



"K-ENT Bulletin" of KORL-HNS

Korean Society of
Otorhinolaryngology-Head and
Neck Surgery

• Serial No.8

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Crisis to
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"K-ENT Bulletin" of KORL-HNS, No.8

1. Feature Article

Uvulopalatopharyngoplasty may decrease the incidence of Parkinson's disease associated with obstructive sleep apnea

Sci Rep 2021;11(1):9608.



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Parkinson's disease (PD) is a typical neurodegenerative disorder that mainly affects the motor system. It is characterized by tremors, rigidity, and slowness of movement at the beginning of the disease, making walking difficult. Once PD develops, it is fundamentally untreatable; attempts can only be made to improve symptoms through medication, rehabilitation, and electrical stimulation of the deep brain.

The relationship between PD and obstructive sleep apnea (OSA) has been steadily proposed in the literature for approximately 30 years. Most studies have shown that the prevalence of OSA is high in patients with PD, probably because the upper airways of patients with PD collapse easily and their lung functions are reduced. Several studies have reported that the occurrence of PD is also increased in patients with OSA. One recent meta-analysis reported that OSA exacerbates cognitive function and motor symptoms in patients with PD, and another meta-analysis reported that OSA is an independent risk factor for PD. Although the exact mechanism is unknown, it is presumed that the oxidative stress caused by intermittent hypoxia and sleep fragmentation in patients with OSA accelerates degenerative changes in the brain to induce the development of PD. However, all these studies were based on a relatively small number of subjects, and the results differed slightly from study to study. In addition, effects of the surgical treatment of OSA on PD incidence have not been evaluated.

Uvulopalatopharyngoplasty (UPPP) is the most commonly performed surgery for OSA. Its success rate, based on the apnea-hypopnoea index (AHI) reduction, is not high. However, UPPP can be a therapeutic option in patients who refuse or are intolerant of continuous positive airway pressure. Therefore, it is meaningful to evaluate UPPP in terms of clinical impact, such as reduction in the incidence of PD. To demonstrate this clinical impact, long-term observational studies of large populations are required, but such

studies are difficult to perform. The Korea National Health Insurance Service (KNHIS) database has recently become available for research purposes in Korea. The KNHIS is a national insurer managed by the Korean government covering nearly the entire population; therefore, it can provide credible, long-term follow-up data on more than 50 million people. Consequently, a retrospective cohort could be constructed by collecting data on patients with OSA as well as those who underwent UPPP.

We collected the following data from the KNHIS database: age, sex, income level (lowest quintile), and various comorbidities based on the ICD code, prescription, or hospitalization record in the claims data. Between 2007 and 2014, there were 202,726 patients newly diagnosed with OSA (OSA group). Of these, 22,742 underwent UPPP (surgery group). Conservative group was comprised of OSA patients who did not undergo UPPP. A total of 1,013,630 subjects were selected as the control group. The mean follow-up duration was 4.8 ± 2.3 years.

The hazard ratio was higher in the conservative group compared to the control group, and this finding was statistically significant in all three Models (Table). A comparison of the surgery group with the control group showed that the hazard ratio of a new PD diagnosis in the surgery group was lower than that in the control group in Model 1, but it was higher in Model 2 and Model 3. However, there was no significant difference between the surgery and control groups in all three Models (the 95% CI included 1). The cumulative incidence plot showed that, compared to the control group, PD occurred more frequently in the OSA group and less frequently in the surgery group (Figure).

Hazard ratio for Parkinson's disease in patients with OSA

	N	Event	Duration (year)	Rate	Model 1	Model 2	Model 3
No OSA	1,013,630	1,125	4,822,203	0.23	1	1	1
OSA							
OSA only	179,984	572	863,159	0.66	2.84 (2.57-3.14)	2.71 (2.45-3.00)	2.57 (2.32-2.85)
OSA+UPPP	22,742	19	100,001	0.19	0.81 (0.50-1.24)	1.52 (0.93-2.32)	1.45 (0.89-2.22)

Model 1: not adjusted / Model 2: adjusted by age and sex / Model 3: adjusted by age, sex, income level, diabetes, hypertension, and dyslipidemia / OSA: obstructive sleep apnea, UPPP: uvulopalatopharyngoplasty

In conclusion, the incidence of PD was significantly higher among patients with OSA than among controls, whereas it was similar to the incidence among controls in patients with OSA who underwent UPPP. This study provides new insight indicating that UPPP may have a preventive effect on PD in patients with OSA.

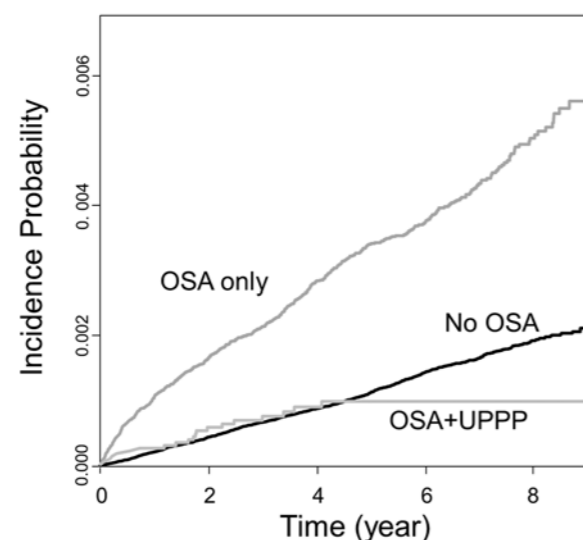


Figure. Cumulative incidence plot for the incidence of Parkinson's disease in patients with OSA. The right plot compares the control group with the OSA group, and the right plot compares the control group with the surgery and conservative groups. Parkinson's disease occurred more frequently in the OSA group than in the control group, whereas it occurred less frequently in the surgery group.

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A comprehensive characterizations of zebrafish rheotactic behaviors and its application to otoprotective drug screening
Expert Systems With Applications 237 (2024) 121496.



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Aquatic animals have rheotaxis that maintains a balance in response to water flow. They sense water flow through hair cells in lateral line, thereby leading to behavior changes relevant to damages on hair cells, the primary sensory receptor cells within auditory and vestibular systems. Zebrafish (*Danio rerio*) are efficient animal models for high-throughput drug screening with human-like hair cells along the lateral line. Their rheotactic behaviors could be assays for hair-cell-targeted drug screening. However, knowledge and tools for rheotaxis analysis along the extent of hair-cell damage have not been fully investigated. This article aims at characterization of rheotactic behaviors identifying lateral line states via an analysis platform that simultaneously examines multiple zebrafish larvae. To this end, we developed an automated framework that incorporated animal test hardware equipment and real-time analysis software for monitoring aquatic behaviors of multiple larvae. Through this framework, a commensurable measure for one-dimensional characterization of rheotactic behaviors was consolidated so that its linear changes could be associated with the population of hair cells remaining intact. These findings satisfied requests for an automated analysis platform to conduct large-scale screening and a biomarker that

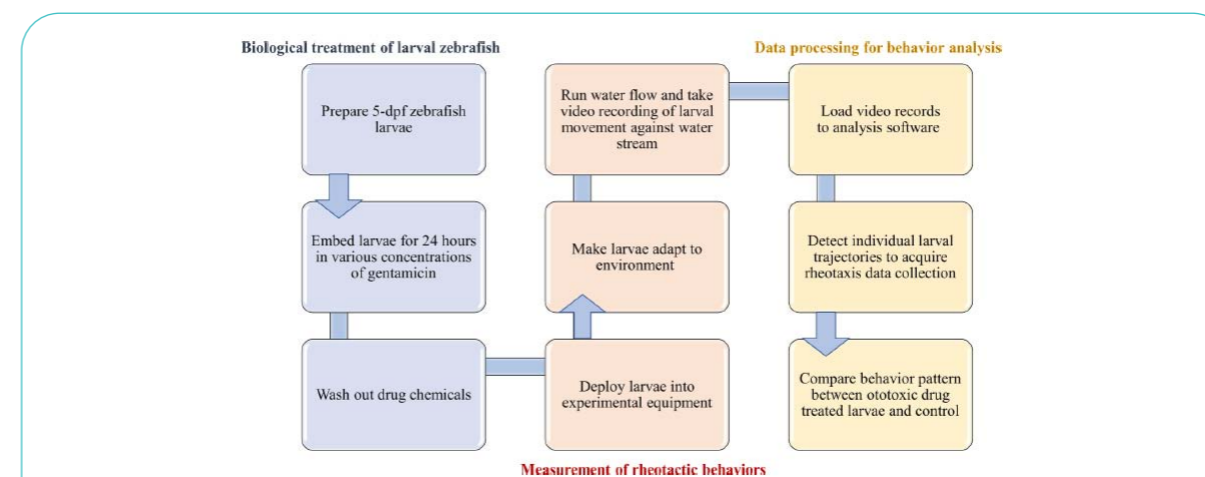


Figure 1. Overall procedure of rheotaxis analysis for drug screening. Individual steps involved in the overall analysis framework is summarized into three major steps: The first two steps were conducted with the experiment hardware equipment, while the last step was a computerized operation processed on the software platform. The software platform conducted the data analysis with the video clips saved in separated files for in-depth statistical analysis between various configurations of the chemical treatment.

discriminate the seriousness of hair cell damage to screen candidates having significant effects in otoprotective drug discovery. Overall procedure was summarized in Figure 1.

In addition, Figure 2 illustrates kernel density estimation (KDE) plots that show the relationship between changes in movement patterns and hair cell populations. Two parameters of the velocity in the horizontal direction along the water flow and the cosine similarity of the head angle, having clearly distinguished trends between the control and gentamicin treated groups, were chosen for concrete distinction among different drug treated groups in the KDE plot. Larvae treated intact demonstrated 'catch-up' behaviors being pushed back by the water flow followed by quick swimming forward against the flow, thereby resulting in a large value of the cosine similarity. Such behavioral patterns made contours of the corresponding KDE plot of an inverted L ('Giyeok') shape. We referred to three cases of the gentamicin treatment as mild, moderate, and severe damage states, according to the drug concentration. As the damage state made transitions from mild to severe, the contour shape gradually varied from an inverted L to a vertical bar by shortening the lower tail of the horizontal velocity and stretching the tail of the cosine similarity profile.

Finally, noticeable changes in behavior patterns were found in captured swim bouts. To clarify such an observation, a number of samples for various parameters including

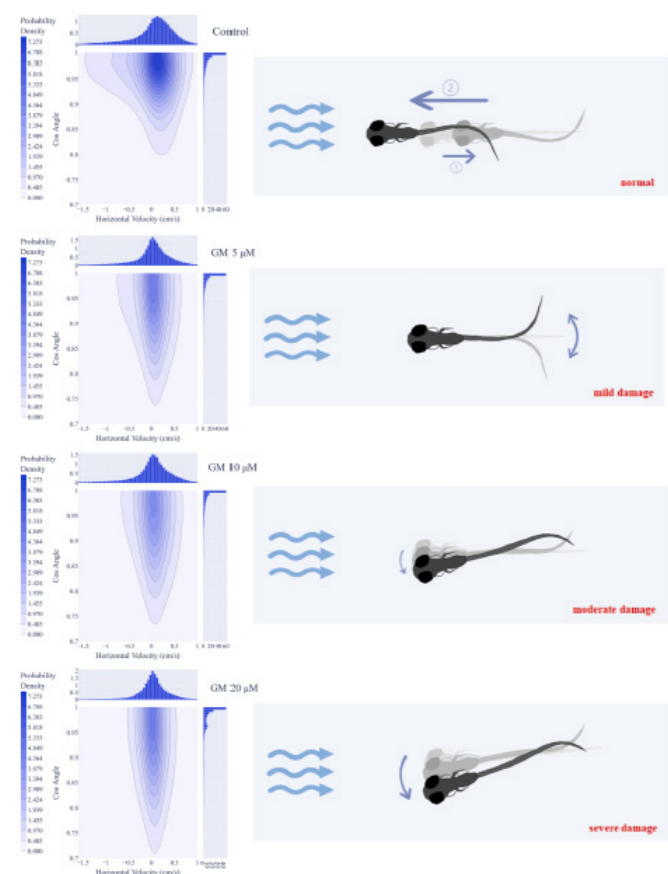


Figure 2. The changes of graph shapes according to the severity of the hair cell damage in the larvae. Kernel density estimation (KDE) plots with a vertical axis of cosine similarity of the head angle and a horizontal axis of the velocity in the direction of the water flow. As hair cell damages aggravated, the head angle profile became diverse, meaning that the frequency of the rotational movement increased and the larvae were likely to move in the vertical direction across the water flow. Such an observation led to consider the catch-up behavior as a primary indicator of the presence of the hair cell damage and the head angle as a quantifier of the extent of the damage, respectively, from movement patterns.

velocity, acceleration, and head angle, were collected during bout actions. A clustering technique called balanced iterative reducing and clustering using hierarchies (BIRCH) was applied to find a possible set of collective patterns in Figure 3.

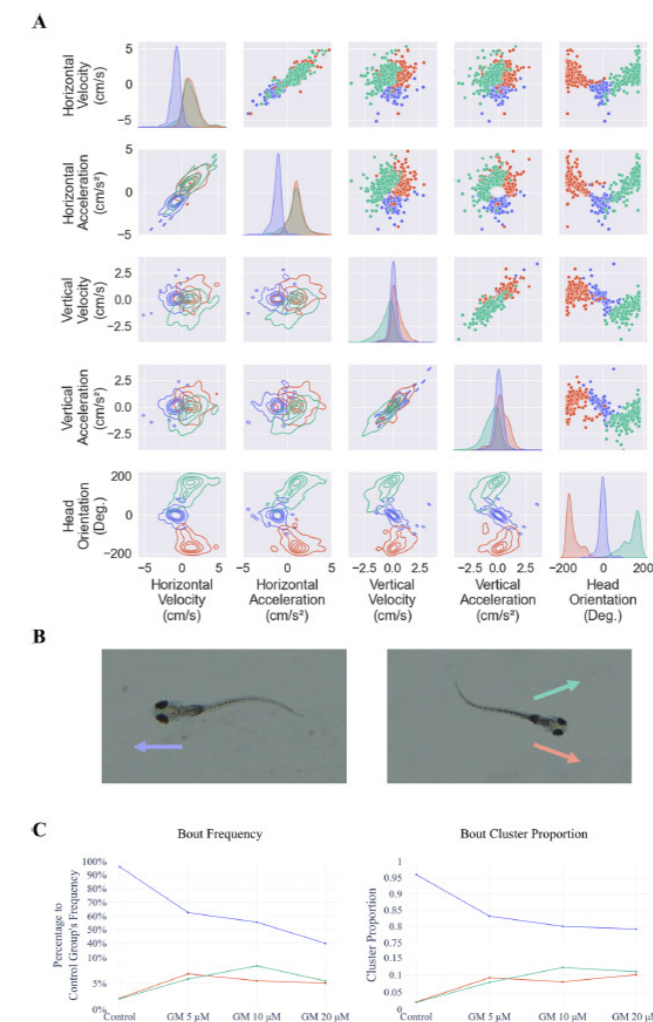


Figure 3. Clustering of larval zebrafish bout data, its movement patterns, and its dose-dependent tendency. (A) Various types of estimated statistical density plots are illustrated with respect to horizontal velocity, horizontal acceleration, vertical velocity, vertical acceleration, and head angle, respectively. Scatter plots, 1-D KDE plots, 2-D planar KDE plots of 3 clusters with 300 samples are presented in upper triangular, diagonal, and lower triangular parts, respectively. Scatter plots and 2-D planar KDE plots are drawn in 2-D planes with their vertical and horizontal axes corresponding to parameters specified to the left of their rows and the bottom of their columns, respectively. The diagonal 1-D KDE plots show the estimated densities of three clusters for the parameters in the corresponding column or row. (B) The movement patterns associated with each of three clusters found from the clustering analysis. The profiles of the swim bout frequency for three clusters. The swim bout frequency of cluster 1 increase whereas the corresponding frequencies for cluster 2 and 3 decrease as the drug concentration grows. (C) The relative bout frequency and cluster proportions in swim bouts. The frequency of the bout pattern labeled as cluster 1, classified as a rheotactic behavior, decreased by 40% after the Gentamicin treatment. By contrast, the frequency of patterns corresponding to other clusters increased slightly. This indicates the decline of the rheotactic swim bouts as hair cell damage intensifies. Furthermore, the population of cluster 1 decreased from 96% to 79% out of the total data points, which results 5-time increases of the population in larval zebrafish's selection of non-rheotactic swim bout actions.

The major contributions of this study are briefly summarized as: (1) A rheotactic behavior analysis framework was presented to combine periodic and continuous features of collective zebrafish larval movements. This approach highlighted the need for simultaneous consideration of short-term and long-term aspects in the rheotactic motion. (2) An integrated platform was developed to detect multiple zebrafish larvae and to analyze their rheotactic behavior in real-time manner. This allows us to obtain continuous movement data in response to water flow reliably and accurately. (3) Correlation features were discovered between the head angle and the horizontal velocity of a zebrafish larva with the lateral line damage. Through the observation of continuous movement such as a swim bout, we could quantify the differences in lateral line damage. (4) New findings about the availability of the frequency of the swim bout were validated for a valid biomarker, through a series of experiments treated with different otoprotective drug candidates. As a result, the overall framework confirmed the potential of this study offers significant potential for practical applications in drug screening.

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2. Introduction to Korean Society of Head and Neck Surgery



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The Korean Society of Head and Neck Surgery (KSHNS) was established on June 1st, 1990, originally known as the Head and Neck Surgery Consensus Meeting (HNSCM). This pioneering group, led by esteemed head and neck surgeons, was formed to create a platform for advancing head and neck surgery. The society's primary goals included hosting academic conferences, fostering international relationship with head and neck societies worldwide, building mutual friendship among members, and providing education and guidance in major head and neck surgical practices.

The HNSCM regularly organized biannual academic conferences to explore the latest advancements and discuss the research presented by the members of the society. Starting in 1995, it began participating in the combined congress of Otorhinolaryngology-Head and Neck Surgery (CORL-HNS), collaborating with societies in Otology, Rhinology, and 3 other associate societies.

In 2007, HNSCM evolved into the Korean Society of Head and Neck Surgery (KSHNS), broadening its international relationships with head and neck societies across the globe. The KSHNS is governed by an executive council comprising a president, president-elect, general secretary, and directors of committees, all dedicated to enhancing research, education, and quality of care for patients with head and neck diseases. The society hosts three annual academic conferences and two case study conferences, promoting academic exchange and harmony among its members. Particularly, the autumn conference is held as a comprehensive academic event, collaborating with other related societies, while the spring conference focuses on research, and the winter conference has a tradition of taking place at a ski resort.

The Society operates several specialized committees that drive research in head and neck surgery, and provide advanced clinical knowledge. Notably, the Artificial and Big Data Research Committee aligns with contemporary research trends in head and neck surgery. Others, like the Ultrasound, Thyroid, Endoscopic and Robotic Surgery committees, focus on training surgeons in advanced techniques based on established guidelines. The Textbook Publication Committee has been producing literature, such as the "Textbook of Thyroid – Head & Neck Surgery" (2005), "Atlas of Thyroid – Head & Neck Surgery" (2014), and the recently published "Head and Neck Ultrasound" (2023). A second edition of the "Atlas of Thyroid – Head & Neck Surgery" is scheduled for publication in 2024, featuring insights and surgical techniques from our society's

experienced surgeons. Additionally, we have plans to release an English version of the atlas through Springer publication, aimed at providing resources to international readers. Our society had also developed and regularly updated clinical guidelines for the management of various diseases including oral cavity cancer and laryngeal cancer, and laryngopharyngeal reflux. These guidelines have been published in the international, peer-reviewed journal, *Clinical and Experimental Otorhinolaryngology*.

International collaboration is a key element of the KSHNS, with the International Committee actively engaging in major global events. Our society played a main role in hosting the 4th International Federation of Head and Neck Oncologic Societies (IFHNOS) in 2010 and the 6th Congress of the Asian Society of Head and Neck Oncology (ASHNO) in 2019. More recently, we hosted the 9th World Congress of the International Academy of Oral Oncology (IAOO) in Incheon, from November 1st to 4th, 2023. In addition, the society hosts biannual webinars focusing on recent advancements in head and neck surgery. It also releases an international bulletin twice a year to facilitate the exchange of valuable information with international societies. These initiatives strengthen our international ties and promote progress in the field of head and neck surgery.



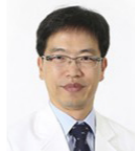


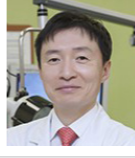
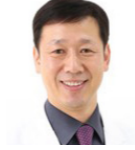
As the KSHNS continues to grow, we uphold our commitment to being a guidance of knowledge and skill in head and neck surgery. Our dedication to improving patient care and providing the highest level of expertise will remain consistent.

Organization of Korean Society of Head and Neck Surgery

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3. Update of Conference

The 13th Annual Korean-American Satellite Symposium (KASS) & International Visiting Scholarship (IVS) Award at the AAO-HNSF 2023 Meeting



Marn Joon Park, MD
Inha University Hospital

To the esteemed colleagues and distinguished members of the Korean Society of Otorhinolaryngology-Head and Neck Surgery (KORL-HNS), I extend my sincere regards.

Greetings, I am Dr. Marn Joon Park, currently practicing as a rhinology specialist, affiliated as a clinical assistant professor at Inha University Hospital, Incheon, Korea. I am honored to introduce myself and share my experience at the 13th Annual Korean-American Satellite Symposium (KASS). Furthermore, I am thrilled to introduce the AAO-HNSF International Visiting Scholarship (IVS) program, which I respectfully received this year with support and sponsorship from the Korean American Otolaryngology Society (KAOS).

With the global decrease in the COVID-19 pandemic, fortunately, the AAO-HNSF announced that this year's national meeting will be held in Nashville, TN, USA, from September 30th to October 4th. After receiving some feedback from the previous year's attendees, this year's organization committee of AAO-HNSF upgraded the event, featuring multiple innovative programs, dynamic social and educational sessions, and multiple academic events in Nashville, which is very famously known for the city's country music. Starting with a very successful opening ceremony, followed by a warm welcome reception from the AAO-HNSF's president, Prof. Kathleen L. Yaremchuk, M.D. More than 1,000 participants from all over the United States and 85 foreign countries joined to celebrate and communicate in this global event, enjoying some refreshments and wonderful live music from many bands in downtown Nashville.

Among the many academic sessions held at this year's AAO-HNSF meeting, one of the highlights was the international symposium session, which featured many scientific oral presentations given by some of the most distinguished surgeons from the KORL-HNS and the KAOS.

On October 1st, an academic session on "Rhinoplasty of the Asian nose" was moderated by Prof. Chae-Seo Rhee from Seoul National University and Prof. Chang-Hoon Kim from Yonsei University. This session included three wonderful lectures: 1) "Correction of the lower one-third of the Asian nose," presented by Prof. Ji Yun Choi from Chosun University; 2) "Current trends in Asian Rhinoplasty," presented by Prof. Sue Jean Mun from Pusan National University; and 3) "Race-based terminology in the rhinoplasty

literature," a very inspiring talk brought by Prof. John J. Chi from Washington University in St. Louis, focusing on the fact that it is time to reconsider the "standards" in the present rhinoplasty literature and textbooks, respecting the diversity in the human race and cultures.

On October 3rd, a session on Head and Neck oncology titled "Recent developments in management of thyroid cancer: the Asian perspective" was moderated by Prof. Se-Heon Kim from Yonsei University. It included three fascinating talks: 1) "Thyroid Radiofrequency Ablation (RFA): Update on Indications," given by Dr. Woojin Cho from With Sim Clinic; 2) "Robotic Retroauricular (Facelift) Approach: Thyroidectomy and More," presented by Prof. Woo-Jin Jeong from Seoul National University; and 3) "Molecular Diagnostic Testing and its Current Application" by Prof. Richard Park from Rutgers University.

PROGRAM

KASS & KOREAN NIGHT (Sunday, October 1, 2023)

5:45 PM – 6:00 PM	Registration
6:00 PM – 6:20 PM	Welcome
6:20 PM – 7:30 PM	Guest speaker presentations Moderator: Jae-Jin Song (Seoul National University), In Seok Moon (Yonsei University) 1. Dr. Eben Rosenthal (Vanderbilt University) Fluorescence Guided Surgery: Rapidly Evolving Applications 2. Dr. Marian Hansen (Iowa University) Innovations in Cochlear Implantation
7:30 PM – 9:00 PM	Dinner and celebration

INTERNATIONAL SYMPOSIUM

Session I (Sunday, October 1, 2023 1:00 PM)

Rhinology: Rhinoplasty of the Asian Nose
Moderator: Chae-Seo Rhee (Seoul National University), Chang-Hoon Kim (Yonsei University)

1. Correction of the lower one-third of the Asian nose	Ji Yun Choi (Chosun University)
2. Current trends in Asian Rhinoplasty	Sue Jean Mun (Pusan National University)
3. Race-based terminology in the rhinoplasty literature	John J. Chi (Washington University in St. Louis)

Session II (Tuesday, October 3, 2023 3:30 PM)

H&N: Recent developments in management of thyroid cancer: the Asian perspective
Moderator: Se-Heon Kim (Yonsei University)

1. Thyroid Radiofrequency Ablation (RFA): Update on Indications	Woojin Cho (With Sim Clinic)
2. Robotic Retroauricular (Facelift) Approach: Thyroidectomy and more	Woo-Jin Jeong (Seoul National University)
3. Molecular diagnostic testing and its current application	Richard Park (Rutgers University)

The 13th KASS Program During the 2023 AAO-HNSF Annual Meeting.

The 13th Annual KASS was held to contribute to the enthusiasm of this big global event, offering a "Korean Night" moment. This is a major annual event at which KORL-HNS and KAOS members gather and familiarize themselves with life in the United States. Briefly mentioning the history of KASS, with the incredible hospitality from one of the senior members of KAOS, Prof. Sammy Lee, a casual dinner during the AAO-HNS national meetings back in the 1970-80s was the first initiative form of an unofficial KASS meeting, inviting all of the Korean ENT colleagues attending the yearly AAO-HNS meeting. With the gradual increasing number of Korean ENT surgeons attending the AAO-HNS meeting as well as the growing number of Korean-American otolaryngologists over time, in 1989, during the New Orleans AAO-HNS meeting, the "Korean-American Otolaryngology Society (KAOS)" was founded.

Keeping up this legacy, in the late 2000s, the former chairman of KORL-HNS, Prof. Chul-Hee Lee, initiated an official academic and social meeting, naming the event the Korean-American Satellite Symposium (KASS), which had its inauguration during the AAO-HNS meeting in San Diego in 2009. As the whole concept and theme of this KASS meeting is to promote knowledge sharing and establish mutual friendship between the otolaryngologists practicing in Korea and America, KASS included many cutting-edge lectures in the otolaryngology field, given by the experts of the society. With the earnest effort from the early founders of KASS and the incredible support from both KAOS and KORL-HNS, KASS had the honor of being accepted as an official program by the AAO-HNS and acknowledged as one of the official social events during the AAO-HNS meeting.

One of the highlights of the 2023 KASS was the invited lectures from the two distinguished otolaryngologists, Prof. Eben Rosenthal from Vanderbilt University delivering his lectures on “*Fluorescence Guided Surgery: Rapidly Evolving Applications*”, and Prof. Marian Hansen from Iowa University giving his talk on “*Innovations in Cochlear Implantation*”, The session was moderated by Prof. Jae-Jin Song from Seoul National University and Prof. In Seok Moon from Yonsei University.



Many excellent lectures were delivered during the international symposium session at the 2023 AAO-HNS conference and KASS. On top of that, the "Korean Night" was an occasion of joy, making new friends, and reconnecting with old ones.

The 2023 KASS took place at Top Golf Nashville, where the venue can perfectly serve the occasion, including academic presentations, a dinner banquet, and social activities. Following a warm welcome address from the KAOS president, Prof. David H. Chi from UPMC Children’s Hospital of Pittsburgh, and a brief introduction on the legacy of KASS by Prof. Do-Yeon Cho from the University of Alabama Birmingham was given. In addition to that, supported by KAOS, five winners of the travel grant award for resident physicians attending the AAO-HNS meeting from Korea and the US were announced. Over great food and drinks, otolaryngologists from Korea and the USA gathered together, greeting, and sharing wonderful conversations, establishing some mutual relationships between physicians from two nations while enjoying playing golf. It was truly a night of joy, excitement, and unison. To add some more anticipation, given that the 2024 AAO-HNS conference will be held in Miami, FL, hopefully there will be even more enjoyable events during KASS and a closer connection between KORL-HNS and KAOS members during 2024 KASS.

In addition to attending the national AAO-HNS meeting and KASS, I was presented with an incredible honor, as I was humbly selected and awarded to be one of the AAO-HNS International Visiting Scholarship (IVS) awardees. To provide a brief overview of the IVS program, the AAO-HNSF awards a selected number of international visiting scholarships annually to junior academic ENT physicians who reside outside of the US. Invited to attend the AAO-HNSF Annual Meeting, IVS awardees also are mandated of an opportunity to arrange their own observership at an academic otolaryngology institution in the US for a minimum of two weeks. The IVS is open to all candidates who meet the eligibility requirements, which requires that the candidate must have completed their resident training, have not attended in previous AAO-HNS meetings, must be affiliated as a full-time junior faculty academic position, and be under 40 years of age. The IVS will receive a travel grant of \$2,000 USD, a waiver for AAO-HNSF Annual Meeting registration fees, and an invitation for a one-year free membership in AAO-HNS. The IVS had some specific IVS opportunities, including the IVS for Koreans, which is sponsored and supported by the KAOS.

During the first day of the AAO-HNS conference, all IVS recipients were invited to an orientation in the Global Connections Lounge, where I had the opportunity to meet numerous colleagues practicing otolaryngology at academic institutions worldwide. Discussing certain significant differences in the healthcare system and physician training system, as well as how discussing divergence in cultures and areas throughout the world may affect otolaryngology practice and surgeon training, was truly amazing, shedding light on a subject I was previously unaware of. The IVS awards were presented by Prof. Sheng-Po Hao, Chair of the International Advisory Board in AAO-HNSF, during the Global Assembly session. It was truly a "real moment", which I will always treasure and count among the greatest accolades and triumphs of my professional career. Also, I was beyond proud to represent my home nation, Republic of Korea, and have the opportunity to film an official interview with the AAO-HNSF. Also, I had the privilege of meeting

Prof. Eugene Myers, a renowned professor, surgeon, and scholar in our society who has inspired multiple generations of otolaryngologists worldwide. During this event, Prof. Myers launched the Eugene N. Myers Global Education Fund during this session to support otolaryngologists working in low-income nations with their continuing education needs. Furthermore, it was an incredible opportunity to be able to attend live lectures delivered from our society's most eminent surgeons, especially having the honor to introduce myself to Prof. Peter H. Hwang, who have inspired and mentored so many skull base/rhinology surgeons over decades.



Attending the AAO-HNSF annual meeting 2023 in Nashville, TN; Enjoying the president's reception with Prof. Kwang Hyun Kim and Prof. Woojin Jeong, and being inspired by the legends in the otolaryngology society, Prof. Eugene N. Myers and Peter H. Hwang; Presentation of IVS awards to all IVS winners of 2023 during the Global Assembly session.

Mercifully enough to be chosen as one of this year's IVS winners, I was able to not only attend the AAO-HNS meeting for the first time in my career, but I was also fortunate enough to have the opportunity to visit Prof. Do-Yeon Cho's clinics, surgery, and research labs in the University of Alabama Birmingham (UAB) Hospital, Otolaryngology department, under Prof. Cho's warm hospitality and wonderful guidance for two weeks. While visiting UAB Hospital, I was also given some great privileges to attend and observe Prof. Woodworth's fascinating skull base and sinonasal tumor surgeries. On the

way back home, with the heartfelt invitation from Prof. Jeffrey D. Suh at the University of California, Los Angeles, I was also given the incredible honor to visit and observe the clinics and surgery at UCLA.



As a 2023 IVS awardee, with the warm welcome invitation from Prof. Do-Yeon Cho, I had such an amazing experience observing the clinics, research, and rhinology/skull base surgeries from Prof. Cho and Prof. Woodworth at the University of Alabama Birmingham Hospital. On the way back home, with the incredible hospitality I received from Prof. Jeffrey D. Suh at UCLA, I was very fortunate to observe Prof. Suh and Prof. Wang's clinics and surgeries at UCLA Hospital, along with an invitation to a very heartfelt dinner from the UCLA faculties.

As a very young otolaryngology surgeon early in my career, practicing in academic teaching hospitals can often be quite challenging and overwhelming. However, being able to receive such an amazing opportunity, generously supported from KAOS and AAO-HNS enabled me to expand my clinical knowledge and surgical skills beyond my horizons. Going to the US and attending this year's AAO-HNS meeting was a major event in my personal and professional life, which definitely inspired me deeply, and changed my life. Lastly, but certainly not least, I cannot express my overwhelming gratitude to Prof. Do-Yeon Cho and Prof. Jeffrey D. Suh for their amazing mentorship and heartfelt invitation. Above all, I will be eternally grateful to KAOS for granting me with this extraordinary opportunity, which I will always carry on throughout my career.

After Closing the 29th Combined Congress of KORL-HNS



Nam Suk Sim, MD, PhD
 Assistant Secretary of Scientific Committee, KORL-HNS
 Severance Hospital

From October 12 to 13, 2023, the 29th Combined Congress of KORL-HNS was held at the Kimdaejung Convention Center in Gwangju. A total of 1,187 participants from all over the country gathered in Gwangju to exchange knowledge and cultivate friendship. The pre-conference golf tournament attracted a lot of attention. Participants representing the three subdivision competed in a fairly, and a winner was Yong Min Kim from Chungnam National University. As it attracted a lot of attention, it was not difficult to witness the players receiving congratulations here and there during the two-day congress. Congratulations to Rhinology team on winning the ENT championship once again.



Figure 1. Group photo of ENT golf championship.

Similar to last combined congress, anyone registered the congress easily found the time tables and abstracts from smart-phone applications. As a leading academic society, we continuously sought changes with the rapidly changing global trends, and attendees also participated in these changes without difficulty. Especially, photo-zone and booth tour parts were received a lot of attentions. Carrying a heavy abstract book in an "ENT" logo-printed eco-bag seems to be a story of long ago.



Figure 2. Group photo taken after the opening ceremony.

After the conference opening ceremony, professor Jeon, In-Sam (Chonnam National University Department of Korean Music) gave a lecture on Jeolla-do pansori stories. He and his students performed exciting pansori, and many participants applauded and enjoyed it. As someone who has never seen a pansori performance, I was very impressed. I would like to thank the chairman for planning a great performance.



Figure 3. A special lecture on Jeolla-do pansori stories by Jeon, In-Sam.

In the kinship meeting, the attendees enjoyed a pleasant dinner with wonderful classical music concert. Numerous attendees filled the hall and shared the friendship and camaraderie. Talented academic member and his colleagues performed many classical songs. The kinship meeting with great wine and classical concert will be talked about for years to come.



Figure 4. A wonderful classic music concert at Gala dinner.

For two days, the conference was held in six halls. Presentations and discussions on various topics were held in each session, giving attendees an opportunity to share and learn about the latest and changing medical knowledge. The essence of the society was lectures, and there were society members full of curiosity and passion in the classroom. I think this was the strength and the passion of the combined conference we wanted.

Next is ICORL 2024 (International Congress of ORL-HNS 2024 in conjunction with the 98th Annual Congress of Korean Society of ORL-HNS and 2024 Spring Meeting of Korean Association of Otorhinolayngologists). Under the direction of President Kyung-Su Kim, it will be held at the Suwon Convention Center from Thursday, April 18 to Sunday, April 21, 2024. Thank you for your interest this time, too. Hope to see you soon!

Next is ICORL 2024 (International Congress of ORL-HNS 2024 in conjunction with 98th Annual Congress of Korean Society of ORL-HNS and 2024 Spring Meeting of Korean Association of Otorhinolayngologists). Under the direction of President Kyeong soo kim, it will be held at the Suwon Convention Center from Thursday, April 18 to Sunday, April 21, 2024. Thank you for your interest this time too. Hope to see you soon!

ICORL 2024 to be held in Suwon, Gyeonggi-do

The International Congress of ORL-HNS (ICORL) 2024, in collaboration with the 98th Annual Congress of the Korean Society of Otorhinolaryngology-Head & Neck Surgery and the 2024 Spring Meeting of the Korean Association of Otorhinolaryngologists, is scheduled to take place from April 18 to 21 at the Convention Center in Suwon, Gyeonggi-do.



Figure 1. Suwon Convention Center

After leaving Seoul for the first time in 2022, ICORL is set to establish itself in the new city of Suwon. It's noteworthy that many events are now being held in-person, free from the impact of COVID-19, so we can look forward to vibrant and bustling events as in the past. There will be an abundance of rich topics and speakers from various countries, and presentations on the latest cutting-edge research like never before. Additionally, Suwon is a city steeped in culture and history, and just a short walk from the conference venue, you will have the opportunity to enjoy many activities.



Figure 2. Suwon Hwaseong

Finally, we hope to come together in the warm spring at the Suwon Convention Center to share academic knowledge and experiences, and to collectively experience the joyous festival of global harmony. Let's meet on-site.

By Subway

「Gwanggyo Jungang(Ajou Univ.) Station」, Sinbundang Line
Get off Gwanggyo Jungang Station(Exit 4) → Walk to Suwon Convention Center(Approx. 10 minutes on foot)



By Bus

Express Bus Stop: 「Gwanggyo Jungang-Ajou University Transfer Center」
Seoul Station M5115, M5121 / Gangnam Station M5422
Get off at Gwanggyo Jungang-Ajou University Transfer Center(Exit 4) Walk to Suwon Convention Center(Approx. 10 minutes on foot)

Intra-city Bus Stop: 「Suwon Convention Center - Lotte Outlet」
5-4, 19, 20, 32, 32-3, 32-4, 670, 720-3, 999 → Get off at Suwon Convention Center - Lotte Outlet Walk to Suwon Convention Center (Approx. 3 minutes on foot)



By Airport Limousine Bus

Incheon International Airport: Airport limousine bus for 「Gwanggyo Jungang-Ajou University Transfer Center」
Take Bus No. 887(60-80 minutes) → Get off at Gwanggyo Jungang-Ajou Daeyeok Transfer Center(Exit 4) → Suwon Convention Center(Approx. 10 minutes on foot)

Gimpo International Airport: Intercity Bus for 「Dongsuwon Station」
Take Bus No. A4300(80min) → Get off at Dongsuwon Station → Take a taxi(10min) or take a bus(30min) → Suwon Convention Center

(www.koreaorlmeeting.org)

Update of International Conferences to be Held in Korea

Year	Specialty	Date	Name	Location	Webpage
2024	ENT	3/20~22	19 th Korea Japan Joint Meeting (KJJM) 2024	Lotte Hotel World, Seoul	http://kjjm2024.org/
	ENT	4/18-21	International Congress of ORL-HNS (ICORL) 2024	Suwon Convention Center, Suwon	https://www.koreaorlmeeting.org/workshop/2024spring/
	Facial plastic	3/24	International Congress of Korean Academy of Facial Plastic and Reconstructive Surgery (KAFPRS) 2024	Cancer Center, Samsung Medical Center, Seoul	Pending

4. International Fellow Scholarship



Maithrea Suresh Narayanan
Asan Medical Center

Q1> Can you introduce yourself?

Hello, my name is Maithrea Suresh Narayanan, and I am an Otolaryngologist-Head and Neck surgeon from Malaysia. Currently, I am attached to the Asan Medical Centre for a Rhinology and Skull Base fellowship under the tutelage of

Professor Ji Heui Kim.

Q2> Where were the most impressive places to travel to in Korea?

I thoroughly enjoyed visiting the Hallasan National Park on Jeju Island. Korea's first UNESCO World Natural Heritage Site. It is situated on South Korea's tallest mountain with a height of 1,950m above sea level. The view from the pinnacle was beautiful, with full view of the autumn colored foliage. Luckily, the weather was mild, with only a light breeze facilitating the hike up. There was also the crater lake called Baekrokdam, which means "Hundred Deer Lake" in Korean, at the summit for an opportunity to see the mountain fauna.

Q3> What food would you recommend to foreigners who are new to Korean food?

My favourite dish so far is the Marinated crab (간장게장 - ganjanggejang). It is a popular Korean dish made by marinating raw crab in a mixture of soy sauce, sesame oil, garlic, ginger, and other spices. The crab is typically marinated for several days or even weeks, until the meat is fully infused with the flavors of the marinade. The crab meat is tender and showcases a complex flavor that is both sweet and salty.

Q4> How is hospital life here different when compared to your own country?

Training here has been a pleasant and educational experience. For example, some Korean innovated medical consumables are in use for complex surgeries and produce excellent outcomes. Certain surgical techniques are also unique to surgeons here, and are a welcome addition to my repertoire. The theater personnel here are courteous and well organized, and the surgical assistants are very highly trained and efficient. On a personal level, i have

experienced wonderful hospitality from my professor and the department. She gave me an Atlas of Skull Base Surgery published by the Korean society as a present and also registered me for the fall and spring KORL conferences. In addition, the other professors in the department were very welcoming and always took time to share pearls and pitfalls from their experiences when I joined their cases.

Q5> What do you think are the pros and cons of the Korean medical system? How is the training course in Korea?

The Korean medical system is a good example of a successful implementation of a National Health Insurance Scheme. It is delivered primarily by the private sector, and has consistently scored highly in OECD indexes. It is well equipped, and routinely treats a large number of complex cases. Training in Asan Medical Center provides excellent exposure for subspecialty training as there are a variety of cases in facial plastics, skull base surgery, as well as allergy and inflammatory pathology. The opportunity to be part of the team managing complex revision surgery and challenging primary resections is invaluable to running a rhinology practice later.

Q6> What's the last thing you want to say?

I truly cherish this opportunity to perfect my craft at this esteemed institution, and would like to extend my heartfelt gratitude to my supervisor Professor Ji Heui Kim for all her help and guidance thus far. Secondly, I am also sincerely grateful to the Korean Society of Otorhinolaryngology-Head and Neck Surgery (KORL-HNS) for awarding me this scholarship.



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