A new academic year begins at UNM HSC Department of Neurosurgery. The transition involves the graduation of our chief resident Pedro Ramirez who will be starting a practice in Orlando, Florida. We have two new interns who join the seven year program and they are Robert (Bobby) Starling, MD who graduated from the Medical College of Georgia and Dominic Harris, MD who graduated from University of Chicago, Prizler School of Medicine. Carlos Sanchez, MD and Seymur Gahramanov, MD are our new chief residents and they will share senior management of the department.

Not only do our residents move on, but our attending physicians also find new homes while others come to join us. Dr. Frederick Harrington will be leaving us in August to join a practice in New York and Dr. M. Omar Chohan, a graduate of our program who is finishing a fellowship in neuro oncology at Sloan Kettering in New York, will be returning to UNM to head our new division of Neurosurgical Oncology.

Omar will be working closely with members of the Cancer Program to build our first integrated neuro oncology program in New Mexico. Dr. Peter Shin will take over many of the responsibilities of spine care at Sandoval Regional Medical Center including the endoscopic spine center that was funded by Dr. Tony Yeung. Dr. Evan Rivers, a physiatrist and a member of our department, will work with Dr. Shin to create a first rate program for spine health based at SRMC.

The ACCESS grant that the Department of Neurosurgery received from the Centers for Medicaid and Medicare Services is finally off the ground with over 50 neurological consults having been received. We are awaiting full credentialing of our neurosurgical faculty at 30 rural New Mexico hospitals to be able to unfold the neurosurgical consultative part of ACCESS. The goal of the program is to improve the level of care that can be provided in our community hospitals while also lowering the overall cost of care by avoiding unnecessary transfers.

ACCESS PROVIDES STATE OF THE ART NEURO CONSULTATIONS TO RURAL NEW MEXICO

Developing a state wide system for telemedicine for neurological emergencies is a major undertaking. It involves developing a technology that connects rural physicians with expert consultants. We overcame the technological portion with collaboration with Net Medical Express Solutions, LLC, a local telecommunication company that has developed a low cost, cloud based system that can connect rural physicians and their patients with consulting doctors anywhere in the world. The next part of the process is to find doctors that are willing and able to provide consultations for neurology and neurosurgery. Because of the ability to utilize doctors from any location and the only requirement is a license to practice in New Mexico we have been able to find our team of consultants. In another update we will discuss our treating physician team.

The other important ingredient is the team that will be involved in the administration of such a large program as well as the nursing team. Our nurses will go on site at each hospital to present a comprehensive program of education concerning the care of neuro emergencies. While it is critical to recognize a true emergent problem, where outcome is linked to the timing of treatment, it is also critical to understand when a problem does not need emergent air transport. Moving an unstable patient with an acute hypertensive hemorrhage is probably detrimental to the patient versus first stabilizing the patient with tight blood pressure control at the local hospital. ACCESS has three senior nurses who have decades of experience with stroke and neurosurgical problems. Debra Banks and Deirdre Kearney are outstanding neuroscience educators and administrators that will not only work onsite to improve the comfort level of local physicians and nurses but they will also work to help develop stroke certifications at any hospital that wants to deliver that level of care. Elizabeth Muller is an experienced neurosurgical clinic director who brings a valuable aspect of patient follow up and communication that is also part of our program of improved care. Our

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administration includes Andrew Hollander who is a senior project manager and a key person critical to getting all aspects of this complex program off the ground. Suzanne Brown will be our program manager once all the parts are in place. Suzanne will be our key connection with CMS who will be providing over 15 million dollars to develop our team, pay for the education components as well for the 8,000 plus consults that the grant will be paying for. This grant would never have transitioned from a good idea to a real working program without the outstanding legal team lead by Ariana Vasquez and the contracting team lead by Bob McMullen.

While the telemedicine system that we have developed will be focused upon neurological emergent care, it is clear that this is the beginning of a new age of collaborative health care where expert physicians will be able to provide timely consultations anywhere they are needed.

The Reversible Dementia: Normal Pressure Hydrocephalus

By Suguna Pappu, MD

Mr V is a 76 year-old teacher who retired to Albuquerque and his wife was concerned because of “trouble playing tennis” because he was not able to move fast enough on the court and was falling. His wife also noticed that his memory was not as good as it had always been. She felt he was “just not right”. In clinic he admitted to without warning having trouble controlling is bladder.

Among the many health concerns of our ever growing elderly population, the fear of dementia and loosing independence are probably at the top of the list. While many causes of difficulty with gait, cognition and even incontinence exist only one is reversible and that when the problems are due to an imbalance between spinal fluid production and removal. The result is hydrocephalus (enlargement of the spinal fluid pathways within the brain), associated with a relatively Normal Intracranial Pressure is Normal Pressure Hydrocephalus (NPH).

The name Normal Pressure Hydrocephalus is a misnomer as the “normal” measurement of intracranial pressure is actually elevated relative to the less compliant normal elderly brain. The result is enlarged ventricles but a spinal fluid pressure that is often within the high normal range. It is believed that the ventricular enlargement found in NPH compresses the frontal regions of the brain(dementia), corticospinal tract(gait) and paracentral lobule of cortex (incontinence). CSF diversion with a ventricular peritoneal shunt is the standard of care which is often curative.

The path to diagnosis of NPH begins with the primary care provider who, after taking a careful history and physical, may order cranial imaging. In particular, a noncontrasted CT or MRI of the brain is an appropriate study. Ventricles are usually enlarged

A neurologist or neurosurgeon then commonly undertakes a diagnostic lumbar puncture. After review of imaging and ruling out other pathology, a lumbar puncture is performed, withdrawing 20-40 cc’s of cerebrospinal (CSF) fluid. When this is done, usually in an outpatient setting, the family is then asked to report any changes in the triad of symptoms, best identified in the 24 hours after the procedure. When NPH is the diagnosis, family will often say “Dad is back” when they see the dramatic improvement in gait and cognition. When the clinical response to the LP is less dramatic, the patient may be admitted to the hospital and have a formalized evaluation by the physical therapists who make an objective assessment of gait before and after the CSF is withdrawn. In more subtle cases a lumbar drain will continuously drain CSF for several days to assess the use of CSF diversion, and the clinical team will make daily evaluations of the possible of CSF diversion.

The most common procedure is a ventriculoperitoneal shunt in which fluid is diverted from the brain ventricle to the peritoneal cavity of the abdomen.

Case Outcome: Mr A was found to have a “normal” pressure on his lumbar puncture. His wife reported that he immediately seemed sharper and he felt more steady on his feet. He had a ventriculoperitoneal shunt placed and is playing tennis again.
Chief Resident Pedro Ramirez Graduates: Begins Practice in Orlando Florida

Dr. Pedro Ramirez graduated from the Residency Program in June. Pedro began with the program in July 2008 as a one year pre-resident fellow. In June 2009 he matched and started in our accredited residency program where he flourished and became a natural leader in the program. In April 2014 Pedro took over as Chief Resident. Dr. Ramirez was a favorite lecturer to medical students and was a mentor to not only neurosurgery residents but residents and medical students in other disciplines. Dr. Ramirez will begin his career in private practice in Orlando, Florida, but he promises to come back to visit and present to the department.

In Memoriam of Neurosurgery Resident

Tausif-Ur Rehman, MD died on October 12, 2014 when a light aircraft that he was piloting crashed in Chicago Illinois. Tausif was born in Pakistan and trained in the premier medical institution of that country, Aga Kahn University. He joined our residency in 2007 and completed the program in 2011. Tausif was a kind and generous man who was practicing in Kansas while working to develop a foundation that would aid the education of under privileged youth in Pakistan. He will be missed.

The Department at a Glance:

1. Colin Semper, MBA, HCM, CAAMA  
   Administrator

Clinical Faculty:
2. Howard Yonas, MD, Chairman
   - Carotid Surgery
   - Microvascular decompression for Tic Doloureux (trigeminal neuralgia) and hemifacial spasm
   - Skull base Tumor Surgery

3. Christopher Taylor, MD, MBA Vice Chairman
   - Director of Residency
   - Endovascular Surgical Treatment
   - Cerebrovascular Disorders
   - Degenerative and Traumatic Spine Disorders

4. Andrew Carlson, MD
   - Endovascular Surgical Treatment
   - Cerebrovascular Disorders
   - Skull Base Surgery

5. Omar Chohan, MD
   - Neuro/oncology Brain Tumors
   - Spine Tumors
   - Degenerative and Traumatic Spine

6. Jeremy Lewis, MD
   - Degenerative and Traumatic Spine disorders
   - Trauma brain and spine
   - Skull Base Surgery
   - VA Neurosurgery

7. Peter Shin, MD, PhD
   - Minimally Invasive Spine
   - Gamma Knife
   - Movement Disorders
   - Degenerative and Traumatic Spine

8. Suguna Pappu, MD
   - Degenerative and Traumatic Spine disorders
   - Trauma brain and spine
   - Gamma Knife - Director VA Neurosurgery

9. Joanna Katzman, MD
   - Director Pain Management Program
   - Neurology

10. Huy Tran, MD
    - Stroke
    - Neurology Neurointensive Care

11. Robert Alunday, MD
    - Emergency Medicine
    - Neurology Neurointensive Care

12. Evan Rivers, DO
    - Rehabilitation Medicine
    - Degenerative Spine Disorders

13. Sunita Rajput, DO
    - Rehabilitation Medicine
    - Degenerative Spine Disorders

Research Faculty:
14. Edwin Nemoto, PhD
    - Director Clinical and Experimental Research

15. Denis Bragin, PhD
16. Jeff Hill, PhD
17. Mark Krasberg, PhD
18. Tamara Roitbak, PhD
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Patient Referrals:

We pride ourselves on expeditiously consulting patients with a full range of neurological and neurosurgical problems.
To refer your patient, please fax a referral letter and diagnostic study reports to: (505) 925-7591 [fax]
RN line: (505) 272-9494
Or contact us through the PALS (272-2000) line at the University of New Mexico
Referrals to SRMC signal program will be through above contact numbers

Gifts to the Department:

Charitable donations to the Department of Neurosurgery are an important part of advancing the science and practice of neurological surgery in New Mexico. These funds aid in resident education and research as well as allow continued acquisition and study of specialized technology that aids in the complex care of patients with stroke, hemorrhage, brain tumors, traumatic brain injury, epilepsy, spinal disorders, movement disorders, and pain. Please contact the department directly to discuss donation or set up a meeting at (505) 272-3401.

“Helping New Mexico patients stay at home for complex neurosurgical care...”