up that they were cows) doing all over the house?” My daughter and her partner burst out laughing and of course exclaimed HAPPY MOO YEAR.

We set about rounding up all of these wayward cows and the vast majority were easy to find, but there are still around 20 outstanding in the house somewhere. The other day I went into the pantry and got some barley for soup. Lo and behold under the bag of barley, I found a cow. There was also one hidden in the cupholder of my treadmill. Every time I find one, I text my daughter, who always sends back a Ha Ha Ha text. It brings a smile to my face and lots of wonderful feelings and thoughts and memories every time I find one.

They did this same joke on her partner's parents with ducks. That was for a QUACKY NEW YEAR. Her partner's parents liked the joke too, though maybe not a much as I did. I do know that some people would not find this funny at all, and be annoyed every time they found a cow.

I write about this because I think it was a great prank and it deserves a story, but also as a reminder of how the way we look at things really does affect our mindset. Every time I find a cow, I could choose to be annoyed or to get a laugh, smile, and a wonderful feeling of the love of my daughter. I choose to laugh, smile and love. It's all about perspective.

This brings me to the past week. Winter has come to Pa. This week was a week of cold and snowy weather and a lot of patient cancellations. This past Friday was crazy, as I started the week with a very full schedule and by the time Friday happened, I had only a day of 15 patients. That was with three added patients. The crazy thing was that the news and weather forecasters had hyped things up

so much that people started canceling by Thursday, and of course, Friday was not that bad. Schools had been canceled, business had closed, and parents stayed home because their children's schools closed. All in all this was feeling like a wasted day to me.

I was complaining about this to one of my brothers who said, “you need to look at this in perspective. You have the ability to spend time and really talk to your patients on that kind of a day. You have the ability to clear off your desk (in my case I don't think clear is possible, but to at least make it a bit better). You should look at it like a blessing, as you are always so busy, and having a bit of down-time can be nice.” Wouldn’t you know it, he was right. I really did get to talk to the patients who came in. It is really nice to enjoy catching up and to not be worried about having to get out of an exam room to move on to the next patient. I had time to clean out some of my desk drawers. I found some really amazing finds. Some old thank you cards that I had saved but were buried in my drawer from patients who have passed. It gave me a really nice feeling and smile to think about them and remember them again. I came across a note from one of our fellow ophthalmologists who had passed. I had not thought about him in a while. Our kids had played hockey in the same league, and the note was about the playoffs. It was bittersweet to think of him, but so nice to remember the wonderful person he was.

My message from all of this is perspective. It's almost always easier to see the negative, but a lot of times there may be something wonderful in any experience, if you can put it in the right perspective. □

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