



THE GNI BULLETIN

The Georgia Neurosurgical Institute opened its doors to the public in 1954. Dr. Robert A. Clark Jr., Dr. Samuel J. Hightower Jr., Dr. Morgan A. Cowan, Dr. Robert A. Sears, Dr. Hugh F. Smisson, and Dr. Charles M. Rowley wanted to bring a neurosurgical practice to the Central Georgia area to offer comprehensive brain and spine-related services.

Over the years, the Georgia Neurosurgical Institute has grown and evolved to offer expanded services to the people of Central Georgia. Today, GNI is a group of neurosurgical specialists performing state-of-the-art procedures. GNI offers modern technologies and treatments of neurological, cervical and spinal disorders, trauma, back pain and neck pain. GNI also has Magnetic resonance imaging (MRI) services. This test uses a magnetic field and pulses of radio wave energy to capture images of the head and spine. In many cases, the MRI gives information that cannot be seen on an X-ray, ultrasound, or computed tomography (CT) scan, ultimately helping our doctors determine an accurate diagnosis.

In addition to our expertise in the fields of neurosurgery, spine-related disorders and available MRI imaging, GNI offers physical therapy services where patients are evaluated by licensed physical therapists and offered the best treatment in Central Georgia.

Our dedicated surgeons take time to share their knowledge and experience with medical students in the community and to conduct research studies with far-reaching implications for patient care. Moreover their papers and presentations are in great demand at seminars and other gatherings of colleagues around the world.

We work to maintain this high level of commitment and achievement in the field of neurosurgery.



Joe Sam Robinson Jr., M.D., F.A.C.S.,
President



Hugh F. Smisson, III,
M.D., F.A.C.S.



Kim W. Johnston,
M.D., F.A.C.S.



Richard A. Rowe,
M.D., F.A.C.S.



Arthur A. Grigorian,
M.D., Ph.D.

www.ganeurosurg.org





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Macon, Georgia

The Georgia State Trauma Commission granted the Medical Center of Central Georgia (MCCG) \$600,000 to build the 48-by-48-foot heliport atop the Emergency Center. With the assistance of this grant, MCCG continues its commitment to world class healthcare.



The first helicopter landed early Monday afternoon March 1, 2010 with a trauma patient from Dorminy Medical Center in Fitzgerald, GA. Hours later, a helicopter transported a patient from MCCG to the Doctors Hospital in Augusta, GA.



Georgia has similar centers at Grady Hospital in Atlanta, the Medical College of Georgia in Augusta and the Memorial Hospital in Savannah.

Trauma Centers throughout the state save many lives every year. These are supervised by the Georgia Trauma Care Network Commission which was established recently when Governor Perdue signed Senate Bill 60 into law. The commission is comprised of a nine member panel who oversees state money set aside to assist trauma care hospitals. The commission is also tasked with organizing the network of trauma hospitals and emergency services to assure all Georgia citizens receive quality care in the aftermath of a critical injury.



Dr. Robinson is currently the Trauma Physician Representative for the Georgia Trauma Commission as well as the Chairman of the Georgia Board of Physician Workforce.



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Yerevan, Armenia



On March 31, 2010, the Center of Vascular Neurosurgery at Yerevan State University was inaugurated by the Armenian President Serj Sargsyan (second from right).



Dr. Arthur Grigorian (first from right), a graduate of Yerevan State University Medical School and currently an attending neurosurgeon of the Georgia Neurosurgical Institute, played a big role in the establishment of this center. With his contribution, 14 staff members of the Center of Vascular Neurosurgery passed their technical training and preparation in American (GNI), German and Austrian centers.

LATEST PUBLICATIONS

Comparison of outpatient and inpatient spine surgery patients regarding obesity, comorbidities and readmission for infection

Walid MS, Robinson EDM, Robinson JS, III, Ajjan M, Robinson JS, Jr.

Accepted by J Clinical Neuroscience

Computational Modeling of HHH Therapy and Impact of Blood Pressure and Hematocrit

Robinson JS, Jr., Walid MS, Hyun S, Menard C, O'Connell R, Bohleber B

Accepted by World Neurosurgery

Impact of postoperative fever on length of stay and hospital cost in spine surgery patients

Walid MS, Sahiner G, Robinson C, Robinson JS, III, Robinson JS, Jr.

Revised Version submitted to Neurosurgery

PET or Perfusion CT may be necessary before evacuating a large subdural hematoma

Walid MS, Robinson JS, Jr.

Accepted by Neuroscience Imaging

Viability of U.S. Stroke centers: A tension between patient care and financial stability

Walid MS, Barth ACM, Robinson JS, Jr.

Accepted by AANS Neurosurgeon



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Efficient Patient Discharge: Successes and Challenges in Stewardship Healthcare Resources

Walid MS, Barth ACM, Mancin KM, Cole DC, Robinson JS, Jr.

Accepted by AANS Neurosurgeon

Can pseudotumor cerebri predispose to placental abruption?

Walid MS, Sanoufa M, Robinson JS Jr.

Southern Medical Journal May 2010;103(5):489-90.

Prevalence of mood-altering and opioid medication use among spine surgery candidates and relationship with hospital cost

Walid MS, Zaytseva NV.

J Clin Neurosci. May 2010;17(5):597-600.

Treatment of Sleep Disturbance in Parkinson's Disease with Eszopiclone: A Placebo Controlled Trial.

Menza M, Dobkin R, Marin H, Gara M, Bienfait K, Dicke A, Comella C, Cantor C, Hyer L

Accepted by Archives of General Psychiatry.

Alzheimer's disease and vascular dementia: The complex relationship between diagnosis and caregiver burden.

Yeager C, Hyer L, Hobbs B, Coyne A.

Issues Ment Health Nurs. June 2010;31(6):376-84.

Empirically Supported Treatments of Post-Traumatic Stress Disorder for Older Adults.

Hyer L, Yeager C.

In (G Beck Ed) PTSD: Empirically Supported Treatments. Guilford Press (2010): New York, NY.

Integration of psychology, psychiatry, and medication in long term care.

Hyer L, Shah S.

In E. Rosowsky, J. Casiani, & M. Arnold (Eds) Geropsychology and long term care: A practitioner's guide. Springer (2010): New York, NY.

Post-Traumatic Stress Disorder and its Treatment at Late Life.

Hyer L, Yeager C.

In L. Poon & J. Cohen-Mansfield (Eds) Understanding the oldest old. Oxford University Press (2010), London.

Late Life Psychotherapy: Challenges and Opportunities to Enhance Wellbeing in the Oldest Old.

Hyer L, Yeager C.

In L. Poon & J. Cohen-Mansfield (Eds) Understanding the oldest old. Oxford University Press (2010): London.



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LATEST CONFERENCES

American Association of Neurological Surgeons (AANS) Annual Meeting.



May 1-5 2010, Philadelphia, PA.

Dr Robinson presented at the socioeconomic session **“Prevalence of comorbidities in spine surgery patients and impact on length of stay and hospital cost.”**

The presentation was cited in a press release by the AANS on May 4, 2010.

Spine Surgery Patients with Other Health Issues Incur Longer Hospital Stays and Increased Costs.

“It is estimated that between 75 and 85 percent of all Americans will suffer from low back pain and/or neck pain at some point in their lives. An estimated 12 million Americans suffer from degenerative disc disease, with over one million patients undergoing surgery each year. The cost of treating back pain is currently estimated at more than \$100 billion annually in the U.S. Many patients with back pain have comorbidities that impact spine surgery. Comorbidity is the presence of one or more disorders (or diseases) in addition to a primary disease or disorder; or the effect of such additional disorders or diseases.

Previous research has suggested that among spine surgery patients, comorbidities may increase the length of stay and hospital cost. “This issue is of substantial importance in an era of economic restraint and frequent operative spine procedures. In order to study the prevalence of comorbidities among patients undergoing costly spine surgery and verify the impact of these factors on length of stay and hospital cost, an in-depth study was conducted on nearly 600 patients undergoing spine surgery at our institution,” stated Joe S. Robinson Jr., MD, FACS, senior author of the study.

Researchers at the Georgia Neurosurgical Institute in Macon, Ga., analyzed spine surgery patients’ existing comorbidities in relationship to hospital stay and costs. The results of this study, *Comorbidities in Spine Surgery Patients and Impact on Length of Stay and Hospital Cost*, was presented by Dr. Robinson on Tuesday, May 4, 2010, during the 78th Annual Meeting of the American Association of Neurological Surgeons in Philadelphia. In addition to lead author Muhammad S. Walid, MD, PhD, co-authors are Edward R. M. Robinson, BA, and Joe S. Robinson III, BA.”

Excerpt from an 850-word Press Release by the AANS, May 4, 2010.

The above paper was cited by the following medical news websites:

AANS
Newswise
Medscape (Daniel M. Keller, PhD)
Cleveland Clinic
DoctorsLounge
OrthoSupersite
Medical News Today
News-Medical.net
Medical Santc
OperationCenters

COMING CONFERENCES

Syrian-American Medical Society and Cleveland Clinic Joint Conference.



July 4-7, 2010, Damascus, Syria.

July 4, 2010: Dr. Robinson will present:

Healthcare Efficiency in 21st Century



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(U.S. Stroke-Trauma Perspective)

July 6, 2010: Dr. Grigorian will present:

Update in Neurovascular Surgery

July 6, 2010: Dr. Ajjan will present:

Medical Management of Subarachnoid Hemorrhage

Congress of Neurological Surgeons Annual meeting.

October 16-21 2010, San Francisco, CA.



Seven digital posters will be presented:

Comparison of Pre- and Immediate Post-ACDF Somatosensory Evoked Potentials in Diabetic and Nondiabetic Patients

Zhao D, Walid MS, Sanoufa M, Chung I, Robinson JS, Jr.

Opioid Use with a History of Previous Spine Surgery increase the Chance of having Another Spine Surgery

Walid MS, Robinson JS, III, Robinson JS, Jr.

The Impact of Age on Pulmonary Complications in Postoperative Subarachnoid Hemorrhage Patients

Walid MS, Sahiner G, Robinson JS, Jr.

Does Unemployment and Payor Category Impact Length of Stay and Hospital Cost in Anterior Cervical Decompression and Fusion Patients?

Walid MS, Barth ACM, Robinson JS, III, Robinson JS, Jr.

The Management of Cervical Artery Injuries in Acute Cervical Spine Trauma

Khachatryan T, Minasyan A, Menard J, Robinson JS, Jr., Grigorian AA

The Incidence of Arterial Injury in Acute Cervical Spine Trauma

Khachatryan T, Minasyan A, Menard J, Robinson JS, Jr., Grigorian AA

New Grading Scale for Cervical Spondylotic Myelopathy

Minasyan A, Khachatryan T, Chung I, Menard J, Robinson JS Jr., Grigorian A

GRANTS/PROJECTS/MEETINGS

The Mercer AIM grant has been in progress for over a year. Dr. Hyer is the primary investigator. It targets Neurodegenerative Disease Project (NDP) issues for clinical, educational, and research purposes. The objectives of this project include the understanding of memory and cognitive functioning through psychological, social, and other biological lenses, as well as targeting biomarkers of neurodegenerative processes. In this past year, we have developed the Mercer University Memory Clinic (MUMC). This is supported by the Geriatric Fellowship Program at Family Medicine, as well as a federal Georgia-Geriatric Education Centers (G-GEC) grant with the University of Georgia in



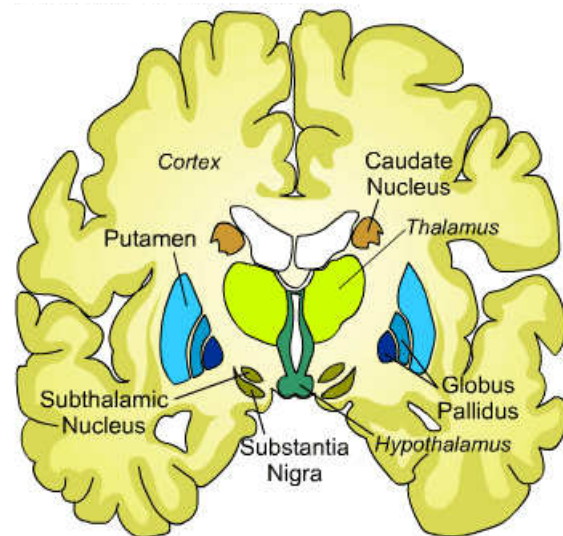
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Athens, GA. It also interfaces with our expanded degenerative disease programs, involving Parkinson's disease, Alzheimer's disease, diabetes, and Traumatic Brain Injury/Stroke. As part of this, we developed a special FREE Memory Clinic for the application of cognitive rehabilitation. Additionally, we carefully assessed (in a double blind study) a state-of-the art computer package for cognitive training for older adults with memory deficits, and developed a Mercer Archive of 300 community dwelling older adults. This last project is intended to establish a database consisting of memory, affective, and adjustment data to be followed over time. We plan to continue and seek further support for these programs. To date (2010), we have submitted 8 grants, several related to stem cells and neurodegenerative diseases and produced over 20 posters/papers. We have also sponsored 8 Mercer students, specifically targeting issues on degenerative diseases.

The **Lilly project** involves an assessment of the prescription drug Cymbalta. Based on data and our experience at GNI, pain is pervasive and related to adjustment, psychiatric markers, quality of life (QL), and personal variables (e.g., opioid use, medical comorbidity, number of spine surgeries), as well as cost markers (like length of hospital stay), etc. We believe that effective pain control in spine surgery patients can improve the overall success of the surgery. We are monitoring the effect of Cymbalta added to opioid in spine surgery patients on the primary study variable of pain over time, as well as the secondary features of QL, functioning, and psychiatric symptoms, especially depression. We will also assess opioid use (morphine-equivalent amount), pre and post-surgery. Finally, we will assess the cost-effectiveness of adding Cymbalta to opioid treatment of neurosurgery patients relative to opioid treatment alone, using methods standardized by the United States Public Health Service's

Panel on cost-effectiveness in Health and Medicine.

Parkinson's Support Group: This is a program supported by GNI and Medical Center of Central Georgia. Dr. Lee Hyer runs the group but organizes presentations by speakers who specialize in different areas pertaining to Parkinson's disease. Since December, our group has been visited by a speech pathologist, an inspirational speaker, and a licensed fitness trainer who specializes in exercises to improve balance, posture, and flexibility in Parkinson's patients. Our Parkinson's Support Group Meetings take place on the 3rd Thursday of every month from September through June. Caregiver Meetings are from 1:30 PM to 2:30 PM and our General Meetings are from 2:30 PM to 3:30 PM. All meetings take place at the Central Georgia Rehabilitation Hospital at 3351 Northside Drive, Macon, Georgia 31210. If you are interested in learning more about our Parkinson's Support Group Meetings, please contact Mary Michael Atkinson at 478-743-7092 ext. 211.



Parkinson disease is caused by insufficient formation of dopamine in the substantia nigra.



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Physiotherapy Clinic

If you have ever been in a car accident where another vehicle hit the back of your car, you sprang forward suddenly then backward and overstretched your neck, you may have experienced what is commonly known as "whiplash" where some supporting ligaments in your neck may have been sprained. In severe whiplash, you may have even damaged the muscles, discs and nerves in your neck. You may not realize you have experienced "whiplash" until about 24 hours after the accident.



If you wake up with a stiff neck, headache and pain after a car accident then this might be a whiplash injury. Often, physiotherapy can provide instant relief for those suffering from neck and shoulder pain due to whiplash injury, although several sessions may be needed for a patient to feel pain improvement. These treatments may be a preferable option to drugs which may cause physical dependency.

When physiotherapy is needed to treat neck and shoulder pain, the therapist usually performs specific gentle exercises to soften the

muscles. By gently turning the head and manipulating the area, the physiotherapist can mobilize the muscles that have been tensed in the trauma and provide some pain relief.

An important component of physiotherapy is massage. The therapist will massage the affected area removing the stiffness and improving blood flow to the muscles. This often eliminates the headache as well as the neck pain. Very often, patients experience immediate results.

Neck and shoulder pain can have many causes, although whiplash is the most common. Other causes of neck and shoulder pain are poor posture, particularly for those who work in offices or sit in front of computers all day. This can weaken the ligaments and muscles in the shoulders and neck and cause discomfort. A physiotherapist can treat neck and shoulder pain through massage and manual manipulations and can assist you in correcting your posture problems.

Our licensed physiotherapists will provide you with excellent service guaranteed. Effectiveness of this treatment is one of the primary reasons why patients seek help by physical therapy.

Call Martha Gurley at 478-743-7092 ext 256

