



Society of Physician Assistants in Otorhinolaryngology-Head &amp; Neck Surgery

# THE VANGUARD



## President's Message

By Reagan Davis, MPAS, PA-C

Dear Colleagues,

This spring feels especially meaningful as we reflect on a season of growth, connection, and celebration within our SPAO community. I am delighted to share highlights from what has already been an exciting and productive year.

Our 2026 ENT for the PA-C Conference in Galveston, Texas, a place near and dear to me, was a tremendous success. With more than 425 attendees, the week was filled with opportunities to learn, connect, and grow together as a community of ENT clinicians. To the attendees, thank you for visiting. I hope you not only found the educational sessions valuable but also enjoyed a bit of island flair during your stay. To those we missed, we hope to see you next year in New Orleans!

This year's meeting was particularly special as we celebrated the 35th anniversary of SPAO. We were honored to welcome many of our founding members and past presidents, recognizing them during our reception for their vision, leadership, and service. Their dedication laid the foundation for our society and helped shape the role of ENT PAs into what it is today. We are deeply grateful for the path they paved and proud to continue building on their legacy.

Another exciting development is the recently finalized results from SPAO's 2025 ENT Workforce Survey, a valuable member benefit that offers a comprehensive look at the current state of ENT APP practice. These data provide meaningful guidance for career decision-making, contract negotiation, and understanding broader trends within our specialty. If you have not yet explored the results, I encourage you to do so on the members-only page of our website.

Looking ahead, our Education Committee is making remarkable progress on SPAO's first-ever onboarding curriculum — designed by ENT APPs, for ENT APPs. This initiative reflects our commitment to supporting clinicians advancing their knowledge and skills in ENT.

At our March Board of Directors meeting, we approved a slight increase in annual membership dues, from \$75 to \$95, effective July 1, 2026. A 5% discount will be available for those who enroll in auto-renewal.

This adjustment will allow us to better support continued membership growth, expand our educational and advocacy efforts, and invest in an exciting new chapter for SPAO, including a rebranding initiative with a new logo. Our goal is to more fully reflect who we are and where we are headed: a nationally recognized and respected leader in ENT PA education and professional practice. We look forward to sharing this new logo with you soon — and perhaps even some SPAO merchandise in the future.

Thank you for your ongoing engagement, support, and your commitment to advancing our specialty. It is an honor to serve this community, and I look forward to all that we will continue to accomplish together.

Warm regards,  
Reagan Davis, DMSc, PA-C  
President, SPAO-HNS

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## THE VANGUARD

8100 Three Chopt Road,  
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## *From the Exam Room of an Otology APP: Principles for Treating Otitis Externa*

*By Kristen Frey, MS, MPAS, PA-C  
Guest Contributor*

“My right ear has been infected for the past four months,” the 2 o’clock patient states in frustration. “The last ENT I saw tried everything. They gave me all kinds of drops and antibiotic pills. They even tried some purple stuff that stained anything it touched. I still can’t hear from my ear. It’s still painful and itchy. The stuff coming out of it still smells bad, too. They didn’t know what else to do, so they sent me to you.”

When I look into my patient’s ear, I see edematous, beefy-red skin with white chunky debris. The smell? It’s a bit like bread dough. There is clearly a Candida infection. This is an indicator that this patient and his ear canal have been through a lot.

How did the patient’s ear get to this point? To figure that out, we need to take a step back and consider the basics of a microbial skin infection. What causes microbial otitis externa (OE) to begin with? A combination of excessive moisture and trapped debris, as well as an elevated pH.

When the ear canal traps moisture, the protective cerumen breaks down, the epithelial layer sloughs too quickly, and what were once symbiotic microbes atop the skin have now become infectious invaders. When the ear’s microclimate is warm, humid, and alkaline with plenty of nutrients to consume, microbial overgrowth occurs.

So, how do we combat this? It goes without saying that we must use an appropriate antimicrobial (topical first line, add orals only in refractory cases). But we must also remove the debris, dry the ear canal, and pH balance the skin.

Microbes use nutrients from dead skin cells as a food source, facilitating their infectious overgrowth. The extra debris also causes moisture trapping and blocks topical treatments from reaching the live tissue. This means that frequent debridement (under binocular microscopy, never with water irrigation) is indicated. Debridement may be necessary every two to five days, depending on infection severity.

This is particularly important during a fungal infection. A debridement schedule could be Monday, Wednesday, Friday. It could be a Tuesday, Friday, and the following Monday. Keeping that debris out of the ear canal limits nutrient availability, assists with drying, and keeps the intact skin cells exposed to the topical treatment (drops vs. powder) that the patient is using.

During debridement the airflow from the otic vacuum dries the canal. This effect can be replicated at home by using a hairdryer. Instruct your patient to use a hairdryer on the cool setting with the end held 6 to 8 inches away from the canal opening. They should let the air flow in their ear for two to five minutes.

Yes, it can take a while to dry out the canal, but this is the gentlest way to dry the ear canal at home.

Another option is to make an ear-drying mixture. There are commercial options available, but I prefer the homemade version. The recipe is cheap and easy. Your patient should buy a 16-ounce bottle of rubbing alcohol (70% or 91%), remove and discard 3 tablespoons of the rubbing alcohol, and replace that discarded volume with 3 tablespoons of distilled white vinegar.

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This mixture both dries and assists with pH balancing the ear canal. It works quicker than the hairdryer method, but depending on how raw the infected ear is, it may cause additional pain. However, it is a great option for prevention and maintaining a dry ear, though.

For drying, you may prescribe an otic powder instead of water-based drops. Otic powders are compounded and come in different varieties depending on what you're treating. I recommend contacting the compounding pharmacy directly to see if they have an order sheet for you to review.

Something to keep in mind with otic powders is how they are applied at home. I prefer the Sheehy-House insufflator over the accordion applicator. The accordion applicator tends to dispense too much powder in a single puff, which can quickly clog an ear.



**Image 1:** Sheehy-House insufflator      **Image 2:** Accordion applicator

Environmental pH is very important in managing microbial numbers. Our ear canals are naturally quite acidic thanks to cerumen. This locally secreted fluid forms a water-resistant layer over canal skin that contains molecules that lower the canal pH. This acidic environment acts to limit microbial overgrowth.

Vinegar preparations, either prescription or homemade (can go up to a 50/50 mixture with water or rubbing alcohol), used during an infection can help to resolve the overgrowth and restore the pH balance of the ear canal. Vinegar can also be an important tool during maintenance to prevent future infections.

For the patient who was suffering from a chronic Candida infection, our treatment was a 14-day course of oral fluconazole, hairdryer technique twice daily at home, ear debridement in clinic every three to four days (including two applications of gentian violet), and compounded otic powder. It took about four weeks of treatment to clear the infection.

Contributing to his particularly recalcitrant case was untreated eczematoid OE affecting his entire canal and eardrum. The patient is now infection-free on a maintenance routine of once weekly otic powder application at home (a mixture of boric acid, dexamethasone, clotrimazole, and ciprofloxacin) and routine ear debridement in the clinic every four to six months.

Every time I treat a patient for OE, I keep these three principles in mind: Minimize debris, dry the ear, and pH balance the canal. With early or mild cases of microbial OE, a simple microscopic debridement and an appropriate otic drop for seven to 10 days usually take care of the infection.

But, in moderate or severe infections (may need an ear wick initially), or fungal-predominant infections, we should counsel patients to actively dry the ear canal at home and schedule frequent office visits to debride the ear canal. I also follow up with the patient until I can see the infection has fully cleared. It is easy for an infection to look nearly resolved, only for it to arise a week or two later.



# Mohs Surgery for Skin Cancer of the Ear and Nose: Key Considerations for ENT Providers

By Kyle J. Goleno, PA-C  
*Dermatologic Surgery*  
Guest Contributor

My clinical practice routinely involves reconstructing noses and ears following the removal of skin cancers. Although rare tumors are infrequently encountered, the vast majority of skin cancers are basal cell carcinoma, squamous cell carcinoma, and malignant melanoma.

In Mohs micrographic surgery, the head and neck make up our primary focus, with the nose and ear among the most commonly affected sites secondary to the increased UV exposure due to anatomic prominence.

According to the American Cancer Society, skin cancer is the most commonly diagnosed cancer in the United States.<sup>1</sup> The most recent incidence analysis, which is from 2012 data, estimated that approximately 5.4 million cases of nonmelanoma skin cancers are diagnosed annually in the United States.<sup>2</sup>

The nose, a central and aesthetically significant facial structure, is involved in up to 25% of nonmelanoma skin cancers of the head and neck, while the ear accounts for nearly 10% of cases.<sup>3, 4</sup>

Of interest, nonmelanoma skin cancers of the ear are more frequently squamous cell carcinomas than basal cell carcinomas.<sup>5</sup>

When selecting the appropriate treatment for nonmelanoma skin cancers, several factors must be considered, including recommended peripheral and deep surgical margins and the risk of recurrence associated with high-risk anatomical locations. These considerations influence the choice of treatment modality, while the anticipated size of the resulting defect plays an important role in determining reconstructive options and final cosmetic outcomes.

In standard surgical excision, recommended margins for nonmelanoma skin cancers typically include 3-4 mm peripheral margins for low-risk basal cell carcinomas and approximately 4-6 mm margins for low-risk cutaneous squamous cell carcinomas.<sup>3</sup> While there is no precise universal recommendation for the deep margin, the appropriate depth of excision varies depending on the anatomic location and underlying structures.

Surgical removal is generally carried to a natural tissue plane or barrier, such as an intralipid plane in the subcutaneous fat, fascia, perichondrium, or periosteum, when appropriate.<sup>3</sup> On complex structures such as the ear and nose, where limited subcutaneous tissue allows tumors to more readily involve deeper structures, these margins may place cartilage at risk and can result in larger, more complex surgical defects, making closure more challenging because of the limited mobility of surrounding tissue.

The majority of primary basal cell carcinomas and squamous cell carcinomas of the ear and nose are well suited for treatment with Mohs micrographic surgery, which allows for precise margin control while maximizing preservation of surrounding tissue. Mohs surgery also offers the highest cure rates for nonmelanoma skin cancer, with up to a 99% cure rate for primary basal cell carcinoma and approximately 97% for primary squamous cell carcinoma.<sup>6</sup>

*Continued on next page...*

Nevertheless, locally advanced tumors, particularly aggressive squamous cell carcinomas with deeper invasion or regional spread, may require multidisciplinary management, including surgical resection performed by otolaryngology or facial plastic surgery teams.

Mohs micrographic surgery offers several advantages when treating skin cancers in these anatomically complex regions. First, complete microscopic margin evaluation allows the surgeon to remove only tissue containing tumor with a narrow margin, often resulting in smaller surgical defects compared with standard excision.

Second, deeper structures such as cartilage can often be preserved, maintaining the structural integrity of the ear and nose. Finally, 100% evaluation of the peripheral and deep surgical margins during the procedure allows for immediate confirmation of tumor clearance and reduces the risk of recurrence.

So, how does Mohs surgery differ from standard surgical excision from a pathologic standpoint?

Tissue removed during a standard surgical excision is not processed the same day as the procedure, as it is in Mohs, but more importantly, the key difference lies in how the tissue is processed.

I often use a pastry analogy to explain this concept to my patients.

### **Standard Excision**

Excised tissue from a standard excision is processed using what is commonly referred to as “bread-loaf” sectioning. As the name suggests, if you imagine the tissue as a loaf of bread, the outer crust represents the surgical margin (obviously, the top surface exposed to air is not a margin of concern). The tissue is cut into vertical slices, similar to slices of bread. Slices from the front, middle, and back are placed on slides, with additional sections examined depending on specimen size. The pathologist confirms the tumor is confined to the inside of the slice and that no cancer extends to the peripheral or deep margin.

However, these slices are extremely thin, only a few microns thick, so only a very small fraction of the total margin is examined, often estimated to be less than 0.1% of the true surgical margin.

By sampling the margins in several locations and removing a sufficiently wide margin of tissue, many tumors are successfully excised. However, because only a small fraction of the true surgical margin is examined, tumors extending between sampled sections may go undetected, which contributes to higher recurrence rates compared with Mohs micrographic surgery.

### **Mohs Micrographic Surgery**

Mohs surgery approaches margin evaluation differently. Instead of a cut perpendicular to the skin, the blade is held at an angle, creating a beveled incision. Instead of resembling a loaf of bread, the specimen can be imagined more like a pie. The exposed surface, the top of the pie, is open to air and not relevant to margin evaluation, but the crust that contacts the pie plate represents the true surgical margin.

Before processing, small relaxing cuts are made on the top of the specimen so that the tissue can be flattened. This allows the entire peripheral edge of the specimen to lie on the same plane as the deep margin. The specimen is then frozen, flipped over, and sectioned horizontally, allowing both the peripheral and deep margins to be evaluated on the same slide.

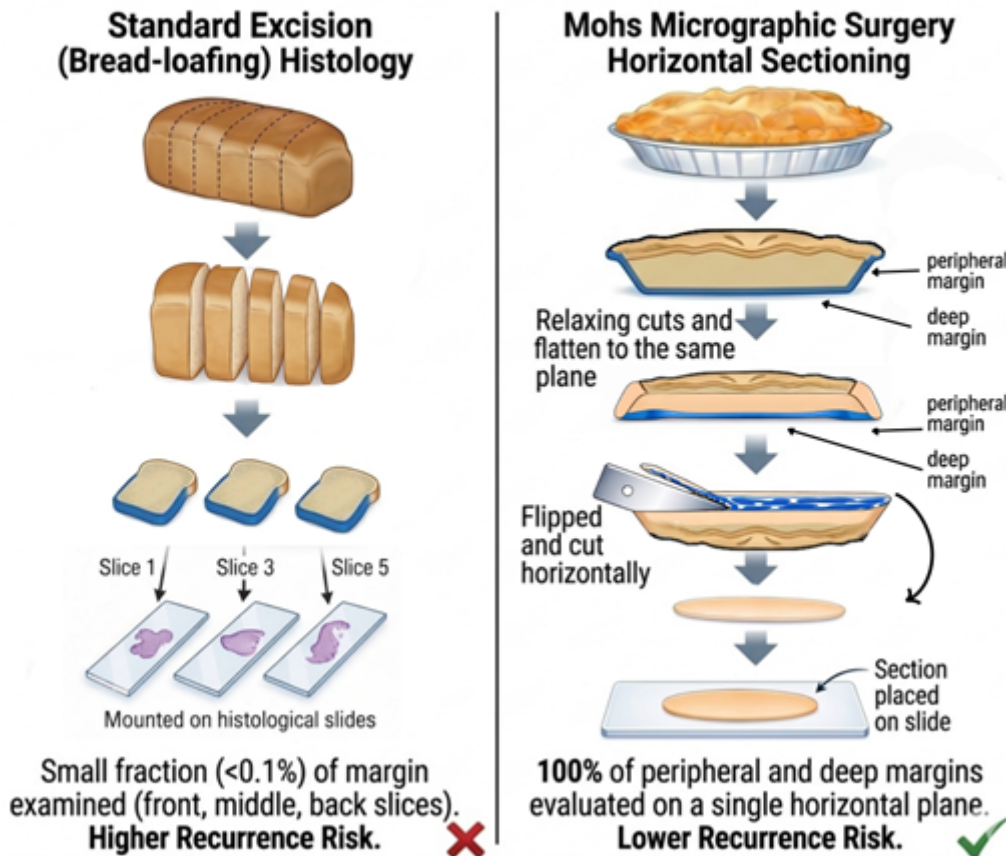
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Because the entire peripheral edge and deep margin are seen, 100% of the margin is evaluated.

Additionally, the tissue is inked and oriented, corresponding to a surgical map (a graphic), so that when the slides are examined under the microscope (i.e., micrographic surgery), any residual tumor can be documented on the map. The surgeon can then use the map to guide them on where additional tissue needs to be removed for the next stage.

This is repeated until clear margins are achieved. This process allows Mohs surgery to follow microscopic tumor extensions with precision, removing only the tissue necessary to achieve clear margins while preserving uninvolved structures.

## COMPARATIVE TISSUE PROCESSING METHODS: Visualizing the Analogy and Histology



Mohs surgery is often described as “a technique to remove skin cancer in layers,” but this can be misunderstood.

This phrasing suggests that a superficial slice is taken off the top, followed by deeper and wider slices taken repeatedly until clear margins are achieved, but that’s not the case.

The first stage of Mohs surgery is intended to remove the clinically apparent tumor along with a narrow margin of surrounding tissue, both along the peripheral margin and at the deep margin. While many skin cancers have visible clinical borders, there are numerous cases in which the skin appears normal to the naked eye, yet microscopic examination reveals a persistent tumor extending beyond what is clinically apparent. Subsequent stages are guided by contiguity rather than depth, additional tissue is

*Continued on next page...*

removed only from the area where the tumor persists, rather than taking a deeper or wider layer from the entire surgical site.

Additionally, the deep margin can be more difficult to evaluate with standard surgical excision. On the trunk and extremities, it is relatively straightforward to dissect into a subcutaneous plane of fat that is often adequate to remove a nonmelanoma skin cancer, while remaining safely above deeper critical structures.

On the ear, however, the skin and soft tissue are extremely thin, and only a short distance separates the epidermis from the perichondrium and underlying cartilage. As a result, tumors in these locations are more likely to approach or involve these deeper structures, and standard excision margins can place cartilage at risk. Mohs surgery allows the surgeon to carefully evaluate the deep margin in its entirety while preserving cartilage whenever tumor involvement is absent.

Because of their prominence and limited soft tissue coverage, the ear and nose are particularly vulnerable to both the development of skin cancer and the reconstructive challenges that follow tumor removal.

Mohs micrographic surgery provides a method of complete margin evaluation that allows surgeons to precisely track microscopic tumor spread while preserving uninvolved tissue. In these anatomically complex regions, this precision often allows critical structures such as cartilage to be preserved while still achieving excellent oncologic control.

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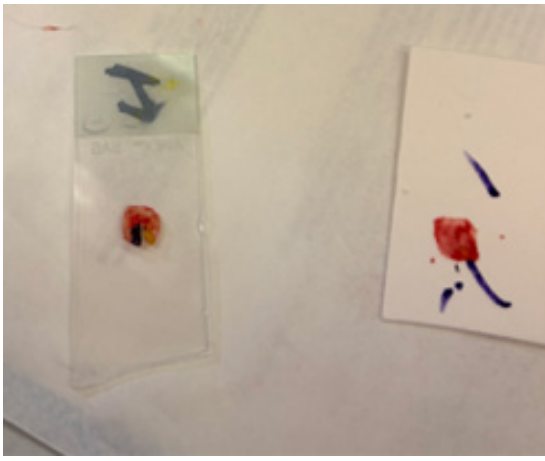
Preop



Tissue being removed with bevel



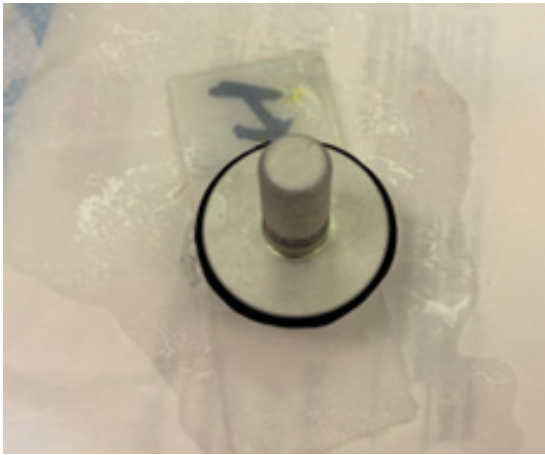
Tissue placed on card



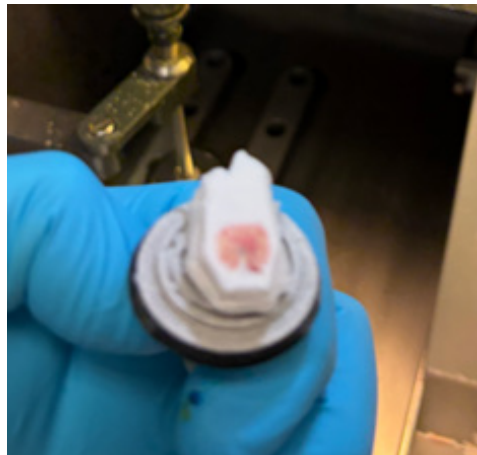
Tissue inked for orientation and transferred to slide



OCT compound applied and frozen



Attached to mounting plate



Tissue flipped so cutting comes from bottom



Horizontal cuts made



Defect with perichondrium intact



## *Tinnitus: What does stress have to do with it?*

*By Evenel Pierre, MHS-PAS, PA-C*

*Treasurer*

It was another day in clinic for me, and I had returned from my lunch break and was well-rested for my afternoon panel of patients. One of the patients on my schedule was coming in for tinnitus. She was a woman in her late 60s who started noticing an incessant high-pitched ringing noise in her ears for the past several months leading up to this appointment.

She didn't notice any significant changes in her hearing, nor did she experience any balance symptoms. She denies any recent loud noise exposure. Her otoscopy exam was unremarkable, with tympanic membranes clear and intact bilaterally. We discussed that her exam findings were reassuring. She was further evaluated with an audiogram.

Her audiogram showed bilateral, symmetric, high-frequency sensorineural hearing loss, consistent with her age. Seems like she's developing presbycusis, I pondered to myself. I then proceeded to ask further questions to pinpoint possible causes of her tinnitus. She denied consuming excessive amounts of caffeine or alcohol. She also denied overuse of aspirin/NSAIDs or tobacco use.

She, however, was experiencing a high level of stress/anxiety. She informed me that she was hospitalized a few weeks ago for pneumonia, and it did a number on her body. She hadn't yet returned to her baseline energy level. It was around the holiday season, and she was very excited to have her family over. She was frustrated and saddened that she did not have the energy to cook or clean her place to host.

Studies have been conducted to investigate whether there is an association between tinnitus and stress. "Overall, evidence suggests stress plays a role in developing tinnitus and the worsening of pre-existing tinnitus." <sup>1</sup> As figure 1 illustrates possible neural and hormonal pathways on how an increase in stress may play a role in the development of tinnitus.

For example, a study measuring hair cortisol levels and hair brain-derived neurotrophic factor (BDNF) showed "in chronic tinnitus patients, higher tinnitus loudness is associated with higher hair-cortisol and lower hair-BDNF levels, whereas higher levels of tinnitus-related distress are additionally associated with lower hair-BDNF levels. Effects were stronger for hair-BDNF than for hair cortisol. Chronic tinnitus may be related to long-term changes in cortisol and BDNF expression, the strength of which may be moderated by perceived tinnitus loudness." <sup>3</sup>

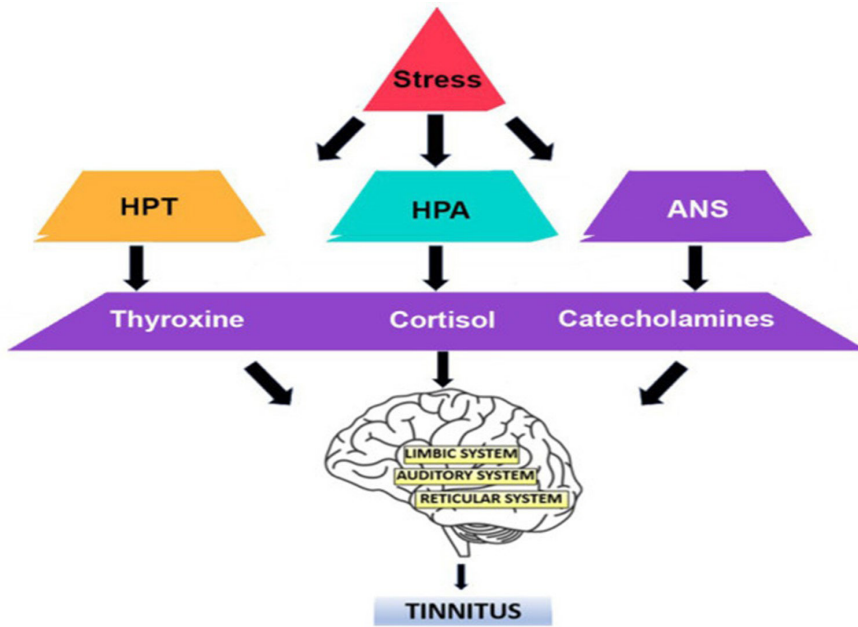
"There is growing evidence supporting the link between magnesium deficiency and increased susceptibility to stress disorders and is illustrated in Figure 2." <sup>2</sup>

Patients with significant stress and anxiety may experience more severe tinnitus. I discussed with my patient that her stress may be contributing to her tinnitus. She then began to divulge to me everything that was bothering her mentally since she was discharged from the hospital. The fact that she now must rely more on others for assistance with daily tasks was quite discouraging to her. It dominated her thoughts throughout her day, increasing her stress levels. I took the moment to encourage her that although her body is weak now, it will get better with time. She was very appreciative of my listening ear and reviewing her audiogram findings.

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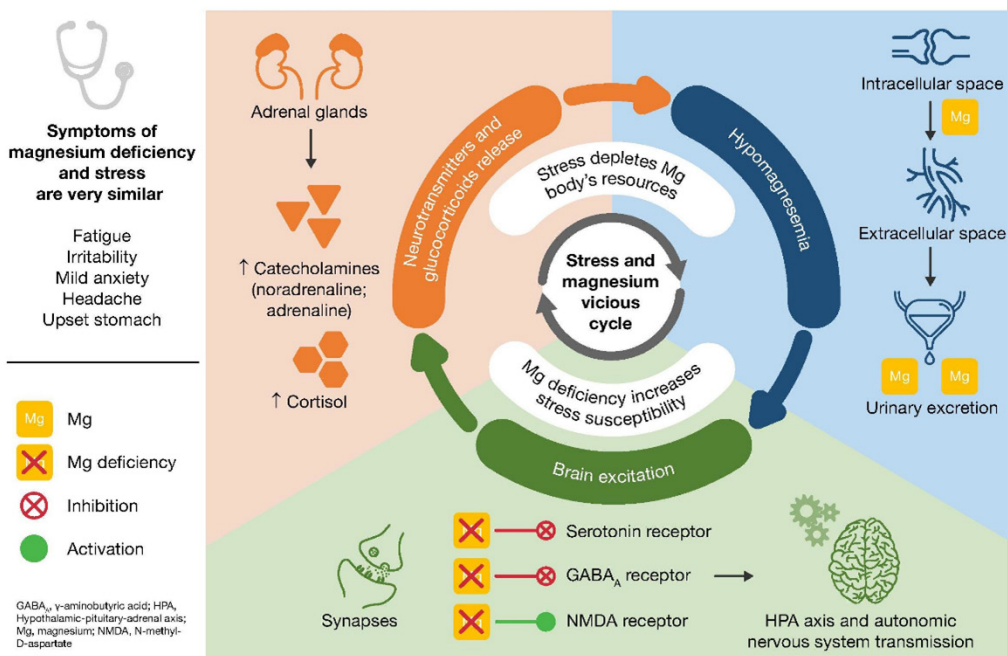
Although we work in ENT, it is important to look at our patients as a whole and not neglect the psychosocial factors that can contribute to ENT complaints. With a common complaint such as tinnitus, sometimes it's not just hearing loss for which we should be assessing.

Taking the extra time to investigate other contributing factors would benefit our patients and the care we provide them. May we always stay curious and look deeper to work towards determining the underlying etiology of our patients' ENT complaints.



**Figure 1** Frontiers in Aging Neuroscience Copyright 2023 Patil, Alrashid, Eltabbakh and Fredericks


The response to stress involves various neural and hormonal pathways. The hypothalamus-pituitary-thyroid (HPT) axis, hypothalamus-pituitary-adrenal (HPA) axis, and the autonomic nervous system (ANS) have been implicated in the development of tinnitus.



**Figure 2** Nutrients 2020 Magnesium Status and Stress Pickering, Mazur, Trousselard et al


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# *Is the RVU an Effective Measure of Nurse Practitioner and Physician Assistant Productivity?*

*By Mahshid Roohi, APRN, Nemours Children's Hospital - Orlando  
Guest Contributor*

The increasing complexity of modern healthcare, combined with shifting demographic trends, an aging population, and a growing burden of chronic illness, has prompted a reassessment of provider roles within the healthcare system.

Among those whose roles have expanded significantly are nurse practitioners (NPs) and physician assistants (PAs), who are essential in meeting the healthcare demands of a diversifying and underserved patient population. Their ability to independently assess, diagnose, treat, prescribe, and manage complex conditions positions them as critical contributors in nearly every healthcare setting, including hospitals, outpatient clinics, rural health facilities, and academic institutions.

Despite their integral role in healthcare delivery, NPs and PAs are still assessed using outdated productivity frameworks designed initially for physicians. Chief among these is the Relative Value Unit (RVU) system, established by the Centers for Medicare & Medicaid Services (CMS) in 1989 as a standardized method to calculate reimbursement based on the time, skill, and intensity associated with various medical services.

While the RVU model effectively quantifies procedural work in specialties like surgery and radiology, it is ill-equipped to capture cognitive, preventative, and relational aspects of practice. Activities such as patient education, chronic disease counseling, care coordination, mentoring, and participation in quality improvement initiatives often go unrecognized in RVU tallies because they do not generate direct billable codes.

The RVU system has long been regarded as the gold standard for measuring provider productivity. However, its design fails to account for the unique aspects of PA and NP practice. PAs and NPs engage in a broader range of activities vital to patient care that are not captured by RVUs. These include patient education, chronic disease management, interdisciplinary collaboration, and mentoring.

Even in procedural settings, RVUs do not consistently reflect actual workload or complexity. A study by Nguyen et al. of 14,936 patients demonstrated that RVUs correlated with surgical complexity but did not adequately predict outcomes or complications, suggesting that the metric prioritizes volume over quality of care. In the plastic surgery population, increasing RVUs correlate with increased risks of overall complications and surgical site complications.<sup>1</sup>

Similarly, Shah et al. found that for common, index general surgery procedures, the current RVU assignments poorly correlate with certain metrics of surgeon work, while moderately correlating with others. Given the increasing emphasis on measuring and tracking surgeon productivity, more objective measures of surgeon work and productivity should be developed, and weak correlations between RVUs and the actual surgical effort further question the fairness of the system.<sup>2</sup>

Jiang et al., in their analysis of 25,432 pediatric urology cases, identified a substantial discrepancy in RVU allocations. They found that shorter, less complex procedures had disproportionately higher wRVU per hour values than longer, more complex

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ones — 14.5 vs. 10.5, respectively.<sup>3</sup> Their data revealed a paradoxically negative relationship between procedure duration and RVU per hour, meaning clinicians were penalized for spending more time on complex cases.<sup>4</sup>

For NPs and PAs, this mirrors the challenge of providing comprehensive, time-intensive care undervalued by RVU metrics. Jiang et al's work adds weight to the argument that compensation models should better reflect actual effort, judgment, and patient complexity.

The RVU system, while foundational in physician reimbursement, is inadequate for capturing the full extent of nurse practitioner productivity. By prioritizing billable services over holistic care, RVUs fail to recognize many essential duties that PAs and NPs perform daily. This misalignment undervalues PAs and NPs and potentially compromises patient care and continuity.

Empirical evidence from surgical and non-surgical specialties consistently highlights the systematic flaws inherent in the RVU methodology, particularly its inability to reflect the time, cognitive effort, and complexity required in many PA and NP-delivered services. Research by Jiang et al. has confirmed that RVUs favor shorter procedures and volume-based care, disincentivizing quality and complexity.

Similarly, qualitative studies demonstrate that RVU systems suppress the relational aspects of healthcare that NPs are trained to provide, such as mentoring, interdisciplinary teamwork, and longitudinal care coordination.

To address these limitations, compensation models must evolve toward structures that reward both the quantity and quality of care. Hybrid systems — integrating base salary, productivity measures, and value-based incentives — provide a more equitable and accurate reflection of NP and PA contributions.

As the healthcare system moves toward integrated care models and population health management, it is essential to develop standardized frameworks for PA and NP evaluation that incorporate clinical outcomes, non-billable work, and professional development.

Reforming the current model is not merely a matter of equity but a strategic imperative to ensure that healthcare delivery remains sustainable, patient-centered, and responsive to the evolving needs of a diverse population. Investing in compensation strategies that reflect modern care realities will help retain a skilled NP workforce, reduce burnout, and ensure that the highest standards of care are consistently delivered.

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# *Nutritional Management in Head and Neck Cancer*

*By Erin Sherer, EdD, PA-C, RD, PA-C*

*Guest Contributor*

Head and neck cancers cause significant morbidity and mortality and can have a profound impact on a patient's nutritional status.<sup>1</sup> By the time they are diagnosed, many patients have already experienced weight loss, and this often worsens throughout treatment.<sup>1</sup> This is partly due to the wide range of nutritional challenges these patients face, including a hypermetabolic state in which the body requires more energy as the tumor grows.<sup>1</sup>

At the same time, patients often do not feel well, making it difficult to increase oral intake enough to meet these higher demands. Malnutrition is therefore common and frequently occurs alongside anorexia and sarcopenia, all of which can negatively affect treatment tolerance, increase complications, and reduce quality of life.<sup>1</sup>

Surgery introduces another layer of complexity. In addition to the increased metabolic demands that come with the surgical stress response, changes to the anatomy can make normal chewing and swallowing difficult or impossible. During recovery, patients often struggle to eat enough, both because of these functional changes and because they may not feel well overall. They may also suffer from early satiety, dumping syndrome, and malabsorption due to the surgical revisions.<sup>2</sup>

Chemotherapy and radiation therapy can further impact nutritional status. Many patients experience what are known as “nutrition impact symptoms,” or symptoms that interfere with the ability to eat.<sup>1</sup> Common examples include nausea, vomiting, oral mucositis, dysphagia, dysgeusia, dry mouth, constipation, diarrhea, and early satiety. Fatigue is also a major factor and can make it difficult for patients to prepare meals or maintain consistent intake.<sup>3</sup>

## **Screening and Early Intervention**

Early identification of malnutrition is key. Several validated screening tools are available, including the Malnutrition Screening Tool (MST), Nutritional Risk Screening (NRS-2002), and Malnutrition Universal Screening Tool (MUST).<sup>4</sup> While there are tools designed specifically for oncology patients, the most important step is simply recognizing risk early and reassessing throughout treatment. A large proportion of patients with head and neck cancer will develop malnutrition at some point during their care.<sup>1,5</sup>

Supporting nutritional status is most effective when it is approached as part of a multidisciplinary care plan. Early involvement of a registered dietitian and speech-language pathologist can make a meaningful difference in outcomes and quality of life, especially for patients at risk for dysphagia or aspiration.<sup>6</sup>

Including the patient and family in care planning is also important. Patients and their families can feel more prepared if they receive education about expected weight changes, strategies to maintain oral intake, and realistic expectations during treatment.

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## **Nutritional Interventions**

For many patients, the first step is optimizing oral intake. This can include high-calorie, high-protein foods, whether through homemade options such as smoothies or commercially prepared oral nutrition supplements. When patients are unable to meet their needs by mouth, enteral nutrition should be considered. In select cases where enteral feeding is not feasible, parenteral nutrition may be appropriate.<sup>7</sup>

Medications can also help manage symptoms that interfere with intake. Antiemetics such as ondansetron are commonly used to control nausea. Appetite stimulants may be considered in certain patients, though their use should be individualized. It is also important to support mental health, as treating depression or anxiety may help improve mood and appetite, even though some medications may have negative impacts on appetite initially.

Access to food and support at home plays an important role in nutritional status. Patients who do not have help with meal preparation or access to adequate food are at higher risk for malnutrition. Involving family, caregivers, and connecting patients with available resources can help address these gaps and may also improve overall well-being.

For patients undergoing surgery, it is also helpful to think about nutrition proactively. Prehabilitation or optimizing a patient's nutritional and functional status before surgery has become an increasingly important part of perioperative care, especially for patients already experiencing dysphagia.<sup>8</sup> Many enhanced recovery (ERAS) protocols emphasize early nutritional assessment and intervention to help improve postoperative outcomes.

Ensuring adequate protein and caloric intake before surgery may support wound healing, reduce complications, and improve overall recovery.<sup>10,11</sup> Additionally, multimodal prehabilitation interventions that combine nutrition counseling, oral nutrition supplements, and swallowing exercises to prevent dysphagia have shown positive outcomes in head and neck cancer patients.<sup>12</sup>

Guidance from organizations such as the American Society for Parenteral and Enteral Nutrition (ASPEN) and the European Society for Clinical Nutrition and Metabolism (ESPEN) can help inform decisions around nutritional support.<sup>4,7</sup> These guidelines provide recommendations on when to initiate enteral or parenteral nutrition and which patients are most likely to benefit.

It is also important to recognize that in patients with advanced or terminal disease states, aggressive nutritional support may not always be beneficial. In these situations, the focus often shifts toward comfort, quality of life, and aligning care with the patient's goals.<sup>9</sup>

## **Emerging Areas and Future Directions**

There is ongoing interest in improving nutritional care for patients with head and neck cancer, particularly through more targeted and proactive approaches – although more research is needed before routine use can be widely recommended. Immunonutrition formulas that are enriched with nutrients such as arginine, omega-3 fatty acids, and nucleotides have already been incorporated into some perioperative care pathways.

Early evidence suggests these formulations may help reduce postoperative complications in select populations, though they are expensive and their use should be individualized.<sup>14</sup> Another area of research is the use of supplements, such as  $\beta$ -hydroxy

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$\beta$ -methylbutyrate (HMB), which may help preserve lean body mass in patients experiencing cancer-related sarcopenia.<sup>13</sup> Omega-3 fatty acids have also been studied for their potential role in modulating inflammation and supporting patients with cancer-related weight loss.<sup>9</sup>

Beyond macronutrients, correcting micronutrient deficiencies and fat-soluble vitamin deficiencies (like vitamin D) are an important and sometimes overlooked aspect of care.<sup>15</sup> Overall, more research is needed to determine which patients are most likely to benefit and how these strategies can be incorporated into routine care.

## Conclusion

Nutritional care in head and neck cancer is complex and often challenging, but it remains an important part of treatment. Early nutrition screening, combined with timely involvement of a registered dietitian and speech-language pathologist, can help improve patient outcomes and quality of life. Optimizing nutrition before surgery can support recovery and reduce complications. Just as importantly, involving patients and their families in nutrition care decisions and education helps ensure that nutritional care remains both effective and compassionate.

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## *In Remembrance of Jeffrey S. Fichera, PhD, PA-C*

*By Farida Hussain, PA-C*



Today and each day, we strive to honor the life and legacy of Jeffrey Fichera, PhD, PA-C, a cherished colleague, mentor, and friend.

Jeff was more than a dedicated professional – he was a person of integrity, compassion, and strength. In his roles as Senior Physician Assistant in our practice and Past President of SPAO-HNS, he exemplified excellence and commitment to patient care, always striving to serve and teach others with skill and heart.

What truly set Jeff apart was his character and willingness to help others. He had a way of making others feel supported and heard. Whether through a thoughtful word, steadfast guidance, or a warm smile during challenging times, Jeff made a lasting impact on his patients and everyone fortunate enough to work alongside him.

Jeff's contributions to The Society of Physician Assistants in Otolaryngology/Head and Neck Surgery (SPAO-HNS) and The Ear, Nose, Throat and Plastic Surgery Associates (ENTPSA) will never be forgotten. The standards he set, the relationships and programs he built, and the level of professionalism he showed will continue to inspire us.

Jeff was a pioneer in the PA community in Central Florida. He communicated well with his referring providers, and his excellent care earned their trust. His name became synonymous with our practice. We recognize him as an extraordinary educator and a national leader amongst our ENT PA colleagues.

While we mourn his absence, we also celebrate a life well lived – one marked by purpose, generosity, and dedication.

As his student on the first day of the rotation, Jeff would say that “ENT is the best-kept secret in the PA world.” During my time as a clinical PA with the group, his words of wisdom shifted to quote his father: “When you work hard and do a good job, you’ll get more work.”

Jeff's work ethic and dedication to patient care and supporting our physicians was inspiring to me and is largely responsible for how I practice medicine.

Jeff was our mentor, teacher, colleague and friend. He is responsible for positive contributions and impacts that have been made in ENT, from a PA clinical perspective in our practice through leadership, education and his guidance.

He is someone we aspire to emulate and will be deeply missed and forever remembered.

# Reflections on SPAO-HNS Past, Present, and Future, Part Two



*Jose Mercado, PA-C*

## **Getting started and building connections**

Even before starting PA school, I was passionate about otorhinolaryngology and was set on a career in ENT. After being accepted to the Miami-Dade Community College PA Program, I wrote a letter to Debra Munsell, who at the time was President of SPAO-HNS, asking about membership opportunities for students.

In 1999, I became the first student member of the Society of Physician Assistants in Otorhinolaryngology/Head & Neck Surgery (SPAO-HNS). Eager to contribute, I helped design and maintain SPAO's website from 1999 until 2018. It was fulfilling to watch our society's digital presence grow. In 2010, SPAO-HNS received AAPA's Constituent Organization Award for Specialty Organizations, demonstrating both the strength of our group and the value of our website.

## **Leadership and creating opportunities**

As I reflect on my time with the organization, I see how each position offered unique opportunities for growth and meaningful connections with our members. As Membership Chair, I learned the value of building strong relationships and fostering inclusion among our diverse membership. My time as Director at Large and Diversity Chair was a bit of a blur, as I frequently stepped in wherever needed and made myself generally useful to the team.

Then, I began my role as Scholarship Chair, which was particularly rewarding. Marie Gilbert and I co-founded the scholarship to recognize and encourage students interested in ENT. Several past recipients have gone on to serve in various leadership roles, including membership chair, scholarship chair, and even President of SPAO.

Becoming President in 2009 was both a privilege and a responsibility; it challenged me to guide the organization forward with vision and integrity. None of these achievements would have been possible without the unwavering dedication and resourcefulness of our members, whose collaborative spirit and fundraising successes ensured that our projects could thrive and make a lasting difference.

## **Conferences and workshops**

I was honored to help organize the Premier Allergy, Asthma & ENT Conference in 2007. Later, as the first Workshop Director for the rebranded ENT for the PA C Annual Conference, I recognized the need for hands-on learning in addition to academic lectures.

To address this, I set out to develop skills-based workshops and also created original mannequins to help facilitate practical high-yield training. I helped to create and coordinate workshops through 2016. Working with so many passionate and talented colleagues was inspiring, and I learned a great deal from everyone along the way.

## **Leading through challenges**

During my second term as President, the SPAO team and I faced the unexpected challenges of the COVID 19 pandemic. It was a difficult decision to cancel the 2020 conference, but with everyone's support, we were able to transition to a fully virtual meeting in 2021. Even during times of uncertainty and stress, I felt incredibly fortunate to be part of such a caring and dedicated community.

Above all, I am deeply thankful to belong to an organization filled with people who are committed to both their work and to one another.

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*Jennifer Brooks, PA-C*

To The Board, my fellow members, and colleagues,

It is with gratitude that I share these words with you today. Receiving this recognition is an honor. Our shared journey was the real reward.

When I look around at the size of this conference, I am amazed by how far we have come. We are no longer just a group of individuals; we are a force making an impact on our profession and the communities we serve. This team is the reason I felt called to serve as your President.

Our mission has always been clear: to advance our colleagues and elevate the field of physician assistants. By doing so, we ensure that the patient receives the highest standard of care. It is a privilege to witness the strides we are making together to bridge gaps in healthcare and champion the role of PAs.

Thank you for your tireless work and for being the inspiration behind everything I do. I am incredibly proud of what we have achieved, and I am even more excited for the future we are building together.

# PUBLICATION HIGHLIGHTS

## *SPAO-HNS Celebrates Publication of Landmark 10-Year Workforce Study*

SPAO-HNS is proud to celebrate the publication of a major workforce study examining 10 years of survey data from physician assistants and nurse practitioners in otolaryngology – head and neck surgery. This important analysis highlights the growing impact of advanced practice clinicians across our specialty and reinforces what SPAO-HNS members have long demonstrated through their work every day.

Using SPAO-HNS workforce survey data collected from 2015 to 2024, the study shows that PAs and NPs continue to play an essential role in expanding access to care, supporting high-volume practices, and performing a wide range of office procedures independently. The findings also reflect the increasing sophistication and value of these clinicians across diverse practice settings.

Just as importantly, this publication highlights SPAO's leadership in advancing knowledge about the otolaryngology workforce. By capturing and analyzing a decade of member-reported data, our society is helping define the present and future of ENT practice.

This study is both a celebration of how far the profession has come and a call to continue investing in recruitment, retention, and professional growth for the next generation of ENT PAs and NPs.

**Read more here:** [https://journals.sagepub.com/doi/10.1177/00034894251409704?utm\\_term=&m\\_i=dStw43FagPUAkvfTQZQS3KFilS8N%2BswY8NDEWkjT4DZ0MK1\\_%2BmA0IUEYfzczxyA73inuwejivrOaq4tSsAKhZZqWzNqYqJ8x1xJyM1&nbd=62059807&nbd\\_source=slgnt&M\\_BT=1925719410691002](https://journals.sagepub.com/doi/10.1177/00034894251409704?utm_term=&m_i=dStw43FagPUAkvfTQZQS3KFilS8N%2BswY8NDEWkjT4DZ0MK1_%2BmA0IUEYfzczxyA73inuwejivrOaq4tSsAKhZZqWzNqYqJ8x1xJyM1&nbd=62059807&nbd_source=slgnt&M_BT=1925719410691002)



## *Dysphonia: Overview, Evaluation, Etiology, and Management*

*By Monika Kamdar, PA-C, MPH*

*Newsletter Committee Chair*

Dysphonia is defined as a change in a person's perceived voice quality, including roughness, breathiness, asthenia, strain, and pitch. Roughness is characterized by raspiness or irregularity in the voice; breathiness is air leaking out of the vocal folds, i.e. a whispery voice; asthenia is a decrease in vocal strength; and strain is an increase in vocal effort.<sup>1</sup>

Voice production: Lungs provide the power by generating airflow up to the vocal folds; the larynx is the vibratory source. The pharynx, nasal cavity, and oral cavity are resonators that produce the recognized voice, and lips, tongue, and soft palate play a role in the articulation of words.

Approximately one in 13 adults experiences dysphonia annually, with approximately 7.5% seeking evaluation by their primary care provider in their lifetime.<sup>3</sup> Voice quality changes can be seen in pediatric to geriatric populations with varying frequency and length of duration depending on the underlying etiology. There is an overall increase in the prevalence of dysphonia in people who have higher vocal demands, including performers, teachers/professors, lawyers, coaches, and fitness instructors.<sup>3</sup>

There are significant implications for persistent dysphonia that can result in a negative impact on quality of life, including social isolation, depression, anxiety, missed work, and lost wages.<sup>2,3</sup> In a recent cross-sectional study, it was found that people with a diagnosis of dysphonia had over 30% higher odds of depression and over 40% higher odds of anxiety compared to people without dysphonia.<sup>2</sup>

Patients should be evaluated by an ENT clinician if their voice symptoms don't improve within four weeks. Patients should be asked whether voice changes were sudden without preceding viral illness, higher voice use, recent surgery/intubation, and use of certain medications, including steroid inhalers, antihistamines, antidepressants, diuretics, and anticholinergics.

When evaluating a patient with dysphonia, voice quality, vocal fatigability, vocal strength, vocal effort, shortness of breath with speaking, tremor with singing changes in vocal range, pitch breaks, and vocal stamina should also be assessed.<sup>4</sup>

“Among infants and young children, an abnormal cry may signify underlying pathology such as vocal fold immobility, laryngeal papilloma.”<sup>3</sup>

In adolescence, males can have puberphonia, where they continue to speak in a higher-pitched, softer voice following puberty, which is usually psychogenic in etiology. People can have vocal fry, which creates a low-pitched, creaky sound. For example, Matthew McConaughey, the Kardashians, and stylistically, some singers, including Billie Eilish and Britney Spears, use vocal fry in songs.

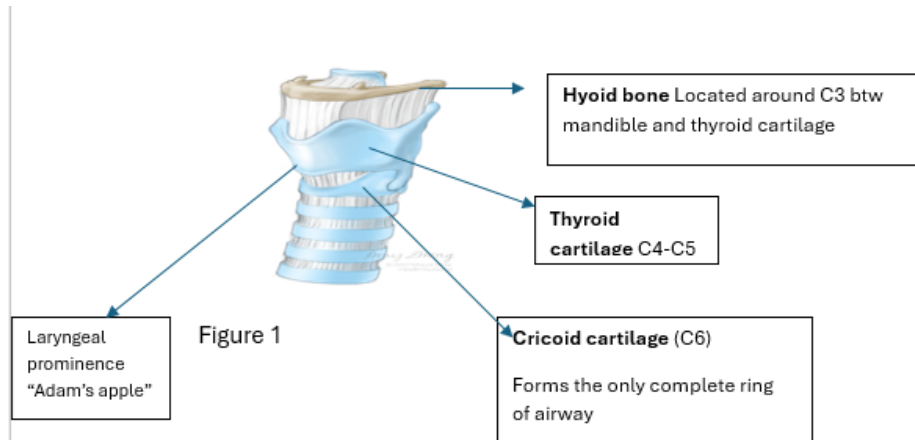
Associated worrisome symptoms for malignancy should also be assessed, including dysphagia, unintentional weight loss, aspiration, dyspnea, otalgia, persistent cough, and hemoptysis.

Patients should be screened for smoking, vaping, and alcohol use, as well as neck radiation history, and family history of head and neck cancer, and presence of neurological symptoms, including dysphagia, dysarthria, hand, neck, vocal tremor, gait disturbance, and cognitive changes.<sup>4</sup>

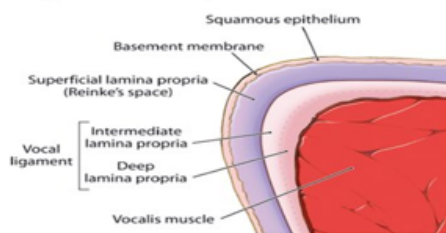
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Examination includes head and neck exam for neck mass, lymphadenopathy, palpation of the neck to assess for tightness and tenderness of the anterior neck and direct visualization of the hypopharynx, larynx with fiberoptic nasopharyngoscopy, flexible nasolaryngoscopy to determine presence of organic pathology, including phono traumatic lesions, including vocal fold nodules and polyps, cysts, vocal fold hemorrhage, bacterial, fungal or viral laryngitis, laryngeal papilloma, leukoplakia, laryngeal cancer, vocal fold paresis/immobility, polypoid corditis, vocal tremor, spasmodic dysphonia, laryngeal sarcoidosis, and laryngeal amyloidosis.

The patient should be asked to perform serial E sniffs to assess for symmetric mobility, a high-pitched E, humming, sustained phonation of E, (O, Ah). If there is concern for spasmodic dysphonia, counting from 60-70 Abductor spasmodic dysphonia and 80-90 for Adductor spasmodic dysphonia.



**Diagram I – The layers of vocal fold tissue**



**Figure 2**

Videostroboscopy uses a pulsed light, and a microphone is placed next to the larynx on the external neck and used to estimate the fundamental frequency of the voice. The strobe frequency is timed at a rate close to the larynx's fundamental frequency, which provides a slow-motion-like view of vocal fold vibration similar to a flip book. Fundamental frequency is the rate at which vocal folds vibrate. Males' vocal folds are longer and thicker compared to females.

Numerous medical conditions can contribute to dysphonia, including:

	<b>Conditions</b>
Neurologic	vocal fold paralysis, spasmodic dysphonia, essential tremor, Parkinson disease, multiple sclerosis, amyotrophic lateral sclerosis
Gastrointestinal	reflux esophagitis, eosinophilic esophagitis
Rheumatologic/autoimmune	rheumatic arthritis, Sjögren syndrome, amyloidosis, sarcoidosis, granulomatosis with polyangiitis
Allergic	
Pulmonary	chronic pulmonary obstructive disease

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Musculoskeletal	muscle tension dysphonia, fibromyalgia, cervicgia
Psychological	Functional disorders
Traumatic	laryngeal fracture, iatrogenic injury, inhalational injury, blunt/penetrating trauma, posterior glottic stenosis
Infectious	Viral, bacterial, fungal
Surgery	Thyroidectomy, ACDF, carotid enterectomy,
Endocrinology	Hypothyroidism, Menopause, Androgen supplementation
Congenital	Laryngeal web, laryngeal cleft

Patients with high voice or overuse of voice can complain of tightness and tenderness of their neck with voice use and have vocal strain and on exam often there is tenderness and tightness of the thyrohyoid space (space between the hyoid bone and thyroid cartilage) and/ or cricoid cartilage seen in **Figure 1** as well as reduction in thyrohyoid space and on nasolaryngoscopy laryngeal hyperfunction (supraglottic, ventricular) is observed.



Laryngeal candidiasis



Bacterial laryngitis



Vocal fold Polyp



Vocal fold nodules



Laryngeal papilloma



Polypoid corditis

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Laryngeal amyloidosis



Laryngeal sarcoidosis



Spasmodic Dysphonia



Tremor

Referral for voice therapy is recommended when there is no worrisome pathology noted on flexible nasolaryngoscopy, and can be beneficial to patients, including for vocal fold nodules, laryngeal hyperfunction, and functional voice disorders.

Strategies to promote good vocal hygiene include staying well hydrated, use of a humidifier, refraining from frequent throat clearing, yelling screaming, whispering, and managing reflux and allergies. Laryngeal massage and voiced gargling with water are effective strategies to relax the laryngeal muscles.

Vocal rest is recommended when a vocal fold hemorrhage is noted anywhere between a few days to one to two weeks, pending severity, and if the patient is on an anticoagulant, viral laryngitis is self-limiting and usually resolves on its own within one to two weeks. Polypoid corditis forms from chronic accumulation of fluid in the superficial lamina propria (**figure 2**) secondary to smoking and therefore smoking cessation is highly encouraged.

Bacterial laryngitis is often treated with Augmentin, Clindamycin or Bactrim (if MRSA is suspected). Fungal laryngitis is treated with Diflucan. Vocal fold polyps and laryngeal papilloma require surgical or procedural management. Depending on the degree of vocal fold immobility and position of the true vocal fold a glottal gap may be present, and a vocal fold injection with hyaluronic acid can be administered to improve vocal fold closure, resulting in an increase in vocal strength and decrease in strain.

Spasmodic dysphonia can be adductor, abductor, and mixed type; a laryngeal dystonia with involuntary laryngeal spasms that cause strangled speech, voice breaks in adductor and breathy, whispery voice in abductor, and both are treated with Botox injections every three to six months.

The voice tends to be worse when speaking on the telephone, with an increase in stress. Surgery can be performed when recalcitrant to Botox injections with denervation reinnervation surgery.

Vocal tremor has involuntary, rhythmic shakiness of voice, especially noticeable with sustained phonation of vowels. If patients also have essential tremor, medications including primidone, propranolol can be effective for tremors and is often managed by a neurologist.

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# Call for contributors for future editions of The Vanguard



The Vanguard is looking for contributors for both CME eligible and non-CME eligible content, as well as suggestions for topics for future editions.

To qualify for CME credit, writers should aim for articles of at least 3,000 words, have three or more learning objectives, and provide at least eight evaluation questions.

If you are interested in writing an article that is either CME eligible or non-CME eligible, please contact editor Monika Kamdar at [monikakamdar12@gmail.com](mailto:monikakamdar12@gmail.com).

The Vanguard is committed to having contributors from a diverse group of voices that represent our organization. We continue to move closer towards the goal of having content from each ENT subspeciality and a wellness topic in each edition.

**“Individually, we are one drop.**

**Together, we are an ocean.” - Ryunosuke Satoro**