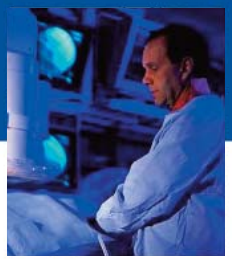
Volume 5, Issue 2, April 2011

Academic Physician Quarterly

A DEPARTMENT OF MEDICINE BULLETIN



UF UNIVERSITY of FLORIDA
College of Medicine
Jacksonville

CHAIRMAN'S MESSAGE

Dear colleagues:

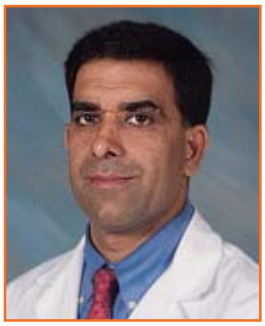
After an unseasonably cold winter this year, I suspect you are as happy as I am that spring is upon us. It's the time of the year when earth rejuvenates itself and Mother Nature blooms. We as individual human beings should take the heed and engage in self-rejuvenation through better eating habits, increased exercise and enhanced optimism. In this regard, I am pleased to report that in January, a new 18-member board of directors was appointed for Shands Jacksonville. Now Shands Jacksonville and Shands at the University of Florida independently operate as closely collaborating "sister" entities with parallel roles, each with its own board and a direct relationship to UF leadership. Their shared mission focuses on the UF Academic Health Center's goals for patients, students and research programs. Please see more on this important development in the last page of the newsletter.

On the patient care front, we have a Focus topic by Dr. Naeem Latif of the Division of Hematology and Medical Oncology who discusses the head and neck cancers and describes the multidisciplinary team at the UF & Shands that specializes in managing these diseases.

I am especially pleased to announce the appointment of Dr. James Scolapio as the new Chief for the Division of Gastroenterology. Dr. Scolapio is an internationally recognized leader who is entrusted with expanding the Gastroenterology services we offer to the community.

As always, if you have any suggestions on how to improve our services please feel free to contact me.

Arshag D. Mooradian, M.D.
Professor of Medicine
Chairman, Department of Medicine



Naeem Latif, M.D.

Assistant Professor of Medicine

Division of Hematology & Medical Oncology

Head and Neck Cancer

Head and neck cancers encompass a diverse group of tumors that frequently are aggressive in their biologic behavior. In 2009, approximately 35,720 men and women (25,240 men and 10,480 women) in the United States will be diagnosed with cancer of the oral cavity and pharynx, and 7,600 will succumb to these diseases. Further, an estimated 12,290 men and women in the United States will be diagnosed with laryngeal cancer, and 3,660 will die from this malignancy. Most patients with head and neck cancer have metastatic disease at the time of diagnosis (regional nodal involvement in 43% and distant metastasis in 10%) and this is due to delay in seeking medical attention and diagnosis.

EPIDEMIOLOGY

Gender: The incidence by gender varies with anatomic location and has been changing as the number of female smokers has increased. The male-female ratio is currently 3:1 for oral cavity and pharyngeal cancers.

Age: The incidence of head and neck cancer increases with age, especially after 50 years of age.. There are more women and fewer smokers in the younger patient group and more likely to have HPV positive cancer.

Race: The incidence of laryngeal cancer is higher in African-Americans relative to the white, Asian, and Hispanic populations. Additionally, in African-Americans, head and neck cancer is associated with lower overall survival, 56% in whites and 34% in African-Americans.

Geography: There is a wide variation in the incidence of head and neck cancer among different geographic regions. The risk of laryngeal cancer, for example, is two to six times higher in Bombay, India, than in Scandinavia. The higher incidence of the disease in Asia is thought to reflect the prevalence of risk factors, such as betel nut chewing and use of smokeless tobacco. In the United States, the high incidence among urban males is thought to reflect exposure to tobacco and alcohol. Among rural women, there is an increased risk of oral cancer related to the use of smokeless tobacco (snuff).

Nasopharyngeal carcinoma is another head and neck tumor with a distinct ethnic predilection. Endemic areas include southern China, northern Africa, and regions of the far Northern Hemisphere—areas in which the diet of inhabitants includes large quantities of salted meat and fish. Cancer of the nasopharynx in these geographic areas also has been associated with Epstein-Barr virus (EBV) infection.

ETIOLOGY AND RISK FACTORS

Tobacco: The incidence of head and neck tumors correlates most closely with the use of tobacco. Head and neck tumors occur six times more often among cigarette smokers than nonsmokers. Use of smokeless tobacco also is associated with an increased incidence of head and neck cancer, especially in the oral cavity. Smokeless tobacco users frequently develop premalignant lesions, such as oral leukoplakia, at the site where the tobacco quid rests against the mucosa. Over time, these lesions may progress to invasive carcinomas. The use of snuff has been associated with an increase in cancers of the gum and oral mucosa.

Alcohol: Alcohol consumption, by itself, is a risk factor for the development of pharyngeal and laryngeal tumors, although it is a less potent carcinogen than is tobacco. For individuals who use tobacco and alcohol, these risk factors appear to be synergistic and result in a multiplicative increase in risk.

UV light exposure: Exposure to UV light is a risk factor for the development of cancer of the lips. At least 33% of patients with lip cancer have outdoor occupations.

Occupational exposures: A small group of head and neck cancers may be attributable to occupational exposures. Nasal cancer has been associated with wood dust exposure, and squamous cell cancer of the maxillary sinus, has been linked to nickel exposure.

Radiation exposure: Exposure to radiation is clearly an important risk factor for thyroid cancer and has been associated with cancer of the salivary glands.

Viruses: There is a strong link between EBV exposure and

Continued on Page 3

Focus continued from Page 2

the development of nasopharyngeal cancer. The potential etiologic role of human papillomavirus (HPV) in oropharyngeal cancer is supported by a growing body of evidence. A recent case-control study of 100 patients with squamous cancer of the oropharynx documented that HPV DNA, type 16, was found in 72% of tumor specimens.

Diet: Epidemiological studies suggest that dietary intake of vitamin A, β-carotene, and α-tocopherol may reduce the risk of developing head and neck cancer.

SCREENING AND DIAGNOSIS

Since many patients with head and neck cancer are unlikely to see a health-care provider, the means by which patient screening would be achieved remains a fundamental problem. The need for expeditious diagnosis of head and neck cancer and referral to a multidisciplinary head and neck cancer center cannot be overemphasized, as early diagnosis can lead to a reduction in mortality. Risk factors as outlined previously, including a history of tobacco and alcohol use and environmental exposures, should be reviewed. Any adult patient with symptoms referable to the upper aerodigestive tract that have lasted longer than 2 weeks or with an asymptomatic neck mass should undergo a thorough examination with a high index of suspicion for carcinoma.

Physical examination: Due to the frequent occurrence of multiple primary tumors in patients with a head and neck tumor, careful evaluation of the entire upper aerodigestive tract is necessary at the time of diagnosis. Laryngoscopy is used to examine the nasopharynx, hypopharynx, and larynx. Nasopharyngoscopes permit a thorough inspection of the upper aerodigestive tract in the office setting. Approximately 5% of patients with head and neck cancer have a synchronous primary squamous cell cancer of the head and neck, esophagus, or lungs. Examination with the patient under anesthesia with endoscopy (which may include direct laryngoscopy, esophagoscopy, and bronchoscopy) and directed biopsy should be performed in all patients with an occult primary squamous cell cancer and in many patients with a known head and neck primary.

Diagnostic imaging: Posteroanterior and lateral chest x-rays should be obtained in all adult patients to eliminate the possibility of occult lung metastasis or a second primary. The CT scan is probably the single most informative test in the assessment of a head and neck tumor. Relatively greater sensitivity of MRI in relation to CT is offset by its decreased specificity. However, Gadolinium-enhanced MRI is probably superior to CT for imaging tumors of the nasopharynx and oropharynx.

PET scan has been evaluated in both primary and recurrent squamous cell carcinomas of the head and neck. In head and neck cancer, FDG imaging has been useful in detecting clinically occult recurrences.

BIOPSY

Fine-needle aspiration (FNA): is a useful diagnostic modality. FNA has an associated false-negative rate as low as 7%. The diagnostic accuracy depends on the physician's skill and the cytopathologist's experience.

Core biopsy: should not be performed on a neck mass, with the rare exception of a proven lymphoma.

Open biopsy: should be performed only when a diagnosis has not been made after extensive clinical evaluation and FNA is nondiagnostic.

PATHOLOGY

Squamous cell carcinoma: More than 90% of all head and neck cancers are squamous cell carcinomas. There are three histologic grades based on the amount of keratinization. Over 50% of head and neck squamous cell carcinomas have been found to harbor a mutation of the TP53 gene and linked to diminished survival. HPV, which causes inactivation of TP53 via elaboration of E6 and E7 oncogenes, has been identified in 35% to 75% of oropharyngeal cancers.

Other tumor types: Other less common head and neck cancers include mucoepidermoid carcinoma, adenoid cystic carcinoma, and adenocarcinoma, all of which may arise in the salivary glands. Head and neck cancers with neuroendocrine features include small-cell undifferentiated cancer and esthesioneuroblastoma (olfactory neuroblastoma). Both Hodgkin lymphoma and non-Hodgkin lymphoma may also be diagnosed as head and neck tumors, often involving the lymph nodes of the neck or Waldeyer's ring.

TREATMENT APPROACHES

Surgical principles: Complete resection is necessary for improved outcome. Reconstruction is complex after resection of head and neck tumors, as the surgery may have an impact on appearance, speech, and swallowing. Decisions regarding the extent of resection should be made by experienced surgeons.

Continued on Page 4

Focus continued from Page 3

Multimodality therapy for Head and Neck Cancer:
Head and Neck cancer should be treated by multidisciplinary team consisting of Oral Maxillary Facial surgery, Ear Nose Throat surgery, Plastic surgery, Radiation Oncology, Medical Oncology, Nutritionist, Speech therapy, Social services and Radiology.

The combination of surgery and radiation therapy has been used for several decades to treat patients with advanced head and neck cancers. However studies have shown that tumors with adverse prognostic features i.e. perineural invasion, lymphovascular space involvement, positive margins and extracapsular extension also benefit from combined chemotherapy and radiation after surgery.

MULTIDISCIPLINARY HEAD AND NECK CANCER CLINIC AT UNIVERSITY OF FLORIDA JACKSONVILLE

We have established a multidisciplinary head and neck clinic at University of Florida Jacksonville, which comprises of ENT Surgery, Oral Facial and maxillary surgery, Radiation Oncology, Medical Oncology, Radiology, Pathology, speech therapy and a Nutritionist. We meet every week in Head and Neck tumor conference and discuss cases and review radiology and pathology, and then we go and see patients together in head and neck clinic. After seeing patients we again get together and make treatment recommendations depending upon patient's condition and disease stage, in this way patients have a chance to meet with different specialists and all questions are answered in one setting. Also because of proton therapy center we are able to treat complicated and difficult cases.

Multidisciplinary Head and Neck Cancer Clinic Team

GME CORNER

Jeffrey House, D.O.

Assistant Professor of Medicine, Division of General Internal Medicine

Program Director, Internal Medicine Residency

New ACGME Program Requirements

In the past internal medicine residencies and their subspecialties could be arduous experiences. It would not be uncommon for residents to work overnight shifts every other night, exceed 80 hours per week on a regular basis, or work several weeks straight without a day off. In 2003, under threat of federal legislation and regulation, the Accreditation Council for Graduate Medical Education (ACGME) agreed to implement standards that set limits on resident duty hours. These new duty hours and standards made a significant impact on the educational environment. This original implementation process also involved a review of the impact of these standards after five years of its introduction. Therefore in 2009 the ACGME conducted a systematic review of resident duty hours and the learning environment with a goal of creating more appropriate standards that recognize the challenges presented in the training and education of each specialty. At the conclusion of this review, the ACGME has put forth new standards for supervision and resident duty hours for graduate medical education. These new requirements will begin to take effect on July 2011.

Among the changes to the Common Program Requirements, duty hours are the area that has attracted the most attention. Here are a few of the highlighted changes: duty periods of PGY-1 residents must not exceed 16 hours in duration. For those working 24 hour shifts, strategic napping is now strongly encouraged, especially from the hours of 10:00 PM to 6:00 AM. Residents must not be scheduled for more than 6 shifts of night float duty. And

Continued on Page 5

GME Corner continued from Page 4

finally moonlighting must now be included in the 80 hour work week.

Duty hours are not the only changes to the Program Requirements. Alertness management has now become an emphasis. Faculty members and residents must learn to recognize the signs of fatigue and sleep deprivation, and sponsoring institutions must provide adequate sleep facilities. Communication and transitions of care are discussed as well, stating that institutions and programs must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety. Finally, the privilege of progressive responsibility and levels of supervision are more clearly defined in the new standards

The new ACGME standards will provide challenges to residency and fellowship training programs across the country. This program will also have hurdles to overcome to meet the upcoming new requirements. However, thanks to strong leadership both past and present, this program will not need major revisions to meet these new demands. With tightly regulated duty hours, an organized night float system, and established nonteaching hospitalist group, most of these ACGME obligations are already met. In addition, coordination with division directors in the CCU and MICU have facilitated required changes to meet the demands of the 2003 and 2011 standards. In fact, a task force comprised of members of the House Staff Council, MICU, Emergency Medicine, and GME have recently met to address the remaining duty hours changes. Finally, and most importantly, it's the dedicated faculty, fellows, and house staff that will ultimately meet the challenges of an evolving educational environment. For that we in the GME office thank you for your support and look forward to the upcoming academic year.

A CLINICAL CASE

John-Paul Pham, MD, Fred Edwards, MD, Alan Miller, MD. Department of Medicine, Department of Surgery, and Cardiovascular Center, University of Florida College of Medicine, Jacksonville, FL.

Anomalous Origin of Right Coronary Artery from the Left Aortic Cusp Causing Episodes of Angina and Syncope

Introduction

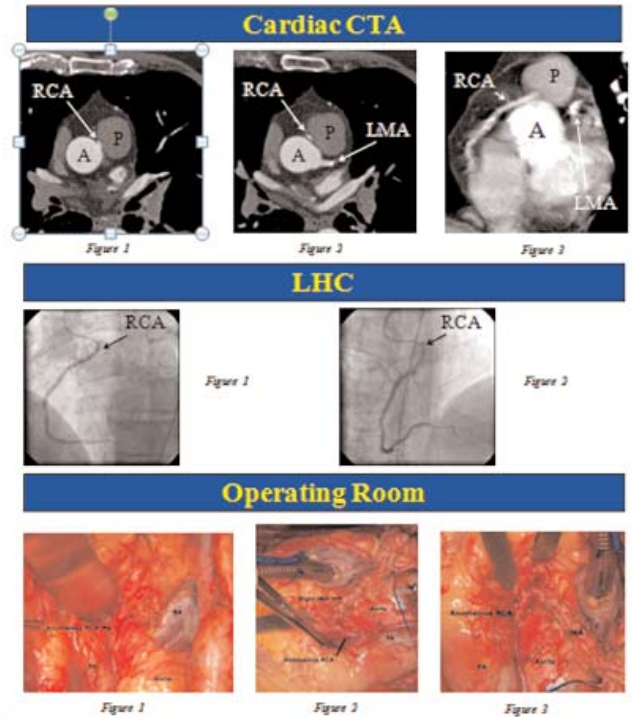
The right coronary artery (RCA) abnormally originating from the left coronary cusp is a rare congenital anomaly.

We report a case that was difficult to diagnose due to the fact that the patient's presentation resembled more commonly seen cardiac conditions. The patient was previously diagnosed with syncope, angina, and dyspnea on exertion and was treated without improvement.

Case Report

A 65-year-old male with a history of angina and syncopal episodes presented with 9/10, sharp, non-radiating, left-sided chest pain associated with shortness of breath, nausea, and diaphoresis. Additionally, he has had more frequent episodes of syncope.

Evaluation of his syncopal episodes was non-diagnostic. He ruled out for acute coronary syndrome with negative cardiac enzymes and there were no remarkable EKG findings. He was found to have an anomalous RCA on cardiac CTA. The vessel originated in the proximal ascending aorta coursed anteriorly between the aorta and pulmonary artery. Cardiac catheterization revealed the



Continued on Page 6

A Clinical Case continued from Page 5

anomalous RCA originating from the left cusp but no obstructive coronary disease. Ejection fraction was 55% with normal wall motion and function.

The patient subsequently underwent coronary artery bypass grafting to the RCA. The anomalous RCA originated from the left cusp posteriorly and coursed left and down anteriorly between the pulmonary artery and proximal aorta. Upon dissection, the proximal portion of the RCA was fused with the aortic wall. It is possible that this represented an intramural course of the coronary vessel. As the RCA continued to course down anteriorly, it bifurcated with one branch running down the AV groove and the other branch running perpendicularly across the right ventricle which is an extremely rare finding. The right internal mammary artery was anastomosed to the anomalous RCA.

Discussion

Anomalous origin of the RCA is known to produce both angina and syncope. Several mechanisms of myocardial ischemia have been postulated. First, the ostium of the anomalous coronary artery is slit-like because of the acute take-off from the aortic wall. Second, the first segment of the anomalous coronary artery runs between the aorta and the pulmonary trunk and has an intramural course within the aortic tunica media. Thus, compression and milking of the anomalous coronary artery by the expansion of both large vessels and the flap-like closure of the orifice might occur during physical effort. Ischemia of the SA node which is supplied by the RCA is probably the cause of our patient's syncopal episodes.

Surgical repair is the treatment for resolution of symptoms. After surgery, our patient was able to ambulate without any syncopal or anginal episodes.

Conclusion

In patients who present with angina, our usual diagnostic focus is to rule out myocardial ischemia but in patients with angina and syncope, coronary arteries of anomalous origin with a malignant course should be considered. The most accurate and diagnostic tool of choice is cardiac CTA.

References

1. White NK, Edwards JE. Anomalies of the coronary arteries. Report of four cases. Arch Pathol 1948;45:766–71.
2. Alexander RW, Griffiths GC. Anomalies of the coronary arteries and their clinical significance. Circulation 1956;14: 800–5.
3. Kaku B, Shimizu M, Yoshio H, Ino H, Mizuno S, Kanaya H, et al. Clinical features of prognosis of Japanese patients with anomalous origin of the coronary artery. Jpn Circ J 1996;60:731–41.
4. Topaz O, DeMarchena EJ, Perin E, Sommer LS, Mallon SM, Chahine RA. Anomalous coronary arteries: angiographic findings in 80 patients. Int J Cardiol 1992;34:129–38.
5. Taylor AJ, Rogan KM, Virmani R. Sudden cardiac death associated with isolated congenital coronary artery anomalies. J Am Coll Cardiol 1992;20:640–7.
6. Kaku B, Kanaya H, Ikeda M, Uno Y, Fujita S, Kato F, Oka T. Acute inferior myocardial infarction and coronary spasm in a patient with an anomalous origin of the right coronary artery from the left sinus of Valsalva. Jpn Circ J 2000;64: 641–3.

RX UPDATES

By Russell McKelvey, Pharm.D.

Can I prevent drug companies from seeing my prescribing history?

Reprinted with some editing from Drug Update, September 2010 with permission.

Did you know that detailed prescribing information is collected by various healthcare information organizations (HIOs) and then sold at high costs to pharmaceutical companies? The pharmaceutical companies then use the information to examine individual prescribing patterns and help direct and track the success of their sales force [1]. The largest HIO, IMS Health, assesses billions of transactions involving more than a million products collected from over 70,000 entities (e.g., hospitals, pharmacies, nursing homes, insurance companies) across the world [1, 2].

In compliance with confidentiality laws, the prescription records sold do not include patient names and sometimes do not include prescriber names (only DEA #'s). The American Medical Association (AMA) maintains a Physician Masterfile that includes current and historical data for more than 1 million medical residents and physicians and approximate 82,000 students in the US [3]. The AMA leases the Masterfile for millions of dollars annually to numerous research firms and pharmaceutical companies. Pharmaceutical companies then use the information to match prescription records to a physician using DEA numbers [1]. Once a "prescribing portfolio" is assembled, individual doctors can be targeted by a pharmaceutical sales representative to increase prescribing of a specific drug.

Fortunately, in 2006, the AMA created and launched a pro-

Continued on Page 7

RX Update continued from Page 6

gram to prevent pharmaceutical companies from obtaining individual prescribing information [4]. The program was created based on findings from a Gallup survey of physician attitudes regarding the use of prescribing data by pharmaceutical companies. The survey showed that 84% of physicians were either "not concerned" about the release of prescribing data or that the ability to "opt out" of the release of data would alleviate their concerns. The Physician Data Restriction Program (PDRP) gives physicians the option to withhold their prescribing data from pharmaceutical sales representatives while still making it available for medical research purposes. The program also allows physicians to register complaints against companies that are believed to be using prescribing data inappropriately. Companies are obligated to adhere to the program through licensing agreements. Companies found in violation of the program could lose access to all AMA data [4]. The program has been reported to be successful thus far. A recent market research study found that 96% of physicians were either "satisfied" or "very satisfied" with the program. In addition, 56% of respondents reported they told a colleague about the program [4].

Enrolling in the program does not prohibit pharmaceutical sales representatives from calling physicians, and call volume could increase or decrease after prescribing data access is removed. Once physicians enroll, the pharmaceutical companies have 90 days to comply with the program. Also, once enrolled there is no need to renew. Prescribing data is restricted indefinitely unless the registration is reversed [4].

To enroll in the program visit www.ama-assn.org/go/prescribingdata or call the AMA at 1-800-621-8335.

References

1. Whitnet J. Pharmaceutical Sales 101: Inside Information [Internet]. Guernica: April 2006. Available from: http://www.guernicamag.com/features/159/inside_information.
2. Our Services: Market Measurement [Internet]. Connecticut: IMS Health; c2010 [cited 2010 Sept 10]. Available from: http://www.imshealth.com/portal/site/imshealth/menuitem.f9bbdbad4782db2637cea2409418c22a/?vgnex-toid=393e51dd68585110VgnVCM10000071812ca2RCRD&vgnextfmt=default
3. Physician Data Resources: AMA Physician Master-file {Internet]. : American Medical Association; c1995-2010 [cited 2010 Sept 10]. Available from: http://www.ama-assn.org/ama/pub/about-ama/physician-data-resources/physician-masterfile.shtml
4. AMA program helps protect doctor's prescribing information: Q & A with American Medical Association Board of Trustees member Jeremy A. Lazarus, MD [Internet]. Chicago: American Medical Association; c1995-2010 [cited 2010 Sept 10]. Available from: http://www.ama-assn.org/ama1/pub/upload/mm/371/pdrp_qa_final.pdf.

NEWS & NOTES

Internal Medicine Update

This program is designed to provide general internists and subspecialists, family medicine physicians, physician assistants, nurse practitioners and allied health care professionals with a state-of-the-art update in internal medicine.

When: April 15-17. 2011

Where: Sawgrass Marriott, Ponte Vedra Beach

For more information, please call 904-244-3158, email cme-mail@ufl.edu or visit http://imu.cme.ufl.edu

Research Day 2011

Research Day 2011 will be held on Thursday, May 12, 2011 from 9am-2pm in the Learning Resource Center. Research Day 2011 will include selected platform presentations, poster viewing, guest speakers and awards presentations.

Internal Medicine Resident Receives Outstanding Resident Teacher Award

The annual University of Florida College of Medicine Medical Education Week, "Celebrating Excellence in Medical Education", honored the education programs and nurtured teaching scholarship by featuring educational sessions and workshops throughout the week-long event.

Muhammad Salahuddin, M.D., Internal Medicine Residency Program, was one of several University of Florida College of Medicine - Jacksonville residents to the Outstanding Resident Teach Award.

Congratulations to Dr. Salahuddin for this honor.

Shands Jacksonville Announces New Board of Directors

A new 18-member board of directors was appointed for Shands Jacksonville in January. The appointment comes in the wake of a vote last fall that restructured governance of two components of the Shands family of hospitals — Shands Jacksonville and Shands at the University of Florida. They now independently operate as closely collaborating "sister" entities with parallel roles, each with its own board and a direct relationship to UF leadership. Their shared mission focuses on the UF Academic Health Center's goals for patients, students and research programs.

"Our new board of directors brings together University of Florida and Shands Jacksonville administrators and physicians as well as strong community leaders who support the hospital's mission," said Jim Burkhart, MHA, FACHE, president and CEO of Shands Jacksonville, and a member of the board. "With this new board, we are well-positioned to form strategic alliances and make decisions more quickly to ensure financial success of the hospital and further our reach in the community."

David Guzick, MD, PhD, senior vice president for health affairs at UF and president of the UF&Shands Health System, chairs both the Shands Jacksonville and the Shands Teaching Hospital and Clinics boards.

Mr. Burkhart and Dr. Guzick are seated on the Shands Jacksonville board along with Robert Nuss, MD, dean of the UF College of Medicine–Jacksonville regional campus and associate vice president for health affairs. The remaining members include five UF faculty physicians and a mix of civic, business and health-care leaders with strong ties to the Jacksonville community.

"With greater participation in the governance of the organization, UF faculty are able to work together with community leaders and help set the strategic direction for Shands Jacksonville," said Dr. Nuss.

Shands Jacksonville embarked on a remarkable turnaround over the past decade. Thanks to substantial investment by Shands at UF, the city of Jacksonville and the University of Florida, and to excellent management by hospital and university leaders and the Shands Jacksonville board of directors, the picture steadily improved, year-by-year.

"The hospital is now operating efficiently and is able to invest in the academic mission of the faculty at the UF College of Medicine–Jacksonville and in the capital investments needed to support a higher level of patient care with appropriate facilities and technologies," said Dr. Guzick. "The University of Florida faculty practice plan has become, by far, the largest group practice in the region, providing a full range of health services to the broad community of Jacksonville."

UF UNIVERSITY of FLORIDA
College of Medicine
Jacksonville
653-1 West Eighth St.
Department of Medicine
Jacksonville, FL 32209-6511
904-244-8846; fax: 904-244-8844

NON-PROFIT ORG.
U.S. POSTAGE
PAID
JACKSONVILLE, FL
PERMIT NO. 73