

SYNAPSE Neurosurgery

## RESIDENT'S CORNER SYNAPSE – SUMMER 2017

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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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