SUMMER 2017 - SPECIAL INSERT

HENRY FORD SYNAPSE Neurosurgery

NEUROSURGERY NEWS AND NOTES

Young Neurosurgeons Research Forum

The Young Neurosurgeon's Research Forum took place at the American Association of Neurological Surgery (AANS) 2017 annual meeting in Los Angeles on Sunday, April 23. Supported by the Young Neurosurgeons Committee and the AANS Mentoring Program, as well as endorsed by the Senior Neurosurgical Society (SNS), this forum gives medical students, residents and fellows the opportunity to present their research in either clinical or basic science.

The Donald O. Quest Resident Clinical Science Award, awarded to the best clinical research project presented by a resident, was given to Dr. Richard Rammo for his oral presentation titled, "A Study on the Safety of Magnetic Resonance Imaging-Guided Laser Interstitial Thermal Therapy Treatment for Cerebral Radiation Necrosis," regarding his work with principal investigator, Dr. Ian Lee. The research determined the safety of laser ablation in patients who suffered from medically refractory radiation necrosis, a sometimes severe complication of radiation therapy for brain tumors. The research provides preliminary evidence that laser ablation may be a safe treatment for patients with this often devastating disease condition for which non-surgical treatments can be ineffective.

Department of Neurosurgery Receives NIH Grant to Study New Stroke Drug

Building on a history of leadership in the study of novel stroke treatments, Henry Ford Department of Neurosurgery researcher, Tavarekere N. Nagaraja, Ph.D., was awarded a research grant by the National Institutes of Health to investigate the efficacy of a new drug, Bryostatin-1, to be used as an adjuvant to tissue plasminogen activator (tPA) therapy for acute ischemic stroke. By working in concert with tPA, researchers will study animal models to determine whether this drug will assist in protecting the brain after a stroke. If effective, this therapy could be especially beneficial for patients who cannot receive tPA within the optimal window of time (less than four and a half hours) after symptom onset.

Welcoming New Physicians

We are pleased to announce that we have two new additions to our Henry Ford Health System neurosurgical team – Frank La Marca, M.D., FAANS, and Azam Basheer, M.D. Both will be based at Henry Ford Allegiance Health (HFAH) in Jackson, Michigan.

Dr. La Marca will be the new Medical Director of the Neurosurgery Service and Director of the Center for Complex Spine Surgery at HFAH. He has special interest in the treatment of adult and adolescent spinal deformity, complex cervical spine surgery, reconstructive spine surgery for tumors of the spine, degenerative spinal disease and minimally invasive spine surgery techniques. Dr. Basheer will join Dr. La Marca at HFAH upon completion of his chief residency in June. He has a strong interest in spinal deformity, spine biomechanics and minimally invasive techniques, along with peripheral nerve disorders. Both Drs. La Marca and Basheer will become adjunct faculty in the Henry Ford Department of Neurosurgery, where we look forward to their ongoing academic and teaching contributions.

RESIDENT RECOGNITION

Graduating Residents

DR. RUSHNA ALI

DR. AZAM BASHEER

2017 Awards

DR. RUSHNA ALI
KAREN STUCK AWARD

DR. RICHARD RAMMO
RESIDENT ACADEMIC ACHIEVEMENT AWARD

DR. THOMAS ZERVOS
GARCIA AWARD

DR. ELLEN AIR
SENIOR STAFF TEACHING AWARD

RESIDENTS' CORNER

Dr. Rushna Ali, who will soon graduate from the Henry Ford neurosurgical training program, became interested in treatment of disorders of the human brain when a family member suffered a subdural hematoma and fell into a coma – then experienced a complete return to normal function as a result of neurosurgical intervention.

This experience inspired Dr. Ali to pursue a medical career, and during her undergraduate days at the Aga Khan Medical College in Karachi, Pakistan, she studied with a newly returned neurosurgical trainee from Henry Ford. *(Editor's note: Dr. Syed Enam graduated from the Neurosurgery program in 1998 and served as a department senior staff member for several years.)* He provided a role model of the perfect teacher, surgeon, researcher and mentor, and inspired her to publish and present her research at international venues as an undergraduate. After visiting Henry Ford for a one-month elective, she decided it would be a good fit, applied for and was accepted to the neurosurgical training program.

During her training, Dr. Ali developed an interest in functional neurosurgery, including the treatment of movement disorders and epilepsy. Working closely with Drs. Ellen Air and Jason Schwalb, she produced several academic manuscripts on these topics. Recently, her review of the treatment outcomes of vagus nerve stimulation (VNS) in Dravet disease, a rare genetic epilepsy syndrome, was published in the *Journal of Neurological Sciences* [1]. In this study, Dr. Ali and her colleagues wanted to procure self-reported data from the caregiver's perspective in a cross-sectional survey, and chose to accomplish their task by employing social media for distribution of the questionnaire.

Utilizing an online survey that was posted to a Facebook page hosted by the Dravet Syndrome Foundation, the authors procured the largest sample of caregivers of patients with this disease to date. Although it's not a cure for the disease, VNS was thought by the caregivers who participated in the study to have improved many aspects of the patients' lives, including reduction in seizure frequency, improvement in seizure severity, reduced hospital admissions, improved cognition, improved emotional interaction and improved ability to participate in schoolwork.

Another manuscript that is currently being readied for publication addresses DBS (deep brain stimulation) for tinnitus, or "ringing in the ears," which can be a disabling condition [2]. Finally, she has led a team in performing a meta-analysis of extratemporal epilepsy resistant to standard oral medications [3], followed by a decision analysis of the same topic [4]. In all, Dr. Ali will graduate with 29 journal publications and three book chapters to her credit. After graduation, she will become a Clinical Fellow in Functional and Epilepsy Surgery at Vanderbilt University.

"At Henry Ford, I learned the value of collaborating with my fellow residents in a writing group, and in that group I learned how to allocate each author's strength to a different aspect of the paper," Dr. Ali says.

REFERENCES

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2. Rammo R, Ali R, Pabaney A, Schwalb J. A review of DBS targets for tinnitus. In preparation. 2017.
3. Ali R, Rammo R, Zakaria HM, Schultz L, Schwalb J. Epilepsy surgery for pharmacoresistant extratemporal epilepsy: A systematic review and meta-analysis. In preparation. 2017.
4. Ali R, Rammo R, Zakaria HM, Schultz L, Schwalb J. Epilepsy surgery for pharmacoresistant extratemporal epilepsy: A decision analysis. In preparation. 2017.

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