

Henry Ford Health System Publication List February 2008

This is a bibliography of journal articles published by Henry Ford Health System personnel. A search was compiled in PubMed during the month of February 2008, and then imported into EndNote for formatting.

Please [contact us](#) if you would like to receive this publication list via email. If the full-text of the article is not available, you can request it from the Sladen Library by clicking on the [Article Request Form](#) or calling us at (313) 916-2550.

You can access this page at <http://www.henryfordconnect.com/sladen.cfm?id=436>

ANESTHESIOLOGY

Frogel, J., L. Soranno, et al. (2008). "Aortic insufficiency confounding transesophageal echocardiograph assessment of left ventricular diastolic function." *Anesth Analg* **106**(2): 409-11. [PDF Full-Text](#)

Henry Ford Hospital, Department of Anesthesiology, 2799 West Grand Blvd, Detroit, Michigan, USA. jfrogel1@hfhs.org

...

BIOSTATISTICS

Heath, E. I., M. W. Kattan, et al. (2008). "The effect of race/ethnicity on the accuracy of the 2001 Partin Tables for predicting pathologic stage of localized prostate cancer." *Urology* **71**(1): 151-5. [PDF Full-Text](#)

Barbara Ann Karmanos Cancer Institute, Department of Hematology and Oncology, Wayne State University, 4100 John R, 4 HWCRC, Detroit, MI 48201, USA. heathe@karmanos.org

OBJECTIVES: To test the accuracy of the 2001 Partin Tables in African American men who underwent radical prostatectomy at multiple centers throughout the United States. **METHODS:** We compiled a large multiethnic cohort of men (n = 3748) treated with radical prostatectomy at multiple sites, including all of the sites of the Department of Veterans Affairs-based Shared Equal Access Regional Cancer Hospital (SEARCH) database (n = 1524), Wayne State University (n = 1305), the University of Texas Health Science Center (n = 522), and the Henry Ford Hospital (n = 397). We evaluated the accuracy of the 2001 Partin Tables using area under the receiver operator characteristic curve (AUC) separately among African American and white men. **RESULTS:** African American men (n = 1188, 32%), despite being more likely to have clinical Stage T1c disease (56% versus 47%, chi-square P <0.001), had higher preoperative PSA values (9.1 versus 7.7 ng/mL, rank-sum P <0.001) and were more likely to have higher-grade disease on diagnostic biopsy (chi-square P = 0.005). Despite these differences in baseline clinical characteristics, the 2001 Partin Tables performed equally well in both racial groups. Specifically, there were no differences in the AUC for African American and white men for predicting organ-confined disease (AUC 0.73 versus 0.72; P = 0.56), extraprostatic extension (AUC 0.62 versus 0.62; P = 0.99), or seminal vesicle invasion (AUC 0.77 versus 0.79; P = 0.53). **CONCLUSIONS:** These data lend further support to the idea that although baseline differences between the races existed that may underlie an overall more aggressive disease among African American men, for the individual patient, race is not valuable for prognostication.

...

2799 W Grand Blvd, K-17
Detroit, MI 48202

henryfordconnect.com/sladen
sladen@sladen.hfhs.org
313 916-2550 voice
313 874-4730 fax

Hours
8:30am-9:00pm M-Th
8:30am-5:00pm F
9:00am-1:00pm Sa

BIostatISTICS

Rybicki, B. A., C. Neslund-Dudas, et al. (2008). "Polycyclic Aromatic Hydrocarbon-DNA Adducts in Prostate and Biochemical Recurrence after Prostatectomy." *Clin Cancer Res* **14**(3): 750-7. [PDF Full-Text](#)

Authors' Affiliations: Departments of Biostatistics and Research Epidemiology and Surgical Pathology, Henry Ford Health System.

PURPOSE: DNA adduct levels may be influenced by metabolic activity, DNA repair capabilities, and genomic integrity, all of which play a role in cancer progression. EXPERIMENTAL DESIGN: To determine if elevated DNA adducts are a marker for prostate cancer progression, we measured polycyclic aromatic hydrocarbon-DNA adducts by immunohistochemistry in prostate cells of 368 surgical prostate cancer patients treated at the Henry Ford Hospital in Detroit, Michigan, between September 1999 and July 2004. Patients were followed up to 5 years after surgery with relative risk for biochemical recurrence (BCR) estimated with a Cox proportional hazards model that adjusted for standard clinical risk factors. RESULTS: At 1 year of follow-up, patients with adduct levels above the median in tumor cells [hazard ratio (HR), 2.40; 95% confidence interval (95% CI), 1.10-5.27] and nontumor cells (HR, 3.22; 95% CI, 1.40-7.39) had significant increased risk of BCR, but these HRs decreased to 1.12 (95% CI, 0.68-1.83) and 1.46 (95% CI, 0.89-2.41) in tumor and nontumor cells at 5 years postsurgery. When we restricted our analysis to patients with advanced-stage (III+) disease, those with high adduct levels in either tumor (53.5% versus 30.2%; $P = 0.07$) or nontumor (55.2% versus 28.6%; $P = 0.02$) cells had BCR rates almost 2-fold higher. In race-stratified analyses, the greatest risk of BCR associated with high adduct levels (in nontumor cells) was for African American patients younger than 60 years old (HR, 3.79; 95% CI, 1.01-14.30). CONCLUSIONS: High polycyclic aromatic hydrocarbon-DNA adduct levels in nontumor prostate cells are most strongly associated with BCR between 1 and 2 years after surgery and in patient subsets defined by younger age, advanced tumor stage, and African American race.

...

CARDIOLOGY

Al-Mallah, M., O. Zuberi, et al. (2008). "Positive troponin in diabetic ketoacidosis without evident acute coronary syndrome predicts adverse cardiac events." *Clin Cardiol* **31**(2): 67-71. [PDF Full-Text](#)

Heart and Vascular Institute, Henry Ford Hospital, 2799 West Grand Boulevard, Detroit, MI 48202, USA. hkim1@hfhs.org

BACKGROUND: Elevated troponin I has been associated with increased mortality in critically ill patients without acute coronary syndrome (ACS). However, the prognostic significance of troponin elevation in patients with diabetic ketoacidosis (DKA) without evident ACS has not been studied. METHODS: Retrospective study of all patients admitted to a U.S. tertiary center between 01/98 and 12/00 with DKA and had troponin I level measured. Patients with evidence of ACS or who met the American College of Cardiology/European Society of Cardiology (ACC/ESC) definition for myocardial infarction were excluded. Baseline characteristics, cardiac evaluation and 2 year major adverse coronary event (MACE) rate were compared between patients with positive and negative troponin. RESULTS: Ninety-six patients fulfilled the inclusion criteria of this study, 26 had positive troponin. There were no differences in baseline characteristics between the two groups. After a 2 year follow-up, there was significantly increased mortality in patients with elevated troponin (50.0% versus 27.1%, hazard-ratio (HR) 2.3, 95% confidence interval (CI) 1.2-4.8, $p = 0.02$). Patients with elevated troponin also had significantly increased MACE rate at 2 years (50.0% versus 28.6%, HR 2.6, 95% CI 1.3-5.3, $p = 0.007$) driven primarily by mortality. Using Cox Proportional Hazard Analysis, elevated troponin was a predictor of increased MACE after adjusting for confounding variables. (Adjusted HR 2.3, 95% CI 1.1-4.6, $p = 0.02$) CONCLUSIONS: Elevated troponin I in diabetic patients admitted with DKA identifies a group at very high risk for future cardiac events and mortality. Whether cardiac risk stratification of these patients will improve long term outcome remains to be studied.

...

CARDIOLOGY

Cavalcante, J. L., M. Al-Mallah, et al. (2008). "The Relationship Between Spontaneous Echocontrast, Transesophageal Echocardiographic Parameters, and Blood Hemoglobin Levels." *J Am Soc Echocardiogr*. **Full Text Not Available/Click for Article Request Form**

Henry Ford Hospital, Heart and Vascular Institute, Detroit, Michigan.

BACKGROUND: Spontaneous echocontrast (SEC) or “smoke” is an intracavitary echocardiographic finding seen in situations of stasis or low blood flow. Increased hematocrit and fibrinogen levels have been associated with SEC in prior studies. Whether low hemoglobin (Hb) levels are an independent predictor of lower prevalence of SEC is a question that remains unanswered. METHODS: A total of 266 transesophageal echocardiographic (TEE) studies were reviewed. Hb levels within 1 month from the TEE study were used as the baseline Hb before the study (75% had Hb on the same day of the TEE study). Clinical characteristics and demographics, and all relevant TEE variables including left atrial (LA) size, LA appendage emptying velocity (LAAEV), and presence or absence of SEC, were obtained using electronic patient information system search of TEE reports. Multivariate regression analysis was performed to identify the independent predictors of SEC. RESULTS: Two groups were analyzed SEC (n = 45) or no SEC (n = 221). Only 7 patients had both LA and right atrial SEC. On univariate analysis, male sex, greater age, prior coronary artery bypass grafting, low ejection fraction (<50%), atrial fibrillation, renal failure, aortic atheroma, dilated LA, and decreased LAAEV (<40 cm/s) predicted SEC whereas low Hb levels were significantly associated with a lower prevalence of SEC (P = .01). However, after adjusting for clinical and echocardiographic variables, low Hb levels did not independently predict absence of SEC. Low LAAEV (P < .001), dilated LA (P = .001), and prior statin therapy (P = .001) were the most powerful independent predictors of SEC. CONCLUSION: A low Hb level is not associated with a lower prevalence of SEC when controlled for clinical and echocardiographic variables. Our study confirms the importance of LAAEV and dilated LA in determining presence of SEC, but also raises interesting questions of the relationship between statins and SEC that warrant further study.

...

CARDIOLOGY

Siddiqui, R. A. and S. Hans (2008). “Double inferior vena cava filter implantation in a patient with a duplicate inferior vena cava.” *J Invasive Cardiol* **20**(2): 91-2. [PDF Full-Text](#)

Cardiac Cath Lab, Henry Ford Macomb Hospital, 15855 Nineteen Mile Road, Clinton Township, MI, 48038, USA. rsiddiq2@hfhs.org

...

DERMATOLOGY

Chong, B. F., A. J. Wilson, et al. (2008). “Immune function abnormalities in peripheral blood mononuclear cell cytokine expression differentiates stages of cutaneous T-cell lymphoma/mycosis fungoides.” *Clin Cancer Res* **14**(3): 646-53. [PDF Full-Text](#)

Authors’ Affiliations: Department of Dermatology, Henry Ford Hospital, Detroit, Michigan.

PURPOSE: Mycosis fungoides (MF) is a cutaneous T-cell lymphoma (CTCL) characterized by neoplastic skin-homing T cells. To better understand the immunopathogenesis of MF, we analyzed the functional ability of peripheral blood mononuclear cells (PBMC) from early and late MF/CTCL patients to express cytokine genes. In late stage MF/CTCL, patients were separated into those with blood involvement (+B) and without blood involvement (-B). EXPERIMENTAL DESIGN: We analyzed T(H)1 (interleukin 2 (IL-2), IFN-gamma), T(H)2 (IL-4, IL-5, IL-10, IL-13), and T(H)17 (IL-17) cytokine gene expression from activated PBMCs from normal (n = 12), psoriasis (n = 6), early MF/CTCL (n = 11), and late MF/CTCL+B (n = 4) and MF/CTCL-B (n = 3) by quantitative real-time PCR. RESULTS: PBMCs from early MF/CTCL and psoriasis showed higher induction of IL-2, IL-4, and IFN-gamma genes than those from normal and late MF/CTCL-B and MF/CTCL+B (P < 0.05) in descending order. PBMCs from late MF/CTCL-B exhibited generally the highest level of IL-5, IL-10, IL-13, and IL-17 expression compared with the other groups. PBMCs from early MF/CTCL and late MF/CTCL-B had similarly elevated IL-13 and IL-17. Of all groups, PBMCs from late MF/CTCL+B had the lowest levels of IL-2 (P < 0.05), IL-4, IFN-gamma, IL-13, and IL-17. CONCLUSIONS: The different pattern of cytokine gene expression suggests a change in immune function in MF/CTCL from early MF/CTCL to late MF/CTCL-B to late MF/CTCL+B. These stages are consistent with localized disease associated with an anti-tumor immune response and late MF/CTCL associated with a loss of immune function mediated by malignant T cells that share regulatory T cell-like properties.

...

DERMATOLOGY

Kouba, D. J., E. F. Fincher, et al. (2008). "Crescentic Complex Closure of Perialar Upper Lip Defects." *Dermatol Surg*. Epub Ahead of Print. [PDF Full-Text](#)

Department of Dermatology of the Henry Ford Health System, Detroit, Michigan, USA.

...

DERMATOLOGY

Lim, H. W. (2008). "Sun exposure and vitamin D level." *J Am Acad Dermatol* **58**(3): 516-517. [PDF Full-Text](#)

Department of Dermatology, Henry Ford Hospital, Detroit, Michigan.

...

DERMATOLOGY

Mahmoud, B. H., C. L. Hexsel, et al. (2008). "Effects of Visible Light on the Skin." *Photochem Photobiol*. **Full Text Not Available/Click for Article Request Form**

Multicultural Dermatology Center, Department of Dermatology, Henry Ford Hospital, Detroit, MI, USA.

Electromagnetic radiation has vast and diverse effects on human skin. Although photobiologic studies of sunlight date back to Sir Isaac Newton in 1671, most available studies focus on the UV radiation part of the spectrum. The effects of visible light and infrared radiation have not been, until recently, clearly elucidated. The goal of this review is to highlight the effects of visible light on the skin. As a result of advances in the understanding of skin optics, and comprehensive studies regarding the absorption spectrum of endogenous and exogenous skin chromophores, various biologic effects have been shown to be exerted by visible light radiation including erythema, pigmentation, thermal damage and free radical production. It has also been shown that visible light can induce indirect DNA damage through the generation of reactive oxygen species. Furthermore, a number of photodermatoses have an action spectrum in the visible light range, even though most of the currently available sunscreens offer, if any, weak protection against visible light. Conversely, because of its cutaneous biologic effects, visible light is used for the treatment of a variety of skin diseases and esthetic conditions in the form of lasers, intense pulsed light and photodynamic therapy.

...

DIAGNOSTIC RADIOLOGY

Elliika, S., S. Payne, et al. (2008). "Acute calcific tendinitis of the longus colli: an imaging diagnosis." *Dentomaxillofac Radiol* **37**(2): 121-4. [PDF Full-Text](#)

*Correspondence to: Rajan Jain, Senior Staff, Department of Radiology, Division of Neuroradiology, Henry Ford Health Systems, 2799 West Grand Blvd, Detroit 48202, MI, USA. rajanj@rad.hfh.edu.

Acute calcific retropharyngeal tendinitis or longus colli tendinitis is an uncommon benign condition presenting as acute neck pain. Clinically, it can be misdiagnosed as retropharyngeal abscess, traumatic injury, or infectious spondylitis. The diagnosis is made radiographically by calcification anterior to C1-C2 and prevertebral soft-tissue swelling. We present two cases of this uncommon condition to illustrate the classic findings on CT and MRI. In addition to the typical calcifications anterior to C1-C2, we detected a retropharyngeal effusion in both patients and effusions involving both lateral atlantoaxial joints in one patient, which to our knowledge has not been published in the literature. In both patients, the correct diagnosis was established by prospective review of the radiographic studies. Recognition of the pathognomonic imaging appearance allows for easy diagnosis preventing unnecessary tests and treatment.

...

HYPERTENSION & VASCULAR RESEARCH

Ardanaz, N., W. H. Beierwaltes, et al. (2008). "Distinct hydrogen peroxide-induced constriction in multiple mouse arteries: potential influence of vascular polarization." *Pharmacol Rep* **60**(1): 61-7. [PDF Full-Text](#)

Hypertension and Vascular Research Division, Henry Ford Health System, 2799 West Grand Blvd., Detroit, MI 48202-2689, USA. ppagano1@hfhs.org.

It is a matter of controversy whether the reactive oxygen species hydrogen peroxide (H₂O₂) contributes to tone in the vasculature as a vasodilator or vasoconstricting factor. To address this, we hypothesized that H₂O₂ can constrict quiescent, non-precontracted blood vessels, but that the contractile response may be different across various vessel beds. As this variable response may be related to the quiescent state of polarization, we further tested whether partial KCl depolarization would unmask or potentiate H₂O₂-induced constriction. We harvested thoracic and abdominal aorta, the carotid and superior mesenteric artery from mice and placed them in myograph systems to measure contractile responses. Under quiescent conditions without pre-contraction, we found that H₂O₂-contracted abdominal aorta with a peak of 21 +/- 4.9% of the reference constriction to 100 mM KCl (p < 0.05), the thoracic aorta contracted by 9.1 +/- 3.6% (p < 0.05), the carotid artery contracted by 5.1 +/- 1.9% (p < 0.05), but there was no contraction in the mesenteric artery at any concentration of H₂O₂ tested in the quiescent state. If the quiescent vessels were then partially depolarized using 30 or 100 mM KCl, we found a significant potentiation of the contractile response to H₂O₂ of 3-7 fold in each of the abdominal, thoracic and carotid vessels, and an unmasking of a significant (71 +/- 6.9%, p < 0.05) contractile response to H₂O₂ in the mesenteric artery. Thus, we found large variations in the ability of H₂O₂ to constrict these quiescent arteries, but partial KCl depolarization either significantly exaggerated the H₂O₂-induced constriction, or in the otherwise refractory mesenteric, revealed an H₂O₂-provoked vasoconstriction. Thus, H₂O₂ is a vasoconstrictor in quiescent or partially depolarized vessels. We conclude that H₂O₂ elicits distinct constrictor effects across different vascular beds, and this may be due to their underlying state of polarization.

...

HYPERTENSION & VASCULAR RESEARCH

Li, X. C. and J. L. Zhuo (2008). "Intracellular angiotensin II induces in vitro transcription of TGF- β 1, MCP-1 and NHE3 mRNAs in rat renal cortical nuclei via activation of nuclear AT1 receptors." *Am J Physiol Cell Physiol*. Epub Ahead of Print. [PDF Full-Text](#)

Division of Hypertension and Vascular Research, Henry Ford Hospital, Detroit, Michigan, United States.

The present study tested the hypothesis that intracellular angiotensin II (Ang II) directly induces transcriptional effects by stimulating AT1 receptors in the nucleus of rat renal cortex. Nuclei were freshly isolated and transcriptional responses to Ang II were studied using in vitro transcription assays and RT-PCR. High power phase contrast micrographs showed an intact envelop encircling the nuclei, which were strongly stained by the DNA marker DAPI but not by the membrane or endosomal markers. [(125)I]-Val(5)-Ang II receptor binding confirmed a predominance of AT1 receptors, whereas RT-PCR showed that AT1a mRNA expression was 3-fold greater than AT1b receptor mRNAs in the nuclei. Ang II increased nuclear [alpha-(32)P]CTP incorporation in a concentration-related manner and the effects were confirmed by autoradiography and electrophoresis. Ang II markedly increased in vitro transcription of mRNAs for TGF-beta1 by 143% (p<0.01), MCP-1 by 89% (p<0.01), and NHE-3 by 110% (p<0.01). These nuclear effects of Ang II were completely blocked by the AT1 receptor antagonist losartan (p<0.01). By contrast, Ang II had no effects on angiotensinogen and GAPDH mRNA expression. Since these transcriptional effects of Ang II in the nuclei were induced by Ang II in the absence of membrane receptor-mediated signaling and completely blocked by losartan, we concluded that Ang II may directly stimulate nuclear AT1a receptors to induce transcriptional responses that are associated with epithelial sodium transport, cellular growth, and proinflammatory cytokines. Key words: angiotensin II, in vitro RNA transcription, nuclear receptors, RT-PCR, sodium transport.

...

HYPERTENSION & VASCULAR RESEARCH

Li, X. C. and J. L. Zhuo (2008). "Nuclear factor-kappaB as a hormonal intracellular signaling molecule: focus on angiotensin II-induced cardiovascular and renal injury." *Curr Opin Nephrol Hypertens* **17**(1): 37-43. [PDF Full-Text](#)

Laboratory of Receptor and Signal Transduction, Division of Hypertension and Vascular Research, Department of Internal Medicine, Henry Ford Hospital, and Department of Physiology, Wayne State University School of Medicine, Detroit, Michigan 48202, USA.

PURPOSE OF REVIEW: Nuclear factor-kappaB (NF-kappaB) has recently emerged as a novel intracellular signaling molecule for hormones, cytokines, chemokines, and growth factors. The purpose of this article is to highlight the role of NF-kappaB as an intracellular signaling for angiotensin II and clinical perspectives of targeting NF-kappaB signaling in treating hypertensive and renal diseases. RECENT FINDINGS: A selective review of recently published work provides strong evidence that activation of NF-kappaB signaling by angiotensin II mediates the detrimental effects of angiotensin II on the transcription of cytokines, chemokines and growth factors. Angiotensin II stimulates AT1 receptors to activate NF-kappaB signaling via both canonical (classical) and noncanonical (alternative) pathways. Intracellular angiotensin II may also induce NF-kappaB activation and transactivation of target genes. Nearly 800 NF-kappaB inhibitors have been described, but none has advanced to clinical trials. However, angiotensin converting enzyme inhibitors and AT1 blockers are beneficial in treating angiotensin II-induced hypertensive and renal injury in part by inhibiting NF-kappaB activation. SUMMARY: Angiotensin II induces the transcription of cytokines, chemokines and growth factors, leading to target organ injury. These responses to angiotensin II are caused primarily by AT1 receptor-activated NF-kappaB signaling. Targeting NF-kappaB signaling with angiotensin converting enzyme inhibitors, AT1 blockers, and specific NF-kappaB inhibitors may represent a novel approach in treating angiotensin II-induced hypertensive and renal diseases.

...

INTERNAL MEDICINE

Kanjanauthai, S., T. Kanluen, et al. (2008). "Tension Chylothorax: A Rare Life Threatening Entity After Pneumonectomy." Heart Lung Circ. **Full Text Not Available/Click for Article Request Form**

Department of Internal Medicine, Henry Ford Hospital, 2799 West Grand Blvd, CFP-1, Detroit, MI, United States.

Chylothorax is an accumulation of chyle in the pleural space due to disruption or blockage of the thoracic duct or its lymphatic tributaries. The thoracic duct carries chyle, which is defined as lymphatic fluid of intestinal origin, to the bloodstream. Chylothorax can occur due to traumatic or non-traumatic etiologies. Chylothorax is a known complication of thoracic surgery and can occur after significant trauma. However, tension chylothorax is an extremely rare and life threatening complication after thoracic surgery. We describe a patient who developed tension chylothorax 2 weeks after a left pneumonectomy was performed. Early recognition and prompt treatment of this life threatening entity are essential.

...

MEDICAL GENETICS

Pindolia, K. R. and B. Wolf (2008). "Candidate Disorders for Gene Therapy: Newborn Screening Facilitates Ascertainment of Presymptomatic Individuals." Hum Gene Ther. **Full Text Not Available/Click for Article Request Form**

Department of Medical Genetics, Henry Ford Hospital and Center for Molecular Medicine and Genetics, Wayne State University School of Medicine, Detroit, MI 48202.

...

NEUROSURGERY

Varelas, P. N. (2008). "How I Treat Status Epilepticus in the Neuro-ICU." Neurocrit Care. **Full Text Not Available/Click for Article Request Form**

Department of Neurology, Henry Ford Hospital, K-11, 2799 West Grand Blvd, Detroit, MI, 48202, USA, Varelas@neuro.hfh.edu.

Status epilepticus still remains a formidable adversary to neurointensivists. Although the majority of cases admitted to the Neuro-ICU are easily controlled with one or two antiepileptic drug defense lines, several cases become refractory and end up receiving general anesthetics for days or weeks with significant morbidity. Treatment algorithms have been published and should be followed, but in many cases they are inadequate because, especially in the distal branches of the treatment tree, are based on anecdotal data or small series of patients. In addition, a double-blind, randomized-controlled study in status has not been done for many years and solid data are lacking for the newer antiepileptics. Therefore, in the moderately to severely refractory cases, status treatment is based on personal previous experience and becomes an art more than a science. In this review of a difficult case, we discuss some fine details of the treatment provided and emphasize the multidisciplinary approach that should be followed including involvement of neurointensivists, epileptologists, electroencephalographers, and neurosurgeons.

...

NEUROSURGERY

Wu, H., D. Lu, et al. (2008). "Simvastatin-Mediated Upregulation of VEGF and BDNF, Activation of the PI3K/Akt Pathway, and Increase of Neurogenesis Are Associated with Therapeutic Improvement after Traumatic Brain Injury." *J Neurotrauma* 25(2): 130-9. **Full Text Not Available/Click for Article Request Form**

Department of Neurosurgery, Henry Ford Health System, Detroit, Michigan., Department of Neurology, West China Hospital, Sichuan University, Chengdu, P.R. China.

ABSTRACT This study was undertaken to evaluate the effect of simvastatin, a cholesterol-lowering agent, on the Akt-mediated signaling pathway and neurogenesis in the dentate gyrus (DG) of the hippocampus in rats after traumatic brain injury (TBI). Adult male Wistar rats were divided into three groups: (1) sham group (n = 8); (2) saline control group (n = 40); and (3) simvastatin-treated group (n = 40). Controlled cortical impact (CCI) injury was performed over the left parietal lobe. Simvastatin was administered orally at a dose of 1 mg/kg starting at day 1 after TBI and then daily for 14 days. Bromodeoxyuridine (BrdU) was injected intraperitoneally into rats. A modified Morris Water Maze (WM) task was performed between 31 and 35 days after treatment to test spatial memory (n = 8/group). Animals were sacrificed at 1, 3, 7, 14, and 35 days after treatment (n = 8/group/time point). Western blot was utilized to investigate the changes in the Akt-mediated signaling pathway. Enzyme-linked immunosorbent assay (ELISA) analyses were employed to measure vascular endothelial growth factor (VEGF) and brain-derived neurotrophin factor (BDNF) expression. Immunohistochemical and fluorescent staining were performed to detect the BrdU- and neuronal nuclei (NeuN)/BrdU-positive cells. Our data show that simvastatin treatment increases phosphorylation of v-akt murine thymoma viral oncogene homolog (Akt), glycogen synthase kinase-3beta (GSK-3beta), and cAMP response element-binding proteins (CREB); elevates the expression of BDNF and VEGF in the DG; increases cell proliferation and differentiation in the DG; and enhances the recovery of spatial learning. These data suggest that the neurorestorative effect of simvastatin may be mediated through activation of the Akt-mediated signaling pathway, subsequently upregulating expression of growth factors and inducing neurogenesis in the DG of the hippocampus, thereby leading to restoration of cognitive function after TBI in rats.

...

OTOLARYNGOLOGY

Seidman, M. D. (2008). "Anterior transcanal tympanoplasty: a novel technique to repair anterior perforations." *Otolaryngol Head Neck Surg* 138(2): 242-5. [PDF Full-Text](#)

Department of Otolaryngology-Head and Neck Surgery, Henry Ford Health System, Bloomfield, MI 48322, USA. mseidma1@hfhs.org

OBJECTIVE: To report a novel, minimally invasive technique for anterior tympanic membrane (TM) perforation repair. **STUDY DESIGN:** A transcanal repair of the anterior TM was performed on 45 patients. **METHODS:** A total of 689 patients with chronic suppurative otitis media underwent surgical intervention; of these, 45 patients with isolated anterior TM perforations underwent an anterior tympanoplasty. This approach is similar to a transcanal approach for small posterior perforations; an anterior rather than a posterior flap is raised. **RESULTS:** Perforations ranged from 20 to 50 percent in size. Preoperative air-bone gaps ranged from 5 to 51 dB and averaged 25 dB. Postoperative air-bone gaps ranged from 0 to 33 dB and averaged 14 dB. Of 45 patients, 40 (88%) had closure of their perforations. Data from 1- to 10-year follow-up are provided. **CONCLUSIONS:**

The anterior transcanal tympanoplasty is a minimally invasive technique to repair anterior TM perforations. The procedure is simple and obviates the need for a large postauricular incision.

...

PATHOLOGY

Anagli, J., K. Abounit, et al. (2008). "Effects of cathepsins B and L inhibition on postischemic protein alterations in the brain." *Biochem Biophys Res Commun* **366**(1): 86-91. [PDF Full-Text](#)

Department of Pathology, Henry Ford Hospital, 1 Ford Place, 5D, Detroit, MI 48202, USA.

The effects of selective inhibition of cathepsins B and L on postischemic protein alterations in the brain were investigated in a rat model of middle cerebral artery occlusion (MCAO). Cathepsin B activity increased predominantly in the subcortical region of the ischemic hemisphere where the levels of collapsing mediator response protein 2, heat shock cognate 70 kDa protein, 60 kDa heat shock protein, protein disulfide isomerase A3 and albumin, were found to be significantly elevated. Postischemic treatment with Cbz-Phe-Ser(OBzl)-CHN(2), cysteine protease inhibitor 1 (CP-1), reduced infarct volume, neurological deficits and cathepsin B activity as well as the amount of heat shock proteins and albumin found in the brain. Our data strongly suggests that the decrease in heat shock protein levels and the significant reduction of serum albumin leakage into the brain following acute treatment with CP-1 is indicative of less secondary ischemic damage, which ultimately, is related to less cerebral tissue loss and improved neurological recovery of the animals.

...

RADIATION ONCOLOGY

Siddiqui, F., R. Kohl, et al. (2008). "Gender differences in pretreatment quality of life in a prospective lung cancer trial." *J Support Oncol* **6**(1): 33-9. **Full Text Not Available/Click for Article Request Form**

Department of Radiation Oncology, Henry Ford Health System, Detroit, Michigan 48202, USA.

The purpose of this analysis was to assess the impact of pretreatment factors on quality of life (QOL) in patients with locally advanced nonsmall cell lung cancer (NSCLC). In particular, this study focused on the possible interaction between gender-specific baseline health-related QOL and Karnofsky performance score (KPS) in a prospective randomized lung cancer trial. QOL information, using validated instruments (Functional Assessment of Cancer Therapy-Lung [FACT-L], version 2, and Functional Living Index-Cancer [FLIC]), was prospectively collected in patients with locally advanced NSCLC treated on Radiation Therapy Oncology Group (RTOG) trial 89-01. Between April 1990 and April 1994, 70 eligible patients participated in a phase III trial comparing a regimen containing sequential chemotherapy and radiation therapy versus sequential chemotherapy plus surgery. Of these 70 patients, 46 underwent pretreatment FLIC and 49 underwent pretreatment FACT-L. There was a significant interaction between gender and KPS using FLIC ($P = 0.009$), which also showed a trend toward significance with FACT ($P = 0.09$). Significant KPS-by-gender interactions were noted for FACT-L in the physical well-being and additional concerns-lung subscales ($P = 0.012$ and $P = 0.0003$, respectively). The results of both the FLIC and FACT-L demonstrated significantly lower scores corresponding to lower KPS values ($P = 0.009$ and $P = 0.016$, respectively). Results of this randomized study incorporating prospective QOL measurements suggested that in patients with locally advanced NSCLC, analyzing QOL data by either gender or performance status alone may not accurately reflect how these factors depend upon each other. Understanding the interaction between gender and performance status could lead to better prognosticators and potentially could tailor interventions for specific groups of patients with lung cancer.

...

SLEEP MEDICINE

Roth, T., G. K. Zammit, et al. (2007). "Efficacy and safety of as-needed, post bedtime dosing with indiplon in insomnia patients with chronic difficulty maintaining sleep." *Sleep* **30**(12): 1731-8. [PDF Full-Text](#)

Sleep Disorders and Research Center, Department of Psychiatry and Behavioral Neurosciences
Henry Ford Hospital, 2799 West Grand Blvd, CEP-3, Detroit, MI 48202, USA. troth1@hfhs.org

OBJECTIVE: To evaluate the efficacy and tolerability of immediate release indiplon capsules in patients with chronic insomnia using an “as-needed” dosing strategy in response to difficulty falling back to sleep following a middle of the night, nocturnal awakening. **METHODS:** Adult outpatients (N=264; 71% female; age, 46 years) who met DSM-IV criteria for primary insomnia, with average total sleep time (TST) < 6.5 hours and >8 nights in the past month with nocturnal awakenings, were randomized to 4 weeks of double-blind treatment with 10 mg or 20 mg indiplon capsules, or placebo. The primary endpoint was latency to sleep onset post-dosing after a middle of the night awakening (LSOpd). Secondary endpoints included patients’ subjective assessment of total sleep time (sTSTpd). Next day residual effects were evaluated by a 100 mm Visual Analog Scale (VAS) rating of sleepiness. **RESULTS:** Both doses of indiplon significantly reduced LSOpd at all time-points. Compared to placebo (45.2 min), the 4-week least squares (LS) mean LSOpd was 36.5 min in the indiplon 10 mg group (P = 0.0023) and 34.4 min in the indiplon 20mg group (P < 0.0001). The 4-week LS mean sTSTpd was higher in the indiplon 10 mg group (253 min) and 20mg group (278 min) compared to placebo (229 min; P < 0.01 for both comparisons). There was no increase observed in VAS ratings of next-day sleepiness for either dose of indiplon when compared to placebo. Indiplon was well-tolerated at both doses. **CONCLUSIONS:** Patients with chronic insomnia with nocturnal awakenings achieved significant and sustained improvement in sleep parameters while utilizing an as-needed post bedtime dosing strategy with indiplon capsules. Indiplon was well-tolerated, with no self-rated, next-day residual effects.

...

SURGERY

Kakkos, S. K. and A. D. Shepard (2008). “*Delayed presentation of aortic injury by pedicle screws: Report of two cases and review of the literature.*” *J Vasc Surg.* EPub Ahead of Print. [PDF Full-Text](#)

Division of Vascular Surgery, Department of Surgery, Henry Ford Hospital.

OBJECTIVES: Perforation of the aorta by pedicle screws is a rare but serious complication of spine fixation surgery. This article reviews the clinical presentation and management of this complication. **METHODS:** Presented are two cases of thoracic aorta perforation by a pedicle screw and a review of the appropriate literature performed using a MEDLINE search. **RESULTS:** Literature review identified eight additional patients. In most cases, aortic perforation was recognized and managed within 18 months of the spine surgery. Clinical presentation included acute bleeding, necessitating urgent exploration in two patients, and pseudoaneurysm formation in five cases, two of which were infected. Depending on the extent of aortic damage and the presence or absence of infection, management ranged from endovascular grafting, to screw burring with closure of the perforation site, to aortic reconstruction with a tube graft and complete orthopedic hardware removal. Outcome was favorable in all patients who were operated on. **CONCLUSIONS:** The small number of reported cases indicates either the rarity of this complication or unawareness of its existence. The true incidence of this complication is probably under-reported. Orthopedic and vascular surgeons should be aware of this potentially fatal problem. Prevention remains the best treatment. Once encountered, a variety of techniques are available to manage this complication with reasonable outcome.

...

UROLOGY

Bhandari, A., J. S. Elder, et al. (2008). “*Fibrous pseudotumor of the tunica vaginalis.*” *J Urol* **179**(2): 727. [PDF Full-Text](#)

Vattikuti Urology Institute, Henry Ford Health System, Detroit, Michigan, USA.

...

UROLOGY

Krane, L. S., A. Shrivastava, et al. (2008). “*A four-step technique of robotic right adrenalectomy: initial experience.*” *BJU Int.* EPub Ahead of Print. [PDF Full-Text](#)

Vattikuti Urology Institute, and Department of General Surgery, Henry Ford Hospital, Detroit, MI, USA.

OBJECTIVE To report a safe, quick and reproducible technique of robotically assisted right adrenalectomy (RRA), developed by assessing the surgical anatomy of the right adrenal gland, its vascularity, and the surrounding structures, through

a high definition, magnified three-dimensional view of the operating field provided by the da Vinci(R) surgical system (Intuitive Surgical, Sunnyville CA, USA). PATIENTS AND METHODS Four patients had RRA between January and July 2007 at the Vattikuti Urology Institute, for varied indications. We extensively reviewed published anatomical and surgical reports of the anatomy of the region to plan the surgical steps for RRA, careful reconfirming recognized anatomical facts and their probable significance. The surgical steps involved: (i) complete division of the hepatocolic ligament; (ii) definition of the right adreno-caval junction (ACJ); (iii) division of the right adrenal vein; (iv) dissection and removal of the adrenal gland circumferentially. The surgery was digitally recorded and reviewed. RESULTS All the adrenalectomies were done transperitoneally through five ports, replicating predetermined surgical steps. There were no anaesthesia or surgery related events and no patient required conversion to open surgery. All the patients had an uneventful recovery and were discharged home 0-3 days after RRA. With increasing experience it was possible to reach the ACJ with minimal peripheral dissection. From a lateral approach, we visualized the adrenal vein travelling along the anterior portion of the gland before terminating at the inferior vena cava and the retrocaval location of the medial edge of the adrenal gland. The right adrenal vein (singular or duplicate) was the only surgically significant vessel, as the other vessels encountered were controlled with bipolar diathermy. CONCLUSIONS Robotic assistance facilitated microdissection of fine anatomical planes around the right adrenal gland and provided direct access to the crucial ACJ. This technique permits ligation of the adrenal vein as an initial step, with no need to handle the adrenal gland. In the initial experience with four patients this technique was reproducible, regardless of indication or anatomical variance.

...

HFHS Publication List Sladen Library

<http://www.henryfordconnect.com/sliden.cfm?id=436>

If you are interested in receiving this list of HFHS Publications on a monthly basis, please fill out the following information:

Name _____

Department _____

Phone Number _____

Email _____

Do you want to receive it:

_____ Via email (Recommended format – includes links to full-text if available)

_____ Via interdepartmental mail

Please return to:

Valerie Reid
HFH Sladen Library, K-17
(313) 916-2550
(313) 874-4730 Fax
vreid1@sladen.hfhs.org