Keynote Forum

**Chandra Veer Singh**
Datta Meghe Institute of Higher Education and Research Wardha, India

**Title:** Functional and Anatomical Outcome of Inside out Technique for Cholesteatoma Surgery

**Biography:** Chandra Veer Singh DLO, DNB, Fellowship In Head and Neck Cancer Surgery, Fellowship in Otology and Base Of Skull Surgery from some of the most prestigious Institutes like Bombay Hospital, Mumbai and Sir HN Reliance Foundation Hospital, Mumbai.

**Somaia Altawalbeh**
Dr. Somaia Altawalbeh Clinic, Jordan

**Title:** A Double-Blind, Randomized, Intra-Individual Controlled Feasibility Trial Comparing the Use of 1,470 and 940 nm Diode Laser for the Treatment of Hyperplastic Inferior Nasal Turbinates

**Biography:** Somaia Altawalbeh Consultant Ear, Nose and Throat Surgery Member of the Jordanian Association of Head and Neck Surgery and Member of the Jordanian Society of Ear, Nose and Throat Surgeons.

Group Photo & Networking and Refreshments Break @ 10:50-11:10

**Abeer Dyoub**
University of L'Aquila, Italy

**Title:** Ethics of Conversational Agents in Healthcare

**Biography:** Abeer Dyoub is a researcher fellow at the Department of Engineering, Computer Science and Mathematics (DISIM), University of L'Aquila. Her Research interest focuses on Artificial Intelligence, with special focus on Computational Logic including Intelligent Agents and Multi Agent Systems.

**Maria O'Malley**
Atlantic Technological University, Ireland

**Title:** Quality Improvement initiative: Introduction of a Cross-Disciplinary Safety Briefing in the Operating Theatre before Operating List Commences.

**Biography:** Maria O'Malley is Band Irish Nursing Board PIN 117395 registered Nurse with extensive expertise providing first-class care in a Theatre Department. Meticulous attention to detail in the monitoring and treatment of patients for continued positive progress and results. Attentive nursing professional presenting high level of care, patient assistance during anaesthesia.
Seyed Ziaeddin Rasihashemi
Tabriz University of Medical Sciences, Iran

Title: Outcomes and Pathological Features of Total Thyroidectomy in Patients with Multifocal Papillary Thyroid Carcinoma

Biography: Seyed Ziaeddin Rasihashemi, M.D., is a chest surgeon in Iran and is affiliated with Tabriz University of Medical Sciences. He received his medical degree from Shahid Beheshti University of Medical Sciences.

Martin Sornes
Hearoll Medical Inc, Norway

Title: New Audiometry, the time has come!

Biography: Sornes was a late bloomer and finished his bachelor of audiology in 2008, vaguely describing the clinical audiometric device of the future in his thesis. In 2007 he was awarded an entrepreneurial scholarship for his idea of mobile audiology.

Dimitra Kalimeri
Athens Medical Center, Greece

Title: Infection Control and Prevention in Private Sector Hospital

Biography: Dimitra Kalimeri is an efficient registered nurse with over 25 years of clinical, educational, and managerial experience. Collaborative and motivational with expertise in training new nursing staff while providing top-notch service to patient populations. She is the Infection Control Supervisor and Associate Director for Nursing at Athens Medical Center.

Lei Huo
The University of Texas, USA

Title: PTEN Expression and Copy Number Variation in Triple-Negative Breast Cancer

Biography: Lei Huo is a practicing pathologist. She is actively involved in clinical and translational research in the field of breast cancer. Her research interests include high risk breast lesions, molecular and immuno-histochemical markers in the diagnosis and treatment of breast cancer, among others.

Haim Kaplan
Haim Kaplan Ltd, Israel

Title: A Single Surgeon’s experience with Motiva Ergonomix Round Silk Surface Silicone implants in breast reconstruction over a 5-year period

Biography: I graduated from Hebrew University in Jerusalem, where I have also completed a specialization in plastic surgery, at the Hadassah Ein Kerem Hospital. Currently, I serve as a plastic surgeon in the Department of Plastic Surgery at the Asaf Harofe Hospital, a member of The Israeli Society and The American Society of Plastic and Reconstructive Plastic Surgery.
Ghizela Ana Maria Salagean  
TopMed Medical Center, Romania  
**Title:** Comparison of Volumetric Modulated Arc Therapy Vs. Helical Tomotherapy Treatment Planning in A Case of Implanted Breast Tissue Expander  
**Biography:** Ghizela graduated from UBB with both a bachelor's and a master's degree in medical physics. Her area of expertise is Radiation oncology. She joined many working groups (WGs) run by ESTRO and EFOMP in recent years.

Hamdi Al Shenawi  
Arabian Gulf University, Bahrain  
**Title:** Is laterality in breast Cancer still worth studying? Local experience in Bahrain  
**Biography:** Hamdi Mohd Al Shenawi is currently employed as a laproscopic surgeon at King Abdullah Medical City in Bahrain and as an assistant professor of surgery in the college of medicine and medical sciences at Arabian Gulf University.

Atziri Corin Chavez Alvarez  
University Laval, Canada  
**Title:** Development of Novel Antimitotic Prodrugs Targeting Cyp1a1-Expressing Breast Cancer Cells Exhibiting Improved Rodent Liver Stability  
**Biography:** Atziri Corin Chavez Alvarez is currently completing a Ph.D. program in Sciences pharmaceutics at University Laval in Quebec City, Canada. Corin completed her undergraduate program in pharmacy at the Faculty of chemistry, pharmacy, and biology at the Universidad Michoacana de San Nicolas de Hidalgo in Mexico.

Vincent Ouellette  
University Laval, Canada  
**Title:** Design, synthesis and biological evaluation of 4-(3-alkyl-2-oxoimidazolidin-1-yl)-N-phenylbenzenesulfonamide salts as novel hydrosoluble antimitotic produgs selectively bioactivated by cytochrome P450 1A1 in breast cancer cells  
**Biography:** Vincent Ouellette obtained his undergraduate degree from University du Quebec a Trois-Rivieres with a Bachelor of Science (BSc) in Chemistry (Forensics profile) in 2016. He then continued his studies to graduate school and received his Master's degree (MSc) in Chemistry at the same university in 2019.

Sadie Elisseou  
Harvard Medical School, USA  
**Title:** Trauma-Informed Clinical Care: Fostering Healing and Resilience  
**Biography:** Sadie Elisseou, MD (she/her) is a primary care physician in the VA Boston Healthcare System, a Clinical Instructor of Medicine at Harvard Medical School and Adjunct Instructor of Medicine at Boston University School of Medicine, and a nationally recognized expert in the field of trauma-informed care (TIC).
Keynote Forum

Eman Salman Taie
Helwan University, Egypt

**Title:** Emerging of Greening Hospitals is Future Challenge for Nurse Manager: Designing and Validating Protocol

**Biography:** Eman Salman Mohamed Salman Taie is professor of Nursing Administration - Faculty of Nursing - Helwan University - Cairo - Egypt. She was Head of Nursing Administration Department in Faculty of Nursing – Helwan University.

10:00-10:30

Armando Masucci
AORN San Giuseppe Moscati, Italy

**Title:** Measurement of Anxiety and Stress levels of Nurses involved in the Covid-19 Emergency in Italy. Factors associated with outcomes on change in quality of life and possible occupational repercussions.

**Biography:** A. Masucci has completed his degree in Medicine and Surgery at the age of 24 years from 1th Faculty of Medicine and Surgery of the Second University of Naples. He is full Professor of occupational Medicine at Pegaso Telematic University.

Speaker Session

Sandra McDade
Capella University, USA

**Title:** Case-Based Patient Scenario Learning Activity on Medication Administration Safety

**Biography:** Sandra McDade recently graduated with the highest honors from Capella University with a PhD in Nursing Education. She received a master’s degree in nursing education and a baccalaureate in nursing with the highest honors in both programs from Benedictine University.

10:55-11:20

Aydanur Aydin
Gumusuhane Universtiy, Turkey

**Title:** Mobile Care App Development Process: Using the ADDIE model to Manage Symptoms after Breast Cancer Surgery (Step 1)

**Biography:** Aydanur Aydin is a faculty member at Gumushane University, Faculty of Health Sciences. Her doctoral thesis includes the effect of mobile-based care support products on symptom management in Breast Cancer patients.
Samanthi Senarath
KAATSU International University, Sri Lanka

**Title:** Factors associated with the presence and reporting of medication administration errors among nurses at Avissawella Base Hospital, Sri Lanka

**Biography:** She is lecturer at KIU, Sri Lanka. She is graduate with a BSc. Hons in Nursing at the University of Ruhuna and Postgraduate Diploma in Social Statistics (PgDSS) at the University of Sri Jayewardenepura, Sri Lanka.

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Elvira Habermann
Freelance RN Continence and Stoma Care, Austria

**Title:** Entrance gate for germs

**Biography:** After her graduation from the nursing school in Klagenfurt, she worked, apart from a baby break, on a neurological ward on a regular basis for 9 years. Then she switched to the urological department. There, for nine years, she also looked after people with incontinence problems.

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Silas Adjei-Gyamfi
Ghana Health Service, Ghana

**Title:** Maternal risk factors for low birthweight and macrosomia: A cross-sectional study in Northern Region, Ghana

**Biography:** Silas Adjei-Gyamfi is a young Global (Public) Health specialist and researcher whose interests are limited to population health, community health, maternal and child health, epidemiology, statistics, health systems, and health policy.

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Leila Ahmadnezhad
Independent Researcher, Iran

**Title:** The effect of immediate and eight weeks inspiratory muscle training on rehabilitation of low back pain

**Biography:** Leila Ahmadnezhad received her PhD degree in 2020 in course of Physical Education and Sport Science. Her main area of research is rehabilitation in low back pain. Her specific research interest is inspiratory muscle training. She teaches rehabilitation courses at the college.

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Joseph Galukeni Kadhila
University of Namibia, Namibia

**Title:** Clinical Learning Experiences of Nursing Degree Students At The Public Training Hospitals: Khomas Region, Namibia

**Biography:** Joseph Galukeni was completed my Masters of Nursing Science at the University of Namibia in April 2023, In December 2018 completed Postgraduate Diploma in Clinical Instruction at the University of Namibia, In December 2012 completed my Degree in Bachelor of nursing science (clinical) honours at the University of Namibia.
Constance Moore  
US Army, Retired, USA  

**Title:** In Their Own Words: Army Nurses Remember the 2003 Iraqi Invasion  

**Biography:** COL (R) Constance J. (CJ) Moore served as an Army nurse for twenty-five years. She was assigned in various psychiatric nursing positions, and in five hospital education and nursing academic roles, culminating in the assignment, Chief of Education, William Beaumont Army Medical Center, El Paso, Texas.

Junaid Sarfraz Khan  
Lady Reading Hospital MTI, Peshawar, Pakistan  

**Title:** Neo-Colonization of Medical Education in the Developing Countries: A Cause for Concern?  

**Biography:** Junaid Sarfraz Khan is an eminent Medical Educationist holding two PhDs and is also a practicing Breast Cancer and Reconstructive Surgeon, being a fellow of both the Royal College of Physician and Surgeons, UK and the College of Physicians and Surgeons, Pakistan.

Ahmed Ashour  
Cairo University, Egypt  

**Title:** Is Music Intervention Effective in Reducing Anxiety and Pain During Breast Biopsy Procedure? A Systematic Review and Meta-Analysis of Randomized Controlled Trials  

**Biography:** Ashour studied MEDICINE at Cairo University, Egypt, and graduated as MBBCh in 2005. He then joined the obstetrics and gynecology residence program at obstetrics and gynecology hospital, faculty of medicine, Cairo University, from 2007-2010. He obtained Masters degree in OBGYN, at Cairo University in 2011, then MD degree in OBGYN in 2013.

**E-Poster**

Sochima Obiekwe  
Nnamdi Azikiwe University Awka, Nigeria  

**Title:** Evaluation of Anthropometric and Hematological Parameters in Symptomatic HIV Male Subjects Not Enrolled In Anti-Retroviral Therapy Attending Nnamdi Azikiwe University Teaching Hospital (Nauth) Nigeria; A Cross-Sectional Study  

**Biography:** Obiekwe Johnmark Sochima, a clinical Physiotherapy student at Nnamdi Azikiwe University, College of Health Sciences. Sochima is a researcher, an author, a data analyst enthusiast, a Public Health advocate, a Healthy Girl child advocate, and a public speaker with years of experience in project initiation and management.

Ezenwa Robinson Modum  
Nnamdi Azikiwe University Awka, Nigeria  

**Title:** Medical Students Understanding, Perception, and Attitudes Towards Amputation as a Medical Procedure  

**Biography:** Dr Robinson Ezenwa Modum (PT) is a youth activist and a public health enthusiast, with a demonstrated history of participation in public health advocacies, health and wellness exercises across his abode.
KEYNOTE SPEAKERS
Day 1
Chandra Veer Singh
Datta Meghe Institute of Higher Education & Research Wardha, India

**Functional and Anatomical Outcome of Inside Out Technique for Cholesteatoma Surgery**

To study the efficacy of inside-out technique in completely eradicating the cholesteatoma from middle ear and mastoid, preservation of hearing & and quality of life post mastoidectomy with regards to recurrent discharge, wax, granulations.

**Material and methods:** In the study we included 100 patients presenting with chronic suppurative otitis media with cholesteatoma, they underwent inside out mastoidectomy and were followed up till the end of the study to evaluate the efficacy of inside out mastoidectomy in eradicating the disease from the middle ear cleft.

**Results:** Of the 100 patients, 98 patients had a total clearance of disease by the inside out approach, and 2 patients, had doubtful clearance. Thus, the overall success rate was 100% in our study. A significant improvement in the mean air conduction (p < 0.01) and the mean air bone gap (p < 0.01) was seen in all postoperatively at 3rd month PTA. Only one patient had conductive hearing loss one and a half years postoperatively after initial improvement. A dry self-cleansing cavity was achieved in 95% of the patients and only 5% required regular cleaning of wax the cavities.

**Conclusion:** Inside out mastoidectomy is a better alternative in canal wall down procedures as it not only clears the disease from the middle ear cleft, but also leaves behind a small postoperative cavity, which will preserve the hearing, decrease the cavity problems and increase the quality of life of such patients.

**Biography**

Chandra Veer Singh DLO, DNB, Fellowship In Head and Neck Cancer Surgery, Fellowship in Otology and Base Of Skull Surgery from some of the most prestigious Institutes like Bombay Hospital, Mumbai and Sir HN Reliance Foundation Hospital, Mumbai. Chandra Veer Singh, Senior Consultant Otorhinolaryngologist, Head and Neck Onco surgeon and Base of skull surgeon. He specialises in Robotic and Endoscopic Surgeries.

With an experience of around 25 years in the medical field and expertise gained by performing over 5000 surgeries, Chandra Veer Singh aptly is also an Associate Professor at the Department of Otorhinolaryngology and Head & Neck Onco sugery at Datta Meghe Institute Of Medical Sciences, Wardha, Maharashtra.

He deserves praise for pioneering several surgical techniques and earning their patents thereof. He is the current editor of The International Journal of Otolology and Laryngology and Cureus. He has over 85 Publications to his credit and is the reviewer of several reputed International Journals including The American Journal of Otolaryngology and Head and Neck cancer surgery. He has been cited over 200 times.
A Double-Blind, Randomized, Intra-Individual Controlled Feasibility Trial Comparing the Use of 1,470 and 940 nm Diode Laser for the Treatment of Hyperplastic Inferior Nasal Turbinates

Introduction: Various laser systems have been used for volume reduction of hyperplastic nasal turbinates. For endonasal application, fiber controlled diode lasers are preferred over conventional laser systems for reasons of cost and practicability. This study compares coagulative tissue effects using l¼ 1,470 nm and l¼ 940 nm lasers in treatment of hyperplastic inferior nasal turbinates in an intra individual manner.

Methods: Twenty patients underwent laser coagulation for hyperplastic inferior nasal turbinates in this prospective, randomized, double-blind, clinical feasibility trial. In each case, one nasal cavity was treated using 1,470 nm laser (4–5 W power), the other one with 940 nm laser (12 W power), endoscopically controlled in noncontact mode. Clinical presentation and patients symptoms were documented preoperatively and on day 1, 3, 7, 14, and 21 postoperatively using rhinomanometry, standardized questionnaires including SNOT 20 GAV (German adapted version), and separate endoscopic examination, respectively.

Results: No infections, hemorrhages, or other complications occurred intra- or postoperatively. The mean operation time was significantly shorter using the 1,470 nm diode laser as compared to the 940 nm laser. There was a significant reduction of nasal obstruction on day 21 postoperatively compared to the preoperative condition on both sides regardless of the laser system used. Evaluation of the SNOT-Scores as assessed before and 3 weeks after surgery showed significant subjective improvements.

Conclusions: 1,470 nm diode laser system offers an efficient method for tissue reduction in hyperplasia of inferior nasal turbinate. Compared with our standard practice (940 nm diode laser), 1,470 nm diode laser application provides an equivalent tissue reduction in shorter operation time using less total energy and a comparable relief of nasal obstruction postoperatively.

Biography

Somaia Altawalbeh Consultant Ear, Nose and Throat Surgery Member of the Jordanian Association of Head and Neck Surgery and Member of the Jordanian Society of Ear, Nose and Throat Surgeons.

Dr. Somaia Altawalbeh holds a Jordanian Board Certificate in Ear, Nose and Throat Surgery from King Abdullah University Hospital. She completed her medical studies at the University of Science and Technology and completed her residency in Ear, Nose and Throat specialization at King Abdullah University Hospital and Ministry of Health.
Infection Control and Prevention in Private Sector Hospital

- Infection control screening process and protocols
- A database about nosocomial infections
- Evaluation, assessment, and monitoring of infections take place on a regular basis.
- The healthcare provider has protocols including respective assignment of clear responsibilities for infection control and prevention.
- Determination of interventions for infection control are based on risk assessment and adequate planning by infection control committee experts.
- Measures are taken regularly evaluated for their effectiveness leading to review or further adjustment by the committee.
- The hospital has implemented an antimicrobial stewardship program which is described in a policy or similar document.
- The program requires and defines the leadership commitment, accountability, and the involvement of a multidisciplinary team.
- Evidence justifying the rating (Reference to your policies, SOPs, (inter-)national protocols, etc.):
- Isolation rooms and respective infrastructure
- A proper infrastructure of isolation rooms is based on international standards including the maintenance of negative pressure (if applicable).
- Protocols for isolation and similar standard practices are available and implemented for the treatment of infectious patients including postmortem procedures of infectious patients/contagious patients/epidemic plagues.
- Protocols for isolation and similar standard practices are available and implemented for the treatment of immune suppressed patients.
- Staff training according to the implemented protocols

Biography

Dimitra Kalimeri Efficient registered nurse with over 25 years of clinical, education and managerial experience. Collaborative and motivational with expertise in training new nursing staff while providing top-notch service to patient populations. She is the Infection Control Supervisor and Associate Director for Nursing of Athens Medical Center.

Graduated with nursing degree and has completed a Master's degree in health Unit Management and Hospital Waste management. She is also a member of the Nurses training office, member of the Quality office, member of the Infection Control Committee of the hospital and has participated in the Management Committee of Pandemic COVID-19.

Has a well-rounded knowledge of infection control techniques and standard medical procedures. Adept at evaluating patient conditions and identifying signs of infection. Specializes in implementing effective infection control procedures and providing staff training in such procedures. Eager to contribute to success and quality-focused, she is also an active participant in all accreditation assessment processes (internal/external audits) that take place in AMC. Furthermore, she lectures on global health at the University of Nursing and Health Sciences with many publications of scientific articles reviewed in various scientific journals.
World Congress on
NURSING AND ADVANCED HEALTHCARE
12-13 July 2023 | Paris, France

SPEAKERS
Day 1
Abeer Dyoub
University of L’Aquila, Italy

Ethics of Conversational Agents in Healthcare

Conversational Agents (CA) are artificial intelligent software which can simulate a conversation with a user in natural language via auditory or textual methods. They are typically used in dialogue systems for various practical purposes including customer service or information acquisition, and even in tele-healthcare, by enabling better accessibility, personalization, and efficiency, conversational agents have the potential to improve patient care. They are often described as one of the most advanced and promising expressions of interactions between humans and machines. The COVID-19 pandemic accelerated the introduction of virtual healthcare delivery in many countries, it also prompted the rapid development of many other diverse technology enabled systems and processes for delivering virtual healthcare to patients. One new technology development is the widespread uptake of conversational agents in people’s lives, and these now also have many health applications. However, despite of the potential benefits of the technology, CA raise many ethical questions and concerns that limit their wide spread use especially in healthcare domains where human lives and well-being are concerned. In this talk I discuss the ethics of CA in healthcare then I present a proposal for designing ethical conversational agents in healthcare.

Biography

Abeer Dyoub is a researcher fellow at the Department of Engineering, Computer Science and Mathematics (DISIM), University of La’Aquila. Her research interest focuses on Artificial Intelligence, with special focus on Computational Logic including Intelligent Agents and Multi Agent Systems, Knowledge Representation and Reasoning, Interpretable Machine Learning, and Machine Ethics. She is a fellow of ACM, GRIN, AIxIA, and GULP. She holds a bachelors degree in electronic engineering from Tishreen University, Syria 2000, a masters degree in computer science 2004 from JMI university, India, and a PhD in ICT from the University of L’Aquila, Italy, 2019.
Maria O’Malley
Atlantic Technological University, Ireland


The purpose of this research was to find a way to improve the communication skills within the Operating Theatre (OT). Effective communication benefits all team members but at times it can be challenging. With the involvement of my colleagues, nurses, health care assistants, managers, surgeon consultants, and anaesthesiologist consultants, this project can improve our care, listening skills, team dynamic, satisfaction, collaboration and understanding what and how we can all communicate better within the work place. The qualitative and quantitative methodology, which was used in the questionnaire, gave the participants the opportunity to write the free text as feedback and assess by using ‘Likert Scale’ value of the research. These participant’s outcomes have indicated that good communication skills saves time, reduces frustration, and improves the patients care within the OT. By using preoperatively Safety Briefing (SB) as the ‘First Step of Five Steps to Safer Surgery’ the outcomes confirmed that perioperative briefing improved the team climate, dynamic and communication of the surgical teams.

Biography
Maria O’Malley is Band Irish Nursing Board PIN 117395 registered Nurse with extensive expertise providing first-class care in a Theatre Department. Meticulous attention to detail in the monitoring and treatment of patients for continued positive progress and results. Attentive nursing professional presenting high level of care, patient assistance during anaesthesia. Considered hardworking and driven. Ready for new opportunity to apply exceptional nursing skills in management setting.
Outcomes and Pathological Features of Total Thyroidectomy in Patients with Multifocal Papillary Thyroid Carcinoma

Background: The incidence of thyroid cancer has increased dramatically in recent decades. Multifocality is considered a poor prognostic factor for PTC. Patients with MPTC are at high risk for local recurrence, as well as lymphatic and distal metastases. This study examined the features and outcomes of multifocal papillary thyroid carcinoma.

Material and Method: This retrospective study was conducted on 300 patients with papillary thyroid carcinoma (PTC). Patients were classified into a multifocal PTC group and a unifocal PTC group. The pathological features of the PTC and the patients' outcomes were analyzed and compared.

Results: The occurrence of multifocality was higher in females than in males: odds ratio (OR): 2.37, 95% confidence interval (CI): 1.2–4.67. Patients in the multifocal group had a larger tumor size (3.63 cm ± 1.66 cm) than patients in the unifocal group (2 cm, p = 0.02), and higher lymph node metastasis: OR: 2.37, 95% CI: 1.49–3.77. In addition, most patients in the multifocal group had a moderate risk of recurrence than in the unifocal group: OR: 1.63, 95% CI: 1.01–2.6. At follow-up, the thyroglobulin plasma levels (p = 0.03) and disease recurrence were significantly higher in the multifocal group than in the unifocal group (OR: 2.73, 95% CI: 1.15–6.44).

Conclusions: Patients with MPTC had a higher risk of disease recurrence, and multifocality was considered to be an independent prognostic factor for overall disease recurrence.

Biography

Seyed Ziaeddin Rasihashemi, M.D., is a chest surgeon in Iran and is affiliated with Tabriz University of Medical Sciences. He received his medical degree from Shahid Beheshti University of Medical Sciences and has been in practice for more than 21 years. He specializes in surgical techniques to treat lung and esophageal cancers, as well as other conditions such as achalasia, mediastinal tumors, post intubation tracheal stenosis and endocrine surgery. Dr. Rasihashemi pays special attention to thyroid surgery in the thoracic surgery department. For the first time endoscopic thyroid surgery has been performed by him since 2015 in Iran.

Dr Rasihashemi has been the head of the thoracic surgery department since 2018. He is also a member of the Board of Thoracic Surgery.
New Audiometry, the time has come!

A field is never stronger than its source of information. That also applies to audiology. That’s why it is a shame that we still test hearing about the same way today as in the birth of audiology in the years after WW2. ENT’s never test hearing, you only interpret the results, and I believe that’s part of the reason why this is still the same. We need an audiometry that collects the relevant information for the clients. And that evolves around how well they can function in noisy surroundings. We need to measure this clinically. The way to do that is to measure auditory discrimination in noise. Not only for those with APD, but for everyone. Auditory discrimination does not automatically correlate with pure tone thresholds.

We need an audiometry that reflects the technological progress of the rest of the world. Pure-tone-audiometry have become a bottleneck for audiology. We need to develop an audiometry with less limitations and more relevant measurements. This needs to be developed in a free field test environment, as this is the natural way we hear and thereby more authentic. We also need to look towards other fields of medicine to develop the audiometry of the future. I believe the new audiometry can be found in the intersection between free field audiology and neuroscience.

I am just an audiologist perhaps blessed with some traits of creativity and an ability to think outside the box, I am definitively not the smartest man attending this conference, so this is a call for cooperation and endorsement of the initiative. If we bring the best minds together, we can produce a more accurate and relevant information for you to interpret in the future. This will help the 430 million people with a disabling hearing loss, and our self when we join that group.

Biography

Sornes was a late bloomer and finished his bachelor of audiology in 2008, vaguely describing the clinical audiometric device of the future in his thesis. In 2007 he was awarded an entrepreneurial scholarship for his idea of mobile audiology, as one of, if not the first audiologist connecting audiology and telemedicine, today the world has proven him right on this point.

Sornes interest in free field testing never withered as he instantly knew this was the future of audiology. Today he is working to develop the new standardization for audiometry through his company Hearoll Medical Inc.
Lei Huo
The University of Texas, USA

PTEN expression and copy number variation in triple-negative breast cancer

With recent advances in targeting the PI3K pathway, it is essential to understand the changes of PTEN expression over the course of the disease in patients with triple-negative breast cancer (TNBC) and whether PTEN copy number variation by next generation sequencing can serve as an alternative to immunohistochemistry to identify PTEN loss. We compared PTEN expression by immunohistochemistry between pre-treatment tumors and residual tumors after neo-adjuvant chemotherapy in 96 patients in a TNBC clinical trial. A correlative analysis between PTEN expression and PTEN copy number by next generation sequencing was also performed. PTEN expression was discordant between pretreatment and post treatment primary tumors in 5% of patients, and between post treatment primary tumors and lymph node metastases in 9%. Intratumoral heterogeneity for PTEN loss was observed in 7% of the patients. Among pre-treatment tumors, PTEN copy numbers were significantly higher in the PTEN-positive tumors by immunohistochemistry compared with the PTEN-loss tumors (p<0.0001). However, PTEN-positive and PTEN-loss tumors overlapped in copy numbers. Testing various specimens by immunohistochemistry may generate different PTEN results in a small proportion of patients with TNBC, therefore the decision of testing one versus multiple specimens in a clinical trial should be defined in the patient inclusion criteria. Although a distinct cutoff by which copy number variation differentiated PTEN-positive tumors from those with PTEN loss was not identified, our findings suggest that higher copy number of PTEN may confer positive PTEN, whereas those with lower copy number of PTEN would need additional testing to assess PTEN loss.

Biography
Lei Huo is a practicing pathologist. She is actively involved in clinical and translational research in the field of breast cancer. Her research interests include high risk breast lesions, molecular and immunohistochemical markers in the diagnosis and treatment of breast cancer, among others.
Haim Yoel Kaplan
Haim Kaplan Ltd, Israel

A Single Surgeon’s experience with Motiva Ergonomix Round Silk Surface Silicone implants in breast reconstruction over a 5-year period

Background: Numerous breast implants are used for breast reconstruction. Each has its advantages and disadvantages. Recent data regarding the link between BIA-ALCL and implant texture caused a significant paradigm shift toward the use of smooth round implants. Motiva Ergonomix, a silk-surface breast implant, is classified as a smooth implant. Up to date, there is little data regarding the use of this specific implant in breast reconstruction.

Objective: Describe a single surgeon’s experience with Motiva Ergonomix, silk-textured, round implant for breast reconstruction.

Patients and methods: A retrospective chart review of all patients undergoing primary or revisionary breast reconstruction procedures, using Motiva Ergonomix, from Jan 2017 to Jan 2022. Patient demographics and medical status were extracted. Surgical data, including reconstructive technique, implant size, plane, use of ADM and complications were recorded. BREAST-Q questionnaires were completed.

Results: 156 consecutive patients were retrieved (269 breasts). 257 were direct-to-implant reconstructions and 12 expander-to-implant. Complications were described per breast. Capsular contraction, baker grade 3-4, was seen in four breasts (1.49%) in the non-irradiated group and six (2.24%) in the irradiated group. Rippling was seen in eleven breast (4.08%), skin ischemia in 17(6.31%), hematoma in four (1.49%), seroma in six(2.23%). BREAST-Q: satisfaction with breast increased by a mean of 9.175 (60.7 points pre-operatively to 69.875 post-operatively). Satisfaction with the implant was 6.52 out of 8.
Comparison Of Volumetric Modulated Arc Therapy Vs. Helical Tomotherapy Treatment Planning In A Case Of Implanted Breast Tissue Expander

Purpose/Objective(s): With the advent of novel breast reconstruction techniques, adjuvant radiotherapy must be administered with breast implants or tissue expanders, leading to difficulties in treatment planning. The aim of this study was to evaluate the optimal radiotherapy (RT) technique for a case of postmastectomy expander breast and nodal volume irradiation.

Materials/Methods: For this study, we made a retrospective comparison between volumetric modulated arc therapy (VMAT), used in our service, and helical tomotherapy (HT) used at a different academic institution. We analysed the case of a patient with right sided breast cancer, who underwent bilateral radical surgery with sentinel lymph node biopsy with implantation of a right sided air tissue expander and a left sided permanent implant. Adjuvant RT was given up to a dose of 50 Gy in 25 fractions, to the breast, axilla, supraclavicular and internal mammary lymph nodes.

Results: In both VMAT and HT techniques, our goal was to obtain a coverage of D95<95%. In the VMAT technique we had to use bolus material, to obtain better coverage at the skin region, this procedure was not necessary for the HT scenario. With the VMAT plan we obtained D95%-PTV_BREAST<93.34%, D95%-PTV-NODES<96.53%, D95%-PTV_IMN<95.75%, whereas, with HT, values of D95%-PTV_BREAST< 96.15%, D95%-PTV-NODES< 98.21%, D95%-PTV_IMN< 98.93% were obtained. Differences were observed for the dose for organs at risk (OAR) structures, as well. Mean heart doses were: DmeanVMAT=5.79Gy, DmeanHT=4.73Gy; right lung doses were: VVMAT5%=58.47%, VHT5%=53.7%, VVMAT20%< 28.08%, VHT20%<20.60% and left lung doses were: VVMAT5%=57.14%, VHT5%=51.20%, VVMAT20%<0.57%, VHT20%<4.00%. Similarly, significant differences were observed when comparing the spinal cord max doses: DmaxVMAT =32.32Gy, DmaxHT =26.81Gy. While the treatment time with the HT technique was 538.2 seconds, compared with the VMAT technique, where we obtained 338.3 seconds, HT showed improvements of target coverage and dose to OARs.

Conclusion: Here we report a head-to-head comparison of VMAT and HT approach from a dosimetric point-of-view for a case with breast tissue expander. Despite our results showing a benefit of the HT approach, due to logistics reasons the patient was treated in our centre with the VMAT technique. Our long-term objective is to create a regional network of breast cancer patient referral and to create a database of patients with breast reconstruction.

Biography
Ghizela graduated from UBB with both a bachelor’s and a master’s degree in medical physics. Her area of expertise is Radiation oncology. She joined many working groups (WGs) run by ESTRO and EFOMP in recent years.
Hamdi Al Shenawi
Arabian Gulf University, Bahrain

Is laterality in breast Cancer still worth studying? Local experience in Bahrain

**Background:** Laterality in breast cancer means an increased frequency of left-sided breast cancers compared to right-sided breast cancers ranging between 1.05 and 1.26. It was first described in 1935 by Fellenberg, Sweden. The explanation of this phenomenon is not clear, but the association with other factors was found. This study aimed to explore the laterality of breast cancer in Bahrain as a model for Arabian countries. The association of laterality with the clinicopathological characteristics of the tumor was also analyzed to explore any applied clinical value.

**Methods:** This is a cross-sectional, retrospective review of a particular ethnic population to study laterality of breast cancer versus a number of clinicopathological factors, as well as prognosis. The study analyzed 228 breast cancer patients treated in Arabian Gulf University facilities in Bahrain between 1999 and 2020. Three bilateral breast cancer and two malignant phyllodes patients were excluded. The following variables were analyzed: laterality ratio (Lt/Rt) and the association between laterality and clinicopathological characteristics (age at diagnosis, family history of malignancy, size of the tumor, tumor grade, histological type, hormonal receptors and HER2, axillary lymph node status, tumor stage, five-year survival rate, nulliparity, and multifocality).

**Results:** The laterality ratio (Lt/Rt) was 1.06 and was 0.97 for patients below 50 years of age, and 1.19 for patients 50 years of age and above. Analysis of our data showed a statistically significant association between laterality and tumor stage (p. value =0.025) at presentation, and laterality and family history of malignancy (p. value =0.052). Right-sided breast cancer was associated with a higher positive family history of malignancy and an increased ratio of locally advanced and metastatic disease, and a reduced 5-year survival in relation to size and stage. Left-sided breast cancer was associated with higher early tumor stage.

**Conclusion:** This is the first study exploring the issue of breast cancer laterality in a defined Arabian population. The laterality ratio in this study was 1.06, which is consistent with the globally published range (1.05 to 1.26) and is increasing with increasing age. The association between breast cancer laterality, and the hormonal and HER2 is still not widely addressed in the available literature, although other clinicopathological characteristics were extensively analyzed.

**Biography**
Hamdi Mohd Al Shenawi is currently employed as a laparoscopic surgeon at King Abdullah Medical City in Bahrain and as an assistant professor of surgery in the college of medicine and medical sciences at Arabian Gulf University.
Development of Novel Antimitotic Prodrugs Targeting Cyp1a1-Expressing Breast Cancer Cells Exhibiting Improved Rodent Liver Stability

Breast cancer is a major health problem as it is the second most common cause of death in women in industrialized countries. It is thus crucial to develop new therapies targeting breast cancer to improve the outcome of this disease. In this context, we developed a family of prodrugs named phenyl 4-(2-oxo-3-alkylimidazolidin-1-yl)benzenesulfonates (PAIB-SOs) that are new molecules cytotoxic on breast cancer cells expressing cytochrome P450 1A1 (CYP1A1) and harmless on normal cells underexpressing that enzyme. CYP1A1 is then responsible for the bioactivation of PAIB-SOs by N-dealkylation into potent antimitotics. Our preliminary studies using the promising PAIB-SO designated as CEU-818 selected from in vitro assays evidenced that it is biodistributed throughout the mouse body but exhibiting too short half-life. Therefore, the main objective of this study was to improve the rodent liver stability of PAIB-SOs for pharmacokinetic and pharmacodynamic studies in rodents. To this end, we evaluated the effects of the homologation of the alkyl sidechain of the imidazolidin-2-one moiety of PAIB-SOs. Our study leads to the synthesis of 45 new PAIB-SOs bearing a n-pentyl, a n-hexyl or a n-octyl side chain. PAIB-SOs bearing a n-pentyl sidechain exhibited antiproliferative activity in the nanomolar to the low micromolar range and high selectivity towards CYP1A1-expressing cancer cells through their N-dealkylation. Conversely, PAIB-SOs bearing a n-hexyl or a n-octyl side chain were shown inactive and poorly hydrophilic. Moreover, the most potent and selective n-pentyl-substituted PAIB-SOs exhibited significantly improved stability towards mouse and rat liver microsomes. They arrested the cell cycle progression in the G2/M-phase and disrupted the cytoskeleton leading to cell death. In addition, they displayed significant antitumor activity and low toxicity in the chick chorioallantoic membrane assay. Our study confirms that the homologation of the alkyl sidechain is a suitable approach to improve the rodent hepatic stability of PAIB-SOs.

Biography

Atziri Corin Chavez Alvarez is currently completing a Ph.D. program in Sciences pharmaceutiques at University Laval in Quebec City, Canada. Corin completed her undergraduate program in pharmacy in chemistry, pharmacy, and biology at the Universidad Michoacana de San Nicolas de Hidalgo in Mexico, from which she graduated with high honors. She was an intern for a year at the faculty of veterinarian medicine’s oncology research laboratory at the same university in Mexico.
Vincent Ouellette
University Laval, Canada

Design, Synthesis and Biological Evaluation of 4-(3-Alkyl-2-Oximidazolidin-1-Yl)-N-Phenylbenzenesulfonamide Salts as Novel Hydrosoluble Antimitotic Prodrugs Selectively Bioactivated by Cytochrome P450 1a1 in Breast Cancer Cells

Our research group developed new potent prodrugs designated as 4-(3-alkyl-2-oximidazolidin-1-yI)-N-phenyl benzene sulfonamides (PAIB-SAs) that are bioactivated by cytochrome P450 1A1 (CYP1A1) expressed in breast cancers into their potent 4-(2-oxoimidazolidin-1-yI)-N-phenyl benzene sulfonamides (PIB-SAs) antimitotic metabolites. One of the predominant problems is the poor solubility of PAIB-SAs in aqueous solutions which is hampering their galenic formulation and administration in animal studies. To circumvent that impediment, salt formation is a widely used strategy to improve hydro solubility. In this study, we report the design, synthesis, evaluation of the aqueous solubility, antiproliferative activity and mechanism of action of 18 new Na+, K+ and Li+ salts of PAIB-SAs. Our results evidenced that the new PAIB-SA salts are up to 39 000-times more soluble in aqueous solution than their neutral counterparts. Moreover, they still exhibit cytotoxic activity and selectivity against CYP1A1-expressing MCF7 and MDA-MB-468 cancer cells compared to MDA-MB-231 and HaCaT cells that are devoid of CYP1A1. The most potent PAIB-SA salts arrest the cell cycle progression in the G2/M phase and disrupt the cytoskeleton dynamic assembly leading to cell death. Finally, they still bioactivated by CYP1A1 via their N-dealkylation into their potent PIB-SA metabolites. In conclusion, our results show that we have significantly increased the hydro solubility of PAIB-SAs by designing new salts. Our results show notably that sodium salts still exhibit potent antiproliferative efficacy and that they remain prone to CYP1A1 bioactivation. This important achievement will allow us to optimize our galenic formulations in view of further biopharmaceutical and pharmacodynamical studies.

Biography
Vincent Ouellette obtained his undergraduate degree from University du Quebec a Trois-Rivieres with a Bachelor of Science (BSc) in Chemistry (Forensics profile) in 2016. He then continued his studies to graduate school and received his Master’s degree (MSc) in Chemistry at the same university in 2019 working on the development of new testosterone-platinum hydrids for the treatment of prostate cancers. Afterwards, he started his doctorate (PhD) in Sciences pharmaceutics at University Laval in 2019 under the supervision of Dr Sebastien Fortin.
Sadie Elisseou
Harvard Medical School, USA

Trauma-Informed Clinical Care: Fostering Healing and Resilience

The Covid-19 pandemic and national movements for health equity over the past few years have highlighted the impact of trauma on health as well as on provider well-being. Rates of depression and anxiety in the U.S. have climbed above 40%, and burnout rates among clinicians are reaching 60%. In this ripe climate, trauma-informed care (TIC) is a rapidly growing social movement. TIC is an evidence-based, strategic framework for providing high-quality clinical care to survivors of individual, interpersonal, collective and structural trauma. Entire public school districts and healthcare systems are becoming trauma-informed, and Oprah’s new book, “What Happened To You?” is firmly rooted in TIC principles. Internet searches for “trauma” have never been higher, and yet TIC remains novel to most clinical nursing professionals.

In this session, a top expert in the field will highlight specific examples of how nurses can apply the Substance Abuse and Mental Health Service (SAMHSA)’s “4 Rs” and “6 principles” of TIC to daily clinical care and their own well-being. Participants will leave with simple, actionable steps to ensure that the care we provide is safe, collaborative, and avoids retraumatizing our patients.

What will the audience learn from your presentation?

• This session will meet the following learning objectives:
• Define trauma and the principles of trauma-informed care
• Practice using trauma-informed communication for routine clinical encounters
• Describe components of a trauma-informed physical assessment
• Define vicarious trauma and name strategies for resilience

Participants will come away with simple, specific, actionable items that they can implement immediately when taking care of patients. These strategies come from published and award-winning research that has already been implemented at medical schools and healthcare institutions across the United States. There is vast potential to expand upon these principles for implementation in various sectors and specialties of healthcare. Trauma-informed care is a form of patient-centered care that can enhance both patient and health worker safety, empowerment, and satisfaction.

Biography

Sadie Elisseou, MD (she/her) is a primary care physician in the VA Boston Healthcare System, a Clinical Instructor of Medicine at Harvard Medical School and Adjunct Instructor of Medicine at Boston University School of Medicine, and a nationally recognized expert in the field of trauma-informed care (TIC). Dr. Elisseou’s award-winning curriculum on ‘trauma-informed physical examination’ is now taught at medical schools across the country. Dr. Elisseou partnered with colleagues to publish the first framework on trauma-informed telehealth. She is the co-founder of the National Veterans’ Health Administration TIC Collaborative and a member of the Harvard Medical School TIC Steering Committee.
World Congress on
OTOLOGY, RHINOLOGY & LARYNGOLOGY
12-13 July 2023 | Paris, France

VIRTUAL KEYNOTE SPEAKERS
Day 2
**Cochlear implant basics: what a candidate for a cochlear implant needs to know.**

Cochlear implant candidates who hesitate to move forward with surgery often express three reasons: Vanity, fear of losing any residual hearing and holding on to a host of misconceptions. The author was bilaterally implanted simultaneously in 2015, after 35 years of total deafness.

Through his podcasts, which include interviews with implant candidates, surgeons, audiologists, and other noted professionals in the field, along with his observations in his support groups, he has summarized the depth of his findings in his book, *Cochlear Implant Basics: What a Candidate for a Cochlear Implant Needs to Know* which is available in seven languages.

Richard Pocker is a twice-recognized Cochlear Hear-O volunteer and has mentored or assisted over a thousand implant candidates helping them to overcome their fears, move out of the isolation of deafness and into a world of sound. He will talk about his experiences in how to help candidates for a cochlear implant move forward.

**Biography**

Suffering a hearing loss from illness at age five and wearing hearing aids until he suffered a sudden and total collapse of all his residual hearing when he was thirty, the author spent 35 years in total silence before receiving simultaneous bilateral cochlear implant surgery in 2015. His speech comprehension went from zero to 85% with rehabilitation. Since that time, he has mentored or assisted candidates and recipients through social media, his website, his book, and support groups. His wide experience has qualified him to help patients and doctors alike to overcome many of the misconceptions surrounding cochlear implants.
World Congress on

OTOLOGY, RHINOLOGY & LARYNGOLOGY

12-13 July 2023 | Paris, France

VIRTUAL SPEAKERS

Day 2
Cross-cultural Adaptation, Reliability and Validity of the Chinese Version of the Acceptance and Action Questionnaire- Hearing Loss

Acceptance and Action Questionnaire-Adult Hearing Loss (AAQ-AHL) is an assessment tool designed specifically to assess psychological inflexibility for adult with hearing loss. Although the original English version of AAQ-AHL has been verified, there are few validation studies on other translated versions. This study investigated the psychometric characteristics of Acceptance and Action Questionnaire-Hearing Loss (AAQ-HL) in China mainland. 402 subjects aged above 12 years with hearing loss were recruited from special education schools, with 294 participating in formal test session. The reliability and validity of the questionnaire were verified. Reliability of AAQ-HL was determined by internal consistency using Cronbach’s coefficient alpha and test-retest reliability using intra-class correlation coefficient (ICC). The validity analysis of AAQ-HL included content and construct validity through exploratory factor analysis, and criterion validity. Test-retest reliability showed an intra-class correlation coefficient of 0.815. Two factors with characteristic roots greater than 1 were extracted from 12 items from exploratory factor analysis. All items had high loadings on a single factor, ranging from 0.648 to 0.886. Meanwhile, the Cronbach’s alpha coefficient of AAQ-HL is 0.829. Total AAQ-HL score were significantly correlated with stress score, depression score and total DASS score, but not with anxiety score. In summary, the psychometric assessment of AAQ-HL showed good retest reliability, internal consistency reliability, content validity, structure validity, and criterion-related validity.

Biography

Ying Yang, PhD, Associate Professor, is currently the Chairman of the Department of Hearing and Speech Rehabilitation of Binzhou Medical University, and is the supervisor of Master’s degree students in Hearing and Speech Rehabilitation. She is also a member of the editorial board of the Journal of Audiology and Speech Pathology and the Chinese Scientific Journal of Hearing and Speech Rehabilitation.
Outcomes of surgical management and implant consideration for depressed skull fractures: A systematic review

Background: Traumatic brain injuries (TBIs) are associated with high mortality and morbidity. Depressed skull fractures (DSFs) are a subset of fractures characterized by either direct or indirect brain damage, compressing brain tissue. Recent advances in implant use during primary reconstruction surgeries have shown to be effective. In this systematic review, we assess differences in titanium mesh, polyetheretherketone (PEEK) implants, autologous pericranial grafts, and methyl methacrylate (PMMA) implants for DSF treatment.

Methods: A literature search was conducted in PubMed, Scopus, and Web of Science from their inception to September 2022 to retrieve articles regarding the use of various implant materials for depressed skull fractures. Inclusion criteria included studies specifically describing implant type/material within treatment of depressed skull fractures, particularly during duraplasty. Exclusion criteria were studies reporting only non-primary data, those insufficiently disaggregated to extract implant type, those describing treatment of pathologies other than depressed skull fractures, and non-English or cadaveric studies. The Newcastle-Ottawa Scale was utilized to assess for presence of bias in included studies.

Results: Following final study selection, 18 articles were included for quantitative and qualitative analysis. Of the 177 patients (152 males), mean age was 30.8 years with 82% implanted with autologous graft material, and 18% with non-autologous material. Data were pooled and analyzed with respect to the total patient set, and additionally stratified into those treated through autologous and non-autologous implant material. There were no differences between the two cohorts regarding mean time to encounter, pre-operative Glasgow coma scale (GCS), fracture location, length to cranioplasty, and complication rate. There were statistically significant differences in post-operative GCS (p < 0.0001), LOS (p = 0.0274), and minimum follow-up time (p = 0.000796).

Conclusion: Differences in measurable post-operative outcomes between implant groups were largely minimal or none. Future research should aim to probe these basic results deeper with a larger, non-biased sample.

Biography
Brandon Lucke-Wold was born and raised in Colorado Springs, CO. He graduated magna cum laude with a BS in Neuroscience and distinction in honors from Baylor University. He completed his MD/PhD, Master's in Clinical and Translational Research, and the Global Health Track at West Virginia University School of Medicine. His research focus was on traumatic brain injury, neurosurgical simulation, and stroke. At West Virginia University, he also served as a health coach for the Diabetes Prevention and Management program in Morgantown and Charleston, WV, which significantly improved health outcomes for participants. In addition to his research and public health projects, he is a co-founder of the biotechnology company Wright-Wold Scientific, the pharmaceutical company CTE cure, and was a science advocate on Capitol Hill through the Washington Fellow's program.
T4b Oral Cancer: is it still un-resectable?

Head and neck surgeons face challenge when treating locally advanced oral malignancies that have spread to the infratemporal fossa (ITF). The limited data suggest that the ITF is a complex anatomic area and tumors with varying degrees of infiltration may have different oncologic outcomes. According to AJCC classification, in T4b tumours, the masticator space (MS), pterygoid muscles (PM), and pterygoid plates (PP) or skull base are implicated. These malignancies were previously thought to be inoperable and only received palliative care. However, recent studies have revealed that many of these tumors may be removed with a fair chance of success using compartment resection of ITF. It is not advisable to consider palliative-intent treatment for all T4b tumours as a single entity. This paper gives an insight on the compartmental resection technique for operability of such tumours along with a case report.

Biography

Aamir Malick Saifi is a consultant Oral Cancer & Reconstructive Surgeon and is currently working as an Assistant Professor in Department of Oral and Maxillofacial Surgery, Institute of Dental Sciences, Bareilly. He specialises in all kinds of Oral Cancer Surgeries (including lip, cheek, tongue, jaw, palate), salivary gland pathologies, paranasal sinus pathologies, anterior and lateral skull base surgeries and various reconstructive surgeries. He is an expert in advanced cancer surgeries where he commonly employs compartmental resection techniques. He is a member of Indian Dental Association and Association of Oral and Maxillofacial Surgeon's of India and has multiple publications to his credit in various national and international journals.
Mary Anuoluwapo Arubuola
Empower School of Health, Switzerland

The Rising Need for a Population Health Approach in Otolaryngology

Global healthcare is moving away from a primary focus on one-on-one interventions to a preventative approach and a maintenance of population health. Various fields are advancing in line with this transition but the field of otolaryngology and head-and-neck surgery are yet to catch up as expected. It is understandable that the peculiarity of the field might make it especially difficult to embrace this swift transition, however, otolaryngology still lags behind in comparison with other fields. The only established preventive measure in the field is the hearing screening of newborns. A Google Scholar search on population health cardiology produces about 1.5 million search results. A search on population health diabetes yields over 3 million search results, but that of population health otolaryngology yields only 748 thousand results with a good percentage of those results having nothing to do with otolaryngology or population health otolaryngology.

A population health approach focuses not just on the symptoms and illness, but also on the social, environmental, biological and financial determinants. The transition in global health approach has also resulted in economic incentives being given to public, preventive and population health. Incorporating population health into health practice has shown to bring about positive results, decrease in overall morbidity and mortality. It also involves health education and awareness causing an increased knowledge of the specific field among the population. It further involves studying of charts to highlight patterns and data that stands out. For instance, studies have shown that people on the lower socio-economic level have more needs for an otolaryngologist but only a minute percentage of them get treated. Population health looks into such information, identifies the determinants of such outcome, and comes up with interventions to make healthcare accessible. In addition, the data observed from the studies of charts and population will inform health funding, intervention and even practices.

Biography

Mary Arubuola has an academic background in both Public Health, and Global Health Procurement and Supply Chain Management. She is a member of the Internal Association for Public Health Logisticians, Reproductive Health Supplies Coalition, Young African Leadership Initiative and the Academy of Public Health of the West African Institute of Public Health. She serves as a reviewer for Scholar Central and BMC Public Health. She has, and continue to build, experience in the fields of public health research, academia, procurement and supply chain. She currently works as a coordinator for the postgraduate diploma program at Empower School of Health, liaison officer between Empower and IAPHL especially on the African continent. She further serves as a support staff for the business development team at Empower, as well as on the research team for the creation of course content.
Objective: To study the frequency of Complicated chronic suppurative otitis media and factors influencing complications including age.

Introduction: Chronic suppurative otitis media is a long standing infection of a part or whole of the middle ear cleft characterized by ear discharge and a permanent perforation. It affects both sexes and all age groups.

COMMON PATHWAYS OF SPREAD OF INFECTION: Direct bony erosion, venous thrombophlebitis, preformed pathways.

CLASSIFICATION OF COMPLICATIONS:
- Intracranial → Meningitis, Extradural abscess, subdural abscess, Brain abscess, Lateral sinus thrombophlebitis,
- Extracranial → Mastoiditis, Facial paralysis, Labyrinthitis, Petrositis.

DEVELOPMENT OF COMPLICATIONS DEPENDS UPON: Organism’s virulence, Poor resistance of patient, Systemic disease, resistance to Antibiotics, Poor socioeconomic status, Lack of awareness about healthcare, Lack of availability of trained specialist.

Patients and Methods: It is a retrospective study, carried out in E.N.T Head and Neck Department, Jinnah Postgraduate Medical Centre, Karachi. All these patients were attended during period of 5 years from 2008 to 2013 were reviewed. 65 cases of CSOM with complication were evaluated. Cases were subdivided as; Group A = age 10 to 18 years, Group B = age 18 to 45 years.

Results: There were 65 patients included in study having complicated CSOM, group A had 44 patients and group B had 21 patients. There were 42 males and 23 females, i.e., male predominance. Most common extra cranial complication was Mastoiditis followed by Facial nerve weakness and Labyrinthitis. Most common intra cranial complication was Meningitis followed by brain abscess, extra dural abscess.

Conclusions: Most of the patients were of poor socioeconomic background with disease negligence, delayed treatment. Poor access to health facilities and improper use of antibiotics.

Biography
Muhammad Imran Bhatti 33 years old currently working as a senior register in the department of ENT and head and neck surgery at Liaqat University of medical and health sciences Jamshoro Pakistan.
Mohammad Taha Mehdi –Araghi  
Shahid Beheshti University of Medical Sciences, Tehran, Iran

**Investigating the Possible Effect of Oral Magnesium on the Improvement of Sudden Sensorineural Hearing Loss: A Clinical Trial Study**

Sudden sensorineural hearing loss (SSNHL), involves the rapid and unexplained loss of hearing that occurs over several days or permanently. Various studies are trying to add a safe supplement or drug to speed up the healing process in patients. In this study, we aimed to investigate the effect of adding oral magnesium on hearing changes in patients with sudden sensorineural hearing loss.

**Material and Methods:** SSNHL Patients were randomly divided into two groups of magnesium and placebo. The intervention group was magnesium (given oral corticosteroids (1 mg / kg / day) prednisone and 250 mg magnesium oxide capsules for 10 days) and the placebo group (receiving oral cortisone prednisone (1 mg / kg / day) for 10 days and placebo (32 people in each group). At the beginning of the study, audimetry of patients was performed. Between 10 and 30 days after the treatment protocols, audimetry was performed again to evaluate the therapeutic effect and the changes were evaluated and compared.

**Results:** The mean age of patients was 46.64 ±10.72 years. There was no significant difference between the two groups in terms of gender distribution and ear involvement (P = 0.57). The rate of hearing loss in the right ear and hearing loss in both the control and experimental groups showed an improvement over 30 days, however, the improvement in the intervention group showed a better improvement than the control group (P<0.05).

**Conclusion:** The recovery trend was significant in placebo patients and oral magnesium patients in both groups. Oral magnesium in combination with oral corticosteroids further improved the hearing status of patients with sudden sensorineural hearing loss, but what is certain is that a more detailed study is needed to make a definitive statement.

**Biography**

Mohammad Taha Mehdi –Araghi is an Board certified Otorhinolaryngologist, Head and Neck Surgeon at Shahid Beheshti Medical school with 4 years of experience at medical and aesthetic surgeries for nose, sinus, throat, ear, and neck. Experienced in Endoscopic Sinus Surgery. His eventual career goal is to provide the best medical services - from preventive to therapeutic and surgical - in my field.
Amir Habeeb
Cambridge University NHS Trust, UK

Telehealth options in managing consequences of tinnitus - Systematic Review and Meta-analysis

Introduction: Treatment for tinnitus focuses on supportive therapies. Long waiting times on the NHS encourage telemedicine options as an alternative.

Aims: To review the literature on telemedicine in the management of tinnitus and analyse their impact on the burden of tinnitus, long-term, anxiety, depression, insomnia and quality of life.

Methods: PubMed, Embase, Cochrane library, Google Scholar, Scopus and Web of Science were searched. English randomised controlled trials with adult participants suffering from tinnitus were included. A random effects model looking at standardised mean differences between intervention and control groups was utilised.

Results: Eleven randomised controlled trials were included. Nine studies looked at internet-based CBT. A Z value of 9.87, P < 0.00001 (I² = 21%) revealed telemedicine approaches may be better at reducing tinnitus burden compared to passive controls.

Conclusions: Telemedicine options have multiple benefits but more research will be needed to conclusively say they are better than alternatives.

Biography
Amir is a junior surgical trainee specialising in ENT surgery. He graduated from University College London in 2019 and completed his foundation training in Cambridge University Hospitals. He continues to train as a junior surgeon in Cambridge. He has completed a Masters in Surgical Sciences and is keen on academic surgery. He enjoys hiking and singing in his past time.
Rhinoplasty Challenges and Surgery Outcomes in Older Adults

**Aim:** The reason for the difficulties of rhinoplasty in elderly patients is to optimize the patient’s anatomical changes in skin quality, cartilage properties, and nasal airways and optimize them according to the patient’s expectations. In this study, we would like to present the challenges and general results of the primary rhinoplasty surgical approach performed on elderly patients.

**Methodology:** Eighteen elderly patients were included in the study. The patient’s photographs from 7 profiles were recorded. Patients were evaluated about nasal skin (thinness, thickness, and elasticity), nasal tip droop (projection and rotation), septum deviation, conchal hypertrophy, soft tissue atrophy, bony fragility and resorption, internal and external valve collapse, and a dorsal hump. The patients’ postoperative 6th-month and 1st-year records were taken and compared with preoperative values. VAS score was used for patient satisfaction.

**Results:** The mean age of the patients was 62 ±6; 8 males and 11 females. The primary indication for rhinoplasty was a posttraumatic deformity in 12 patients and obstructive nasal symptoms in 10 patients. There were diabetes mellitus in 4 patients, hypertension in 6 patients, and smoking history in 10 patients. Nasal obstruction was relieved through septoplasty (95%), turbinate ablation (80%), and spreader grafts (60%). Nasal tip ptosis was addressed through tip grafts (60%), columellar struts (90%), and caudal septal extension grafts (85%). The satisfaction VAS score was high between the nose they had in the first year after the surgery and the nose they chose over the application.

**Conclusion:** Considering the anatomical and psychological factors related to age in elderly patients, we can achieve more optimal results and make our patients happier by providing sincere communication.

**Biography**
Aynur Aliyeva, is an ENT Surgeon and Neuroscience Ph.D candidate. She currently practicing in the Cincinnati Hospital Medical Center, Ohio, USA. She graduated from medical school (MD) at Azerbaijan Medical University with an Excellent Diploma (Honors). She commenced residency education at the Izmir Bozyaka Education and Research Hospital Department of ORL-HNS in Turkey in 2014-2019, she gave oral and poster presentations and submitted scientific publications at various national and international scientific congresses. She have gained advanced knowledge of the Russian, English, and Turkish languages. Nikolas Blevins in 2021. She gets her otology neurotology fellowship in Catholic University of Korea St. Mary’s Hospital, Korea, Seoul in 2021-2022.
Fathima Habsa
University of Kelaniya, Sri Lanka

Parent reported emotional well-being, challenges and expectations on hearing aid usage in children aged between births to 15 years from a selected audiology clinic

Background: The potential benefit of early identification and intervention for hearing loss is achievable if hearing aid use is consistent. Parents play a critical role in intervention process by encouraging the regular hearing aid usage, however parents may encounter different challenges and experiences in hearing aid management in children. In the existing literature, there are no studies conducted to identify parents’ experiences and challenges in hearing aid management in Sri Lankan context.

Objective: This study aimed to identify the reasons for the delay in hearing aid fitting, the emotional well-being, challenges and expectations on hearing aid usage among the parents of children between births to 15 years.

Method: A descriptive cross-sectional study was used. Forty-two caregivers of children with unilateral or bilateral hearing aid users were interviewed via phone to gather data for two questionnaires which were researcher developed questionnaire on parent’s experiences on hearing aid fitting and management and the translated and validated Sinhala version of the Parental Stress Score (Godamunne et al., 2014) to collect data on parent’s psychological well-being. Data were analysed using descriptive statistics and Independent-Samples Kruskal-Wallis test and conceptual content analysis was used for open ended questions.

Results: On average the children were fitted with hearing aids at an age of 48 months. The delay between hearing loss diagnosis and the hearing aid fitting ranged from 0-36 months. Financial difficulties (63%), long wait for the appointment also that requires additional visits (52%) were the main reasons for the delay in the fitting. Majority of parents have not received information on financial assistance (95%), strategies to keep a hearing aid on the child (69%), what a child can and cannot hear with hearing aids (64%), and daily listening check-up (62%). Outside play activities (47%), fear of losing hearing aids (16%), and dislike of wearing hearing aids (19%) were the most challenging situations for consistent hearing aid use. The mean Parental Stress Scale score was 32.08. No significant correlation was found between the child’s age, the caregiver’s age, hearing aid use hours in a day and parental stress level.

Conclusion: Parents required comprehensive information on hearing loss and hearing aid management. Audiologists have the role of understanding parents’ experiences and challenges as well as considering their emotional well-being to support and provide family-centered care.

Biography

Fathima Habsa is a final year undergraduate student of Speech and hearing sciences specialized in audiology at faculty of medicine, University of Kelaniya, Sri Lanka. She has particular interest in researches related to intervention and rehabilitation for children with hearing losses.
Reham Farouk Zittoon
Port Said University, Egypt

Allergic Rhinitis Patients Associated with Migraine: Effect of Treatment of Allergic Rhinitis on Migrainous Attack

Background: allergy immunology specialists frequently encounter with diagnosis of migraine headache this is prospective study, to assess ability of the treatment of allergic rhinitis in patients having migraine to decrease the attacks of migraine

Results: Between June 2016 and Feb.2019, 58 patients suffer from migraine and having positive allergic symptoms for all patients CBC with differential, nasal smear and IgE test assessment of migraine disability assessment score pretreatment and three months post treatment score to know the effect of the treatment of allergic rhinitis on the attack of migraine. The mean age of patients was 40 years old Age distribution was between 18 to 59 years old. Sex also distributed and found 21 male and 37 females, showing more presented in females. Hemoglobin was found between 10.8 to 12.4 mg/dl, with mean 11.37mg/dl, IgE test was between 5 to 800iu/ml, with mean 171.29iu/ml, no patients included in Grade I while the majority included in Grade III, We noticed that patients improved from allergic rhinitis and migranous attack at same time had 43.1% while patients improved allergic rhinitis but migraine became less frequent and less sever were 15.52%(partially improved), Patients improved allergic rhinitis. Grade I No pain showed statistically significant difference also Grade III Moderate pain showed statistically significant difference. IgE level in improved cases around 88.4

Conclusion: There is strong relation between migraine and allergic rhinitis

Biography
Reham Farouk Zittoon is an Assistant professor of faculty of Port Said University from Egypt and she is the Member of Egyptian otolaryngology and Member of Suez Canal team Ent.
Accepted Abstracts
Auditory Processing Disorders in Adults: Evidence-Based Identification and Treatment

Auditory Processing Disorders (APDs) have been a challenge for audiologists for decades. Audiologists need evidence-based testing and treatment options specific to adults because their needs are different from children. Best clinical practice for APD in adults is based in functional assessment and functional rehabilitation, the specifics of each are presented.

The assessment, identification, and treatment of auditory processing disorders (APDs) began with a medical model based on site of lesion in adults which eventually led to a communication model based on developmental and educational abilities in children. Audiologists today, however, need a functional model based on whether, or not, their patient has an auditory component to their communication problems. Further, over the past several years, much of the clinical research has provided models of APD based on broader auditory-cognitive communication components that address functional abilities that form the basis of the work presented here.

For adults, the original basis for APD identification, i.e., site of lesion testing, was behavioral tasks designed to tap auditory cortical function to identify temporal lobe lesions prior to the use of imaging techniques widely available today. It is some of these very same tests we use today to identify functional deficits in central auditory processing. One of the most important differences between children and adults with regard to APD is the etiology of their hearing problems. In adults, most APDs are the result of head injury from motor vehicle accidents, falls, sports, etc. that are not identified by standard audiologic assessment (i.e., the audiogram and word recognition in quiet). Thus, the cause and treatment of these hearing problems must consider auditory processing deficits identified in the APD evaluation and rehabilitation process. A more current view of APD would be to look at the functional areas of difficulty for our patients and to facilitate an improvement in function.

This presentation is designed to look at the current status of APD in adults. It will cover the definition, symptomology, testing, and treatment of teens and adults with APD.

APD in adults is focused around identifying whether, or not, there is an auditory component to their hearing complaints. Auditory processing is assessed monaurally and binaurally, with speech and non-speech stimuli, and in noise and in quiet. Most adults presenting for APD evaluation experience persistent post concussive symptoms and particular attention is paid to how their receptive communication skills have changed following the injury.

Identification of APD, as recommended by both ASHA and AAA, is based on abnormal performance on at least two parts of the APD evaluation. In adults, the identification of APD is more challenging, due to a lack of standardized adult APD protocols, and must be based on a clear understanding of how an adult with a similar audiogram would perform on a particular set of tests. Research has shown there is no cookie-cutter set of tests that can be used with each patient and that an individualized assessment should be performed.

Adult APD services must be widely available in audiology clinics because there is no other profession with the expertise to evaluate and treat auditory processing problems. Failure to serve adults with APD results in reduced employment opportunities, increases communication failures with others (i.e., family members), and social isolation, especially as a result of a head injury. Treatment and recommendations are based on functional difficulties and tailored to support the educational, employment, and interpersonal communication needs of the individual.

Biography

Dr. Elizabeth Leigh is an Audiologist with over 25 years of experience as a clinician, a researcher, and a professor of Audiology. Clinically, she established Auditory Processing Disorder Clinics at two VA hospitals to diagnose and treat patients with persistent complaints of hearing problems in the presence of normal, standard, audiologic assessment. She was one of the first to address the underlying mechanisms of hearing problems not related to pure-tone threshold tests
(i.e., the audiogram) in Veterans.

Scientifically, she developed innovative approaches to investigate the effects of aging and minimal hearing loss on auditory temporal coding and the relation of those measures to speech understanding in noise performance. She has published and presented on the effects of abnormal binaural processing and reduced auditory temporal coding on speech perception in noise.

In 2020, Dr. Leigh founded the Auditory Processing Center for Adults to help practitioners establish Adult APD in every hearing clinic around the world. She has presented her work in auditory processing in adults at the International Symposium on Audiological Medicine (India, Feb. 2022), the Texas Speech, Language and Hearing Association (Feb. 2022), and the Indian Speech and Hearing Association (May 2022).
Hussameldin Elbosraty  
Cairo University, Egypt

ENDOSCOPIC MANAGEMENT OF ADVANCED JNA: tips & tricks

Juvenile nasopharyngeal angiofibroma (JNA) is a combined vascular and fibrous neoplasm which arises from the posterior-lateral wall of the nose. The tumor exhibits a strong tendency to bleed and, despite being microscopically benign, frequently exhibits destructive and aggressive behavior. Various treatment modalities are currently available for JNA, but surgical resection remains the best option. Recently, and after the advent of preoperative embolization, many endoscopic trials were used to treat small JNA with great success. Still, however, the large tumors remain a challenge.

We describe our experience in 153 cases of endoscopic resection of advanced JNA including cases with intracranial extradural extension.

Materials and methods: We describe our experience in 153 cases of endoscopic resection of advanced JNA including cases with intracranial extension. All the patients were adolescent males, the age ranges from 6 to 48 years. Tumor staging was 71 cases were stage III, 39 cases were stage IV and 43 cases were stage I and II. All cases were embolized 2 days pre-op.

Results: Complete tumor removal is achieved in 143 cases. Incomplete removal in 10 cases. One case has been irradiated, the other 9 cases a 2nd session of endoscopic resection was done. 3 of these cases required a 3rd session with no recurrence on the next 5 years. Morbidity in the form of permanent loss of Eustachian tube dysfunction in 2 cases. Infra-orbital hypesthesia in one case. In our series 3 cases of mortality from uncontrolled blood loss.

Conclusion: Recently, and after the advent of preoperative embolization, endoscopic resection of JNA is considered the state of art management, still, however, the large tumors remain a challenge.

Dural Invasion in JNA: Does it exist?

Juvenile nasopharyngeal angiofibroma (JNA) is a combined vascular and fibrous neoplasm which arises from the posterior-lateral wall of the nose. Despite being microscopically benign, the tumor frequently exhibits destructive and aggressive behavior. Various staging classification had been suggested, but there is no universal agreement worldwide about the most accepted. Each author takes into consideration different perspective. The dural invasion is one of the most challenging and determinant factor in the management of this tumor. In the literature, there is a great debate regarding this point. We managed 109 cases of JNA, 27 of them were having intracranial extension. Only four of them were with true dural invasion.

We describe our experience in dealing with advanced JNA including cases with intracranial extradural extension.

Biography

Hussam El-Din Mahmoud Mohammed El-Bosraty  
James D. Bates  
Texas Oral and Maxillofacial Surgery Dallas, USA

Diagnosis, Nonsurgical and Surgical Treatment of Obstructive Sleep Apnea

Sleep-disordered breathing is a hot topic in healthcare today. Otorhinolaryngologists, head and neck, and maxillofacial surgeons are in a unique position to screen for, diagnose and treat their patients with obstructive sleep apnea. OSA is a serious, potentially life-threatening condition which can result in hypertension, congestive heart failure and even death. This presentation will cover the screening, diagnosis and contemporary management of sleep-disordered breathing in a comprehensive format, for otorhinolaryngologists, head and neck surgeons, and maxillofacial surgeons. From the medical history and clinical examination, to diagnostic imaging findings, to a detailed discussion of the clinical polysomnogram and sleep medicine consultation referral, to mandibular advancement oral appliance therapy and CPAP therapy, to upper airway surgery including uvulopalatopharyngoplasty (UPPP), laser-assisted uvulopalatoplasty (LAUP), nasal septoplasty, inferior turbinectomy, tonsillectomy and adenoidectomy, radiofrequency tongue and soft palate ablation and nerve stimulation, to maxillomandibular advancement and genioglossus advancement, to tongue and hyoid suspension, this presentation will provide direct and practical real life ways to improve the health and prolong the life of your patients with maximal fulfillment in return.

Biography

James D. Bates, D.D.S., M.D., F.A.C.S., is an American board-certified oral and maxillofacial surgeon in active private practice in Dallas, Texas. Originally from Lubbock, Texas, he attended Texas Tech University as an undergraduate. He graduated with many honors from The University of Texas Dental Branch at Houston with a D.D.S. degree, and from Texas Tech University School of Medicine with an M.D. degree. In addition, he completed an internship in general surgery at Baylor University Medical Center, and completed an accredited residency in oral and maxillofacial surgery at The University of Texas Health Science Center in Houston. As a Clinical Associate Professor in the Department of Oral and Maxillofacial Surgery at Texas A&M University Health Science Center for 18 years, he participated in resident training and Master’s Thesis research. As the founder of Texas Oral and Maxillofacial Surgery, his practice is proud to have maintained over 16 years of continuous accreditation as an Office-Based Surgery Practice by the internationally-recognized Joint Commission.
Shuo Li  
Union Shenzhen Hospital of Huazhong University of Science and Technology, China

**Odontogenic myxoma involving the right nasal cavity, orbital floor, and skull base in a 20-year-old woman: removal and review of the literature**

**Rationale:** Odontogenic mucinous tumor (OM) is a rare benign tumor in the jaws. It is considered locally aggressive but non-metastatic. The dispersed stellate and spindle-shaped cells in an abundant mucus-like extracellular matrix is one of the outstanding characteristics of OM, which may contain odontogenic epithelial cells. Here, we report a case of odontogenic mucinous tumor observed at a relatively rare site, which occurs in the maxillary posterior interdental region and maxillary sinus, as well as involves the right nasal cavity, orbital floor, and skull base.

**Patient concerns:** A 20-year-old young female patient was referred to our institution for right-sided nasal congestion and facial swelling.

**Diagnoses:** The right inferior nasal tract and common nasal tract of the patient were blocked with a reddish neoplasm. CT and MRI scans of the paranasal sinuses exhibited a soft tissue mass in the right maxillary sinus, septal sinus and middle and lower nasal passages. The clinical history and preoperative examination and neuroimaging findings were indicative of an odontogenic cyst.

**Interventions:** The patient received Right-sided nasal sinus tumor resection via endonasal endoscopic anterior lacrimal saphenous fossa combined with Kollu’s approach. The postoperative pathological findings were suggestive of an odontogenic mucinous tumor.

**Outcomes:** The patient recovered well after surgery with significant relief of symptoms.

**Lessons:** Odontogenic mucinous tumors are clinically treated with conservative and marginal surgery, both with low recurrence rates. However, conservative surgical treatment is less surgically invasive, more acceptable to patients, and results in a better quality of survival.

**Biography**

Shuo Li is an Chief Physician Director of Otolaryngology Department at Union Shenzhen Hospital of Huazhong University of Science and Technology, China

His Clinical Specialty Direction is Nasopharyngeal Carcinoma Head-Neck Surgery  
Endoscopic Sinus Surgery. He did Ph.D in Otolaryngology Tongji Medical College of HUST in 2014, Master of Otolaryngology Guangzhou Medical University in 2011, and Bachelor of Clinical Medicine Sun Yat-sen University in 2003.

His Professional Experience was Chief physician of Otolaryngology and Head & Neck Surgery, Associate chief physician of Otolaryngology and Head & Neck Surgery. Attending doctor of Otolaryngology and Head & Neck Surgery, Resident doctor of Otolaryngology and Head & Neck Surgery and His Research Directions are 1. The gene therapy of nasopharyngeal carcinoma 2. The diagnosis and treatment of head and neck cancer.
**Total aplasia of the paranasal sinuses and nasal cavity: the first case report**

**Background:** The paranasal sinuses (PNSs) are small empty spaces around the nasal cavity at the entrance to the respiratory tract, and they have various functions. The development and anatomy of the PNSs are exposed to many variations, often leading to patients’ complaints upon presentation.

**Case presentation:** Here, the first case of total aplasia of the paranasal sinuses and nasal cavity and its contents is presented. Several cases of varying degrees of combined aplasia and hypoplasia, even total sinus aplasia, have been reported in the literature, but to the author’s knowledge, no cases of total sinus aplasia and associated nasal aplasia have been described thus far.

**Conclusion:** This case report describes a rare, and probably the first, case of severe sinonasal developmental defects elegantly identified with bone window computed tomography (CT).

**Biography**
Trefa Salih Hasan is a Consultant Radiologist at the Department of Radiology, Erbil Teaching Hospital, Erbil, Iraq and Kurdistan Region. Published in Egyptian Journal of Otolaryngology.
UPCOMING CONFERENCES

World Congress on Cancer Research and Oncology
October 23-24, 2023 | Tokyo, Japan
cancerscience@scmeetings.org
https://scholarsconferences.com/cancer-oncology/

International Conference on Gynecology, Obstetrics & Women’s Health
October 23-24, 2023 | Tokyo, Japan
gynecology@frontiersevents.com
https://scholarsconferences.com/gynecology-obstetrics/

World Heart Congress
October 23-24, 2023 | Tokyo, Japan
heartcongress@scholarsconferences.org
https://cardiologymeet.org/

2nd Edition World Nursing and Healthcare Summit
October 25-26, 2023 | Tokyo, Japan
healthcare@scholarsevents.org
https://scholarsconferences.com/nursing-healthcare/

2nd World Congress on Otology, Rhinology & Laryngology
May 20-21, 2024 | London, UK
otorhino@scholarconferences.org
https://otorhinolaryngology.scholarsconferences.com/

6th Edition Global Summit on Breast and Women’s Cancer
May 20-21, 2024 | London, UK
cancerscience@scmeetings.org
https://breast-womens-cancer.scholarsconferences.com/

4th World Congress on Nursing and Advanced Healthcare
May 20-21, 2024 | London, UK
https://nursingworldcongress.com/
organizer@nursingworldcongress.com