

THE PROSPER MÉNIÈRE SOCIETY

Winter 2019

19th



International Symposium on INNER EAR DISORDERS

A week-long forum for presentation and discussion of the most current research on inner ear diagnosis, medicine, and surgery

March 21-27, 2020

Registration will begin on Saturday, March 21st, with final talks given on Friday, March 27th.



Hotel Theresa in Zell im Zillertal, Austria

This week-long continuing medical education program is intended for practicing otolaryngologists, otologists/neurotologists, neurologists/neurosurgeons, neuroradiologists and audiologists. It will provide a comprehensive overview of inner ear diseases/disorders and their treatments. Basic and clinical researchers will present lectures and conduct plenary sessions on clinical ramifications of inner ear pathophysiology, state-of-the-art interventions, inner ear organ culture techniques, hair cell regeneration, inner ear fluid dynamics and their alterations in pathophysiologic disorders, and autoimmune inner ear disease.

LETTER FROM THE DIRECTOR



Greetings to all! Greetings to all! This newsletter is highlighting our Gold Medal Award recipient, P. Ashley Wackym, MD, Chair of Department of Otolaryngology - Head Neck Surgery at the Rutgers Robert Wood Johnson Medical School and a Chancellor Scholar

of Rutgers Biomedical Health Sciences in New Brunswick, New Jersey. Dr. Wackym was nominated and chosen by the members of the Society and has graciously accepted this honor, which will be bestowed during the Banquet Night (Wednesday evening) during the 19th International Symposium on Inner Ear Disorders in Zell.

As our Gold Medal recipient, Dr. Wackym will be making two presentations at the meeting, and these abstracts can be found in this newsletter. I am certainly very excited to hear these presentations!

I hope that you will plan to attend the conference and participate in the presentations. The call for abstracts has been placed on the Prosper Meniere Society website at www.prospermeniere.com. Additional information about meeting registration and hotel accommodations can also be found in this newsletter. Looking forward to seeing you in Zell!

Sincerely,

John Dornhoffer, MD, FACS

*Executive Director, Prosper Meniere Society
Professor and Chair, Department of Otolaryngology—
Head and Neck Surgery
University of Arkansas for Medical Sciences*

GOLD MEDAL AWARD WINNER



2020 Gold Medal Award Recipient **P. Ashley Wackym, MD, FACS, FAAP**

P. Ashley Wackym, MD is a seasoned administrator, investigator, and surgical otologist-neurotologist and skull base surgeon. He is currently the Chair of Department of Otolaryngology – Head Neck Surgery at the Rutgers Robert Wood Johnson Medical School and a Chancellor Scholar of Rutgers Biomedical Health Sciences.

Dr. Wackym’s clinical emphasis is on cochlear implantation and skull base surgery as well as other hearing and balance disorders. He is particularly well known for the surgical management of patients with superior semicircular canal dehiscence. His basic research was funded by the National Institutes of Health for over two decades in the area of gene discovery in the inner ear. Currently his research is focused on cognitive dysfunction before and after surgical management of third window syndrome, cochlear implantation, outcomes of Gamma Knife surgery, balance disorders, and the development of new biomedical engineering technologies. He has published over 170 papers, 60 book chapters, and 20 video productions and has edited three books, including the 18th edition of Ballenger’s Otorhinolaryngology Head and Neck Surgery.

The Intersection between Third Window Syndrome, Menière Disease and Vestibular Migraine

P. Ashley Wackym, MD and Carey D. Balaban, PhD

From the Department of Otolaryngology – Head and Neck Surgery, Rutgers Robert Wood Johnson Medical School (P.A.W.), New Brunswick, New Jersey; and the Department of Otolaryngology (C.D.B.), University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania.

In 1861, 158 years ago, Prosper Menière presented a paper before the French Academy of Medicine in which he described a series of patients with episodic vertigo and hearing loss. Prior to that time, vertigo was thought to be a cerebral symptom similar to epileptic seizures. He was not attempting to define a disease or syndrome but rather to emphasize that vertigo could originate from damage to the inner ear. The term Menière disease is used to define the classic triad of vestibular and cochlear symptoms and aural pressure/fullness. Endolymphatic hydrops is widely accepted as the pathologic substrate, but much debate remains regarding the etiopathogenesis of the disorder. Vestibular migraine has also been recognized as a distinct disease entity. However, its symptoms overlap greatly with those of other vestibular disorders, especially Menière disease. Clinically, one-third of vestibular migraine patients develop endolymphatic hydrops. Others have hypothesized that the two share a common etiology and/or are variants of the same disease. To complicate the clinical spectrum of these inner ear disorders, there are now known to be 13 sites where a bony dehiscence can produce a third window syndrome, as well as additional CT- third windows. Most of these third window syndrome patients experience migraine headaches as well as the variants of migraine; vestibular migraine, ocular migraine and hemiplegic migraine. Of the various sites of dehiscence, superior semicircular canal dehiscence is most often associated with endolymphatic hydrops. The intersection of these symptoms and objective findings will be compared and contrasted.

Third Window Syndrome: Surgical Management of Cochlea-Facial Nerve Dehiscence

P. Ashley Wackym, MD; Carey D. Balaban, PhD; Pengfei Zhang, MD; David A. Siker, MD; Jasdeep S. Hundal, PsyD

From the Department of Otolaryngology – Head and Neck Surgery, Rutgers Robert Wood Johnson Medical School (P.A.W.), New Brunswick, New Jersey; the Department of Otolaryngology (C.D.B.), University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania; the Department of Neurology (P.Z.), the Department of Neurosurgery (J.S.H.), Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey; and Siker Medical Imaging and Intervention (D.A.S.), Portland, Oregon.

OBJECTIVE: This communication is the first assessment of outcomes after surgical repair of cochlea-facial nerve dehiscence (CFD) in a series of patients. Pre- and postoperative quantitative measurement of validated survey instruments, symptoms, diagnostic findings and anonymous video descriptions of symptoms in a cohort of 16 patients with CFD and third window syndrome (TWS) symptoms were systematically studied.

STUDY DESIGN: Observational analytic case-control study.

SETTING: Quaternary referral center.

PATIENTS: Group 1 had 8 patients (5 children and 3 adults) with CFD and TWS who underwent surgical management using a previously described round window reinforcement technique. Group 2 had 8 patients (2 children and 6 adults) with CFD who did not have surgical intervention.

INTERVENTIONS: The Dizziness Handicap Inventory (DHI) and Headache Impact Test (HIT-6) were administered preoperatively and postoperatively. In addition, diagnostic findings of comprehensive audiometry, cervical vestibular evoked myogenic potential (cVEMP) thresholds and electrocochleography (ECoG) were studied. Symptoms before and after surgical intervention were compared.

MAIN OUTCOME MEASURES: Pre- vs postoperative DHI, HIT-6 and audiometric data were compared statistically. The thresholds and amplitudes for cVEMP in symptomatic ears, ears with cochlea-facial nerve dehiscence and ears without CFD were compared statistically.

RESULTS: There was a highly significant improvement in DHI and HIT-6 at pre- vs postoperative ($p < 0.0001$ and $p < 0.001$, respectively). The age range was 12.8 – 52.9 years at the time of surgery (mean=24.7 years). There were 6 females and 2 males. All 8 had a history of trauma before the onset of their symptoms. The mean cVEMP threshold was 75 dB nHL (SD 3.8) for the operated ear and 85.7 dB (SD 10.6) for the unoperated ear. In contrast to superior semicircular canal dehiscence, where most ears have abnormal ECoG findings suggestive of endolymphatic hydrops, only 1 of 8 operated CFD ears (1 of 16 ears) had an abnormal ECoG study.

CONCLUSIONS: Overall there was a marked improvement in DHI, HIT-6 and symptoms postoperatively. Statistically significant reduction in cVEMP thresholds was observed in patients with radiographic evidence of CFD. Surgical management with round window reinforcement in patients with CFD was associated with improved symptoms and outcomes measures.

CALL FOR 2020 ABSTRACTS

Deadline: **December 31, 2019**
Submit Abstracts to:
Brenda Speed
bospeed@uams.edu

PURPOSES/ OBJECTIVES

Upon completion of this course, participants should be able to:

- **DESCRIBE** the pathophysiology of inner ear disorders
- **IDENTIFY AND DISCUSS** appropriate medical and/or surgical treatment regimens for Ménière's disease and other diseases of the inner ear, including tinnitus
- **ASSESS** the indications and basic interpretations of diagnostic findings for vertiginous patients
- **REVIEW** implantable hearing devices and cochlear implants
- **UNDERSTAND** inner ear fluid dynamics and homeostasis in the normal and hydroptic inner ear
- **DESCRIBE** the three-dimensional spatial organization of the membranous labyrinth
- **UTILIZE** the video Head Impulse Test (vHIT) of all semicircular canals properly and be able to identify artifacts and errors and interpret results
- **REVIEW** the physiological basis and clinical interpretation of the new tests of otolith function: oVEMPS and cVEMPS

TOPICS

BASIC SCIENCE

- Anatomy and physiology of the cochlear and vestibular system
- Inner ear pharmacology

DIAGNOSIS OF VESTIBULAR DISORDERS

- Imaging techniques
- Vestibular testing: Head Impulse Test
- VNG
- cVEMPS and oVEMPS

SURGICAL AND MEDICAL MANAGEMENT OF VESTIBULAR DISORDERS

- Migraine therapy
- Perfusions: dexamethasone and gentamicin
- Low-pulse generators
- Surgery

SURGICAL AND MEDICAL MANAGEMENT OF HEARING LOSS

- Implantable hearing devices: BAI, middle ear, and cochlear implants
- Hearing aids

COCHLEAR IMPLANTS

- Surgical techniques: soft insertion, hearing preservation, and hybrids
- Unilateral vs bilateral
- Age of implantation
- Neuroplasticity

TINNITUS TREATMENT

- Transcranial Magnetic Stimulation
- Cochlear Implantation
- Behavioral Therapy

19th

International Symposium on

INNER EAR DISORDERS

March 21-27, 2020

REGISTRATION FORM

YES, please register me for the symposium.

EARLY REGISTRATION THROUGH DECEMBER 1, 2019

- | | | | |
|---|-------|---|-------|
| <input type="checkbox"/> MEMBER Early Registration | \$400 | <input type="checkbox"/> NON-MEMBER Early Registration | \$500 |
| <input type="checkbox"/> MEMBER Late Registration | \$500 | <input type="checkbox"/> NON-MEMBER Late Registration | \$600 |

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Company _____

Address _____

State _____

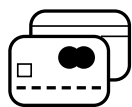
Zip _____

Country _____

Telephone _____

Registration includes meeting materials, admission to the Welcome Reception, and ticket to Gold Medal Award Reception.

Return this form by Fax: **(501) 686-8029** or
Email to **bospeed@uams.edu**.



Pay by PayPal or Credit Card at
www.prospermeniere.com

GROUND TRANSPORTATION

We recommend flying into the Munich airport. Ground transportation is available from the Munich airport to Hotel Theresa via Fours Season Travel at **www.airport-transfer.com** or SMS transfer services at **sms@flughafentransfer.at**. When booking your shuttle, make sure to use "Zell im Zillertal" as the final destination! You will need the hotel address and phone number for your booking. Hotel Theresa Bahnhofstraße 15, 6280 Zell im Zillertal, Austria, (+43(0)5282 2286 0). The train system is also an option. The Zell im Zillertal stop is across the street from the Hotel Theresa.

To become a member of the
Prosper Ménière Society, please fill out a
Membership Application at
www.prospermeniere.com

HOTEL THERESA

The **Hotel Theresa** is a very popular ski resort, so the **Prosper Ménière Society** has reserved a block of rooms at a special price. Make sure you ask for the **Prosper Ménière Society** room rate.

We encourage you to please book your room early so that you will not miss out on the great accommodations of this hotel. Please visit the hotel's website at www.theresa.at.

Room Rates:

- **185 Euros per person per night in double occupancy**
- **220 Euros per night in single occupancy**

Please contact the hotel directly and ask for the **Prosper Ménière** room rate. E-mail at info@theresa.at or contact by telephone (+43(0)5282 2286 0) or fax (+43(0) 5282 4235).

For ski areas, ski rates, and ski packages visit:
www.zillertalski.at or www.zillertalarena.com

The **room rate** includes:

- Voluminous breakfast buffet
- Lunch buffet from midday to 4 p.m.
- A marvelous five-course dinner with menus to choose from
- Guided hiking, skiing, and tobogganing tours
- Exercise room
- Indoor and outdoor heated pool with Jacuzzi
- Sauna zone with multiple saunas, Tuscany court and large relaxing area
- And much, much more