



THE GNI BULLETIN

The Georgia Neurosurgical Institute is a group of Board-certified neurosurgeons dedicated to providing top-level, sophisticated neurosurgical services to our patients with compassionate care and understanding. Our professional surgeons work with each patient as one of their own, deserving time, attention, and respect.

The senior member of Georgia Neurosurgical Institute is **Dr. Joe Sam Robinson, Jr.** Dr Robinson received his doctorate in medicine from the University of Virginia in 1971. He completed internship and general surgery training at Emory University in Atlanta and neurosurgical residency at Northwestern University, Chicago in 1978. From 1979 to 1981, he served as Robert Wood Johnson Clinical Scholar at Yale University before returning to Macon, GA. **Dr. Kim W. Johnston** received his medical degree from the Medical College of Georgia in Augusta in 1981. Following a general surgery internship at the Medical College in Augusta, he completed a residency in Neurosurgery at the same Institution in 1987. **Dr. Hugh F. Smisson, III**, received his Doctorate in Medicine from the Medical College of Georgia in Augusta in 1986. Interning in the Department of Surgery there, Dr. Smisson went on to complete neurosurgical residency in 1992. **Dr. Arthur A. Grigorian** is a native of Eastern Europe. He received his Medical Doctorate at Yerevan State Medical Institute in Armenia in 1987 and completed neurosurgical residency at the University of Medicine and Dentistry of New Jersey in 1999. From 1999 to 2000, he passed cerebro-vascular fellowship at Albert Einstein College of Medicine, NY. **Dr. Richard A. Rowe** finished medical school at Emory University School of Medicine in

1987 and completed Neurosurgical residency at the Medical College of Georgia in Augusta in 1994. He served as skull base neurosurgery instructor and Assistant Professor of Neurosurgery at the University of Arkansas before joining our group in 2009.



All our patients undergo a methodical and individual evaluation, including an attentive review of the medical history and the results of imaging studies.

We provide guidance regarding the optimal treatment options for our patients and encourage them to take an active role in decision-making regarding their own care.

In cases where spine surgery is required, such as patients with herniated lumbar disks, spine canal stenosis or ankylosing spondylitis, we provide advanced surgical treatment and use minimally invasive techniques whenever possible.

Patients with brain disorders, such as tumors, are served with cutting-edge surgical care. They undergo thorough investigation to determine the best individual treatment for their cases.

This bulletin is designed to update you about the clinical research productivity of Georgia Neurosurgical Institute.

Our website: www.ganeurosurg.org



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ACADEMIC PAPERS

Our institute is involved in the teaching process of medical students and shares knowledge and experience with visiting doctors. We conduct clinical research related to quality care and efficiency. Our papers are presented at regional seminars and national conferences and are published in highly-ranked peer-reviewed journals in the USA and around the world.



Congress of Neurological Surgeons Annual Meeting

October 16-21 2010
San Francisco, CA.

The following seven digital posters were presented:

Paper Title: Comparison of Pre- and Immediate Post- ACDF Somatosensory Evoked Potentials in Diabetic and Nondiabetic Patients.

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

Paper Title: Opioid Use with a History of Previous Spine Surgery increase the Chance of having Another Spine Surgery.

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

Paper Title: The Impact of Age on Pulmonary Complications in Postoperative Subarachnoid Hemorrhage Patients.

Authors: Walid MS, Sahiner G, Robinson JS, Jr.

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

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

Paper Title: The Management of Cervical Artery Injuries in Acute Cervical Spine Trauma.

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

Paper Title: The Incidence of Arterial Injury in Acute Cervical Spine Trauma.

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

Paper Title: New Grading Scale for Cervical Spondylotic Myelopathy.

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

The abstracts and posters can be accessed online at:

<http://w3.cns.org/university/abstracts/index2.asp>



The Georgia Neurosurgical Institute

50 YEARS OF EXCELLENCE

Since 1954

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American
Association of
Neurological
Surgeons



2011 AANS 79th Annual Scientific Meeting

April 2011

Colorado Convention Center
Denver Colorado.

Georgia Neurosurgical Society 2010 Annual Fall Meeting

November 2010

Atlanta Marriott Buckhead Hotel &
Conference Center
Atlanta, GA.

Four papers will be presented:

Paper Title: Earlier Spine Surgery as a
Marker for Additional Spine Surgery at a
Distant Site

Authors: Walid MS, Abbara M, Tolaymat
A, Robinson JS, Jr.

Paper Title: Drains are Associated with
Increased Risk of Posthemorrhagic Anemia
in Spine Surgery Patients

Authors: Walid MS, Abbara M, Tolaymat
A, Davis J, Waits K, Robinson JS, Jr.

Paper Title: Spinal Cord Stimulation:
Psychological Predictors of Outcome

Authors: Walid MS, Waits K, Etkinson
MM, Scott C, Robinson JS, Jr, Hyer L.

Paper Title: Pseudotumor Cerebri:
Categorical Disease or Spectrum of Disease

Authors: Walid MS, Sanoufa M, Robinson
JS, Jr.

Two oral papers were presented:

M. Sami Walid - The Role of Drains in
Lumbar Spine Fusions.

Coauthors: Abbara M, Tolaymat A, Davis J,
Waits K, Robinson JS, Jr.

Kevin Waits - Spinal Cord Stimulation
Psychosocial Predictors of Outcome.

Coauthors: Walid MS, Etkinson MM, Scott
C, Robinson JS, Jr, Hyer L.

The presentations can be accessed online at
<http://ganeurosurgical.org/speakertalks.html>

Cogmed Conference

September 2010

Naperville, IL.

Dr. Lee Hyer presented:

Cogmed: A Cognitive Rehabilitation
Intervention to Improve Working Memory in
Older Adults.



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Annual Meeting of the American Psychological Association

**August 2010
San Diego, CA.**

Dr. Lee Hyer presented:

Anxiety and Depression: The Truth About
Older Adults.

Cognitive Retraining in the 21st Century.

End-of-Life Care Patterns of the Oldest Old,
with and without Neuropsychiatric
Conditions, in Long Term Care.



63rd Annual Meeting of the Gerontological Society of America

**November 2010
New Orleans, LA.**

Dr. Lee Hyer presented:

From the NHHS and NHHCS Datasets:
Trends in Hospice-Palliative Care Services
in LTC from 2004 to 2007.

Patient Characteristics of the 2007 National
Home and Hospice Care Survey.

Personality and Adjustment to Assisted care
Living.

PUBLICATIONS

Walid MS, Robinson JS III, Robinson E,
Brannick BB, Ajjan M, Robinson JS Jr.
Comparison of outpatient and inpatient
spine surgery patients with regards to
obesity, comorbidities and readmission for
infection. J Clin Neurosci. 2010
Dec;17(12):1497-8.

Barth ACM, Walid MS, Mancin KF,
Faircloth LR, Robinson JS, Jr. Improved
Efficiency in the Process of Discharging
Patients. AANS Neurosurgeon
2010;19(3):36-39.

Walid MS, Sanoufa M. Pathologic fracture
of the odontoid as the presenting sign of
metastatic cancer. Indian J Cancer. 2010
Oct-Dec;47(4):475.

Walid MS, Zaytseva N. How does chronic
endocrine disease affect cost in spine
surgery? World Neurosurg. 2010
May;73(5):578-81.

Walid MS, Zaytseva N. The impact of
chronic obstructive pulmonary disease and
obesity on length of stay and cost of spine
surgery. Indian J Orthop. 2010
Oct;44(4):424-7.

In-press Papers

Walid MS, Robinson JS, Jr. Economic
Impact of Comorbidities in Spine Surgery.
JNS: Spine.



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Robinson JS, Jr, Walid MS, Hyun S, O'Connell R, Menard C, Bohleber B. Computational Modeling of HHH Therapy and Impact of Blood Pressure and Hematocrit. *World Neurosurgery*.

Walid MS, Sanoufa M, Robinson JS, Jr. The Impact of Age and Body Mass Index on Cost of Spine Surgery. *Journal of Clinical Neuroscience*.

Walid MS, Robinson E, Robinson JS, Jr. Higher Comorbidity Rates in Unemployed Patients May Significantly Impact Cost of Spine Surgery. *Journal of Clinical Neuroscience*.

Accepted Papers

Walid MS, Sahiner G, Robinson C, Robinson JS III, Ajjan M, Robinson JS, Jr. Postoperative Fever Discharge Guidelines Increase Hospital Charges Associated with Spine Surgery. *Neurosurgery*.

Walid MS, Barth ACM, Robinson JS, Jr. Viability of U.S. Stroke centers: a tension between patient care and financial stability. *AANS Neurosurgeon*.

Walid MS, Abbara M, Tolaymat A, Robinson JS, Jr. Occult Vit B12 Deficiency in Cervical Spine Surgery Patients. *Neuroscience & Medicine*.

Hyer L & Yeager C (2010). Post-Traumatic Stress Disorder and its Treatment at Late Life. In: L. Poon & J. Cohen-Mansfield (Eds). *Understanding the oldest old*. London: Oxford University Press.

Hyer L & Yeager C (2010). Late Life Psychotherapy: Challenges and Opportunities to Enhance Wellbeing in the Oldest Old. In: L. Poon & J. Cohen-Mansfield (Eds). *Understanding the oldest old*. London: Oxford University Press.

Hyer L, Yeager C, Scott C, & Hyer R (2010). Psychotherapy with Older Adults: Importance of Assessment. In: P. Lichtenberg (Ed). *Handbook of assessment for older adults*. Guilford: New York, NY.

Hyer L & Yeager C (2010). Empirically Supported Treatments of Post-Traumatic Stress Disorder for Older Adults. In: G Beck (Ed) *PTSD: Empirically Supported Treatments*. Guilford Press: New York, NY.

Hyer K, Babcock C, Lucas A, Robinson L, Hyer L (2010). Multi-professional team care (257-271). In: V. irth, D. Wieland, & M. Dever-Bumba (Eds). *Case-based geriatrics: A clinical Approach*. McGraw Hill: New York, NY.

Menza M, Dobkin R, Marin H, Gara M, Bienfait K, Dicke A, Comella C, Cantor C, Hyer L (2010). Treatment of insomnia: A controlled trial of Eszopiclone and placebo. *Archives of General Psychiatry*, 25, 1708-1714.

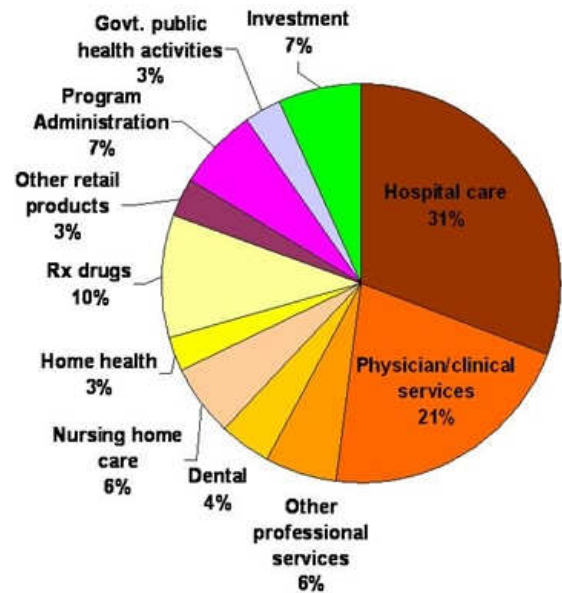
Yeager C, Hyer L, Hobbs B, Coyne A (2010). Alzheimer's disease and vascular dementia: The complex relationship between diagnosis and caregiver burden. *Issues in Mental Health Nursing*. ID-443810.



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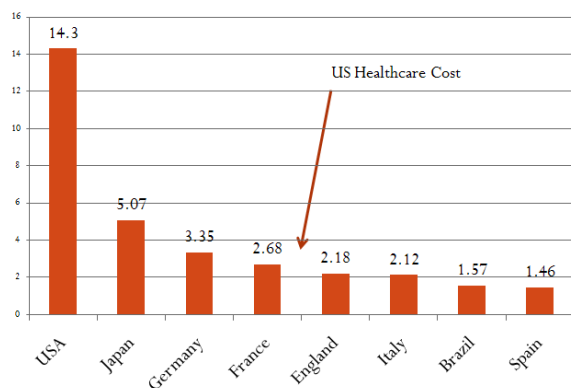
December 9, 2010 – Dr. Joe Sam Robinson presented “Promoting Efficiency in Tertiary Healthcare Centers – Physician Role” at the Grand Rounds of the Department of Surgery, Mercer School of Medicine, Macon GA.



Key Points of the Presentation:

- Human life is sacred and the healthcare system is holy.
- The healthcare system expenditures are high (\$2.3 trillion in 2008) and less and less money is available (Medicare cuts).
- We need to improve efficiency in the healthcare system and promote cost awareness among physicians.

GDP (Trillion)



DR. JOE SAM ROBINSON, MD



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October 28, 2010 - Dr. Lee Hyer presented "Anxiety and Depression at Late Life: Importance of Cognition" at the Grand Rounds of the Department of Psychiatry and Health Behavior, Mercer School of Medicine, Macon GA.

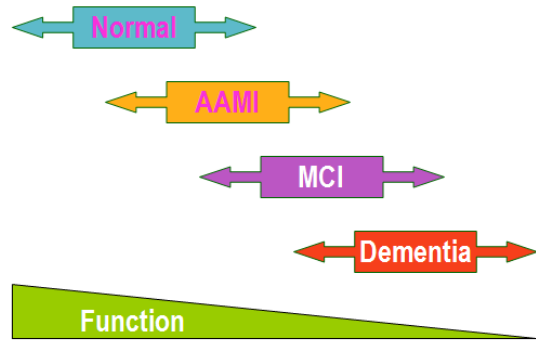
Key Points of the Presentation:

Aging has become a complex and exciting topic. People are currently living longer and, as they do, issues that were not as apparent in previous times are now preponderant.

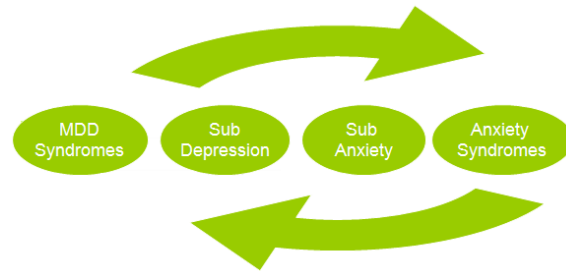
This presentation addressed the importance of a new view of aging and the importance of cognitive health as well as affect-based challenges. The taxonomies of aging have changed - no longer are they simple ideas of dementia or not, depression or not, or anxiety or not. Life is lived on a continuum and people make choices across their lifespan that have a powerful impact on their later life.

This presentation elucidated the importance of the more egregious problems at late life (dementia, depression and anxiety) and provides clinical data for interventions and care.

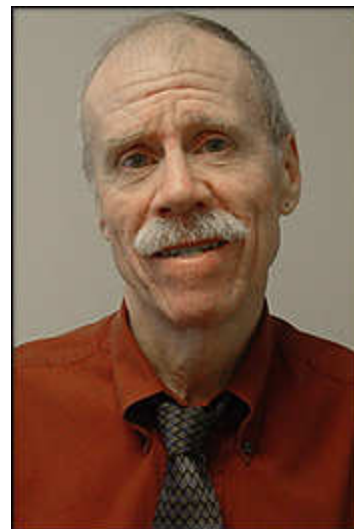
Continuum of Cognitive Decline



AAMI: Age-associated memory impairment. MCI: Mild cognitive impairment.



MDD: Major depressive disorder.



DR. LEE HYER, PHD



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SELECT ABSTRACT

Title: Economic Impact of Comorbidities in Spine Surgery

Authors: MS Walid, JS Robinson, Jr.

Introduction: Comorbidities in spine surgery patients reasonably may be factors that increase healthcare cost. In order to verify this hypothesis, we conducted the following study.

Methods: Major comorbidities and age-adjusted Charlson Comorbidity Index scores were retrospectively analyzed for 816 spine surgery patients operated between 2005 and 2008 and their treatment costs (hospital charges) at our institution were assessed with the help of SPSS v16. The sample was collected by a nonmedical staff (hired at the beginning of 2006). Patients underwent one of three most common types of spine surgery: lumbar microdiscectomy (20.5%), anterior cervical decompression and fusion (60.3%) and lumbar decompression and fusion (19.2%). Patients were nearly equally divided by gender (53.0% females and 47.0% males), and 78.0% Caucasians vs. 21.0% African Americans and the rest of mixed or unidentified race. The average age was 54 years with a standard deviation of 14 years.

Results: There were significant differences in the prevalence of major comorbidities between males and females and between severely obese and non-severely-obese patients. The impact of comorbidities on the cost of spine surgery was more prominent in older patients and an additive effect from some comorbidities was recorded in various types of spine surgery. For instance, in the

ACDF group, female patients with severe obesity and diabetes mellitus had significantly higher hospital charges than those with one or none of these two conditions (\$34,943 vs. \$25,633; \$25,826; \$25,153; $P < .05$). In the LDF group, female patients with diabetes mellitus and history of depression had significantly higher hospital charges than those with one or none of these two conditions (\$65,782 vs. \$53,504; \$55,990; \$52,249; $P < .05$). Significant difference was also found in hospital cost (\$16,472, $p < 0.01$, 32% increase over baseline) in the LDF group between patients with the lowest and highest scores of Charlson Index

Conclusions: Comorbidities additively increase hospital cost for spine surgery patients and should be considered in payment arrangements.

Read the full text paper at the next issue of the Journal of Neurosurgery: Spine

Journal of Neurosurgery: Spine

