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Fall 2013 healthpoints

ALL THE POSSIBILITIES OF MODERN MEDICINE

 COLUMBIA UNIVERSITY
MEDICAL CENTER
In affiliation with
NewYork-Presbyterian



Craig R. Smith, MD, FACS
Chairman,
Department of Surgery

Greetings: Message from the Chairman

This issue of Healthpoints highlights two cutting edge initiatives in the Department of Surgery. In thoracic surgery, you'll discover the amazing potential of a new method of assessing and preparing donor lungs before transplantation. In cancer news, you'll read about an ambitious initiative to provide screening for gastric cancer where it previously has not been available.

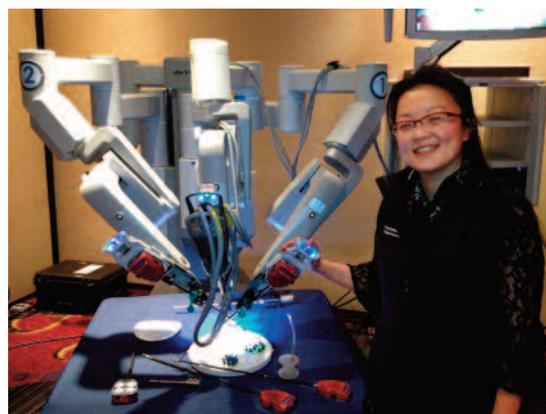
While these advances are clearly notable, what happens in our daily surgical practices is no less exceptional. We welcome the many new faculty members joining our ranks this fall, without whom our continued growth and improvement would be impossible. For more about daily news and events, such as the opening of our new single-day thyroid biopsy clinic, please subscribe to our blog at columbiasurgery.net. ■

Outreach Program Seeks to Prevent Gastric Cancer in High-Risk Populations

Partnership with Korean Medical Program at Holy Name Hospital features assessment program targeted to community at high risk of gastric cancer.

Gastric (stomach) cancer frequently carries a poor prognosis in this country because it is usually detected in advanced stages when surgery is no longer possible. According to **Yanghee Woo, MD**, Director of the Center for Global Excellence in Gastric Cancer Care at NYP/Columbia, if it is detected in early stages, or has spread to only one or two lymph nodes, gastric cancer is curable with endoscopy and surgery.

A leading expert in robotic surgery for gastric cancer and other abdominal conditions, Dr. Woo is unsatisfied with merely providing outstanding care to her patients through the latest treatment avenues. Because early screening can potentially identify gastric cancer before it becomes deadly, Dr. Woo has launched initiatives to educate the public about risk factors for gastric cancer, to identify criteria that could be used for the development of new screening protocols, and most recently, to partner with Holy Name Hospital in Teaneck, NJ, to directly



Yanghee Woo, MD, Director of the Center for Global Excellence in Gastric Cancer Care at NYP/Columbia

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For physician referrals, please call: **1.855.CU.SURGE**

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Deborah Schwarz, RPA, CIBE

Executive Director, Office of External Affairs

Jada Fabrizio Design

Sherry Knecht Managing Editor

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target her efforts at one of the populations that could most benefit: Korean Americans.

Of all populations in the U.S., Asian Americans have the highest risk of developing gastric cancer, followed by black, Hispanic, and Caucasian Americans. In addition to ethnicity, the most important risk factors are infection with *H. pylori* and chronic swelling and inflammation of the stomach (atrophic gastritis). Other risk factors include a family history of stomach cancer, presence of a polyp larger than two centimeters, pernicious anemia, smoking, family cancer syndromes such as HNPCC, male gender, and age over 65.

In the U.S., screening for gastric cancer (evaluating for disease before any symptoms arise) is not covered by insurance, and not typically performed. Instead, patients are usually evaluated only if they develop upper GI pain, an ulcer, reflux, bleeding, or other symptoms—when it is frequently too late to cure gastric cancer.

Collaboration with Holy Name Hospital

Dr. Woo's partnership with Holy Name takes several forms. First, she treats patients there bimonthly. Her team performs complex upper gastrointestinal cancer operations including minimally invasive robotic surgery for appropriate patients with gastric, pancreatic, and biliary diseases. "I work closely with the center's gastroenterologist and medical oncologist, and I am pleased to be learning in turn from their knowledge of the community they know so well," says Dr. Woo.

In addition to performing these advanced surgeries, Dr. Woo is now launching a new high-risk assessment program for gastric cancer. The screening will not only directly benefit individuals who may be at high risk of developing gastric cancer, but it will provide the essential data needed to establish research-based screening guidelines for this country.

The high-risk assessment program began September 28, 2013, at the Korean Medical Society Health Fair at Holy Name Hospital, where more than 70 specialists from 28 fields of medicine provided free consultations, examinations, screenings, and vaccinations to about 1500 attendees. Alongside these specialists, Dr. Woo's team provided education and initial screening for gastric cancer. Depending on the results, some patients were offered follow up for endoscopy, which is the method of choice to screen for gastric cancer.

Patients' data will also be used as part of a research initiative to develop the first gastric cancer screening criteria. "In some countries, screening for gastric cancer is done regularly in the same way that we screen for colon cancer in the U.S. Here, we do not even have clear guidelines

about who would best benefit from screening," says Dr. Woo. Data from participants' screening and questionnaires will help Dr. Woo to determine effective criteria such as the ideal age to begin screening, at what intervals screening should be performed, and other guidelines.

"Because endoscopic screening is expensive, we first need to prove that screening high-risk patients for gastric cancer may allow us to identify patients with cancer at earlier stages," says Dr. Woo. "Ultimately we also hope to use this data to find cancer markers in the blood (something like PSA, or prostate-specific antigen, which is associated with a higher risk of prostate cancer) that can be used as an alternative to endoscopic screening."

"It is ideal to reach out to the Korean American community because this population is at higher risk for this cancer," continues Dr. Woo. "Our screening program has the potential to catch lesions before they become incurable." ■

For more information about gastric cancer and its treatment, see www.columbiasurgery.org/gastric or call 212.305.0374.



Gastric Cancer Did you Know?

- Korean Americans are 4.5 to 8 times more likely than other Americans to develop gastric cancer.
- The five-year survival rate for gastric cancer in the U.S. is 25%.
- More than half of patients are not diagnosed until cancer is in its advanced stages.
- Fewer than 50% of patients receive proper treatment for gastric cancer.

NOVEL Update: Progress Continues in Trial of Ex Vivo Lung Perfusion

Increasing the pool of donor organs with new means of pre-transplant assessment and conditioning.

Ex vivo lung perfusion (EVLP) is a process of evaluating and preparing donor lungs outside the body prior to transplant surgery. The lungs are warmed to normal body temperature, flushed of donor blood, inflammatory cells and potentially harmful biologic factors, and treated with antibiotics and anti-inflammatory agents.

Frank D'Ovidio, MD, PhD, Surgical Director of the Lung Transplant Program at NewYork-Presbyterian/Columbia, is very pleased with the progress of the NOVEL trial of Ex Vivo Lung Transplantation, which had begun shortly before it was highlighted in the Summer 2012 issue of Healthpoints. "Ex vivo perfusion is a valuable resource to assess organs and potentially improve some that would have been turned down because of quality."

Already approved and in use in Europe and in Canada, this process of evaluation and reconditioning is of great interest because it can increase the pool of available donor lungs that are suitable for transplantation. Because so many donor lungs are damaged at the time of death, only 20-30% of donated lungs are usable. Since the initiation of the FDA "NOVEL" trial, the lung transplant team at NYP/Columbia has evaluated twelve sets of lungs and has been able to perform eight transplants that would not have been possible without EVLP.

All the NYP/Columbia EVLP transplant recipients are doing well and their outcomes are equivalent to those of patients who received lungs that had not been subject to EVLP, confirming what has already been established about the safety of this process.

Organ Care Recovery Unit

Not only may EVLP increase the pool of donor lungs suitable for transplantation, but it holds exciting potential to open other possibilities in the field of organ transplantation. Dr. D'Ovidio and colleagues are developing plans to establish an Organ Care Recovery Unit, which would allow intensive care of lungs that were inappropriate for immediate transplantation. "We would assess these organs toward the goal of reconditioning them for transplant if appropriate," he explains.

The Organ Care Recovery Unit would also apply the ex vivo assessment and perfusion technique to organs other than lungs, potentially offering the same benefit of increasing access to transplantation for patients in need of a kidney, liver, heart, or pancreas. The methodology is currently being tested with donor livers and kidneys.

Moreover, the success of EVLP has opened a new channel of research into tailoring treatment of donor lungs to benefit the recipient. Dr. D'Ovidio anticipates that in the coming years, researchers will administer cell therapies, gene therapies, and pharmacologic agents during EVLP to determine whether such treatments will improve early and long-term outcomes of lung transplantation. "As research develops, we may also be able to use more specific therapies to personalize the treatment based on the understanding of the genetic background of the lungs," Dr. D'Ovidio explains. Related research is currently underway; stay tuned for more on this topic in future issues.

NOVEL is the acronym for Normothermic Ex-Vivo Lung Perfusion as an Assessment of Extended/Marginal Donor Lungs.

Read more about this study at columbiasurgery.org or call 212.305.8904.



A set of donor lungs during ex vivo assessment and conditioning in preparation for transplantation.

Lung Transplant Facts

- *Once you get into the NYP/CUMC transplant program, you'll be placed on the Organ Procurement and Transplantation Network's (OPTN's) national waiting list. OPTN matches donor lungs to recipients based on need, severity of disease, and whether the transplant will improve a recipient's chance of survival.*
- *Approximately 1700 people are on the waitlist for lung transplantation in the U.S.*
- *Each year, about 1400 lung transplants are performed.*
- *Since the organ allocation system was revised in 2005, the average wait time for lung transplantation dropped from about 2 years to 3-4 months, an improvement which has reduced the risk of dying while on the organ waitlist.*

New Faculty

Meet the newest physicians and surgeons in the Department of Surgery

Paul Chai, MD

Director, Pediatric Heart Transplantation and Mechanical Assist Device Services, Division of Cardiac, Thoracic and Vascular Surgery

Dr. Chai brings a breadth and depth of expertise in complex neonatal surgery and minimally invasive cardiac surgery. In addition to directing NYP/Columbia's pediatric heart transplantation and mechanical assist device services, Dr. Chai also directs congenital heart surgery services at the Weill Cornell campus. He performs aortic valve surgery, including valve-sparing root replacements, in both pediatric and adult patients; and he continues to care for his patients as they grow into adulthood as part of the hospital's adult congenital heart disease service. Dr. Chai comes to NYP/Columbia most recently from the Johns Hopkins Children's Heart Surgery Program at All Children's Hospital in St. Petersburg, where he served for nine years as Associate Medical Director of the Heart Institute.

Joseph Costa, DHSc, PA-C, *Instructor in Clinical Surgical Sciences (in Surgery), Division of Thoracic Surgery*

Joseph Costa, DHSc, PA-C, is the first Physician Assistant to become a faculty member at NYP/Columbia University College of Physicians and Surgeons. He began as Dr. Craig Smith's private PA in Cardiothoracic Surgery (2000-2010), where he was a key oversight team member on pediatric and adult heart procurements, and later in performing lung procurements. When he became the Chief PA in Thoracic Surgery and Lung Transplantation, his role expanded to include complete responsibility for all aspects of onsite evaluation of potential lung allografts for transplant. In addition to his duties

as lead surgeon, Dr. Costa is responsible for evaluating and performing the operative phase in re-operative donors and Donation after Cardiac Death (DCD) donors. Along with his clinical responsibilities, Dr. Costa has taught and mentored surgical interns and fellows since 2003. He was featured in the book, "The Surgeons," casted in the movie "Awake" as a transplant surgeon, and is the author of numerous journal articles, abstracts, and poster presentations.

Gebrine El-Khoury, MD, PhD, *Visiting Professor of Surgery, Division of Cardiac, Thoracic and Vascular Surgery*

Gebrine El-Khoury, MD, PhD, Chief of Cardiothoracic Surgery and Professor of Surgery at the University of Louvain in Brussels, is currently recognized as one of the top aortic surgeons in the world and a prominent pioneer of aortic surgery. Dr. El-Khoury is now on faculty at NYP/Columbia in the Division of Cardiac, Thoracic and Vascular Surgery; he will be attending one week per month to focus on complex aortic cases.

Katherine Fischkoff, MPA, MD *Instructor in Clinical Surgery, Division of Acute Care Surgery*

Katherine Fischkoff, MPA, MD is the newest member of the acute care surgery division, having completed her general surgery residency at New York University Medical Center earlier in 2013. From 2008 to 2010 she was part of a research team at Memorial Sloan Kettering Cancer Center. Dr. Fischkoff earned her undergraduate business degree, Masters in Public Health, and Medical Degree from George Washington University, where she received the George Washington Presidential Administrative Fellowship Award in 1998, 1999, and 2000.

Richard Green, MD, FACS

Associate Chief, Division of Cardiac, Thoracic, and Vascular Surgery.

Richard Green, MD, FACS, has longstanding experience in fostering collaboration across traditionally separate specialties in order to promote optimal care for patients with vascular disease. As the Associate Chief of the newly merged Division of Cardiac, Thoracic, and Vascular Surgery at NYP/Columbia, Dr. Green is very pleased to be shepherding the new division's emergence as a collaborative entity. He comes most recently from North Shore-Long Island Jewish Health System, where he served as Vice President of Physician Integration from 2011 to 2013, and Lenox Hill Hospital, where he was Chairman of the Department of Surgery and Co-Director of Peripheral and Endovascular Interventions from 2004 to 2013.

Adam Griesemer, MD

Assistant Professor of Surgery, Center for Liver Diseases and Transplantation

Dr. Griesemer's clinical expertise includes pediatric transplantation, living donor liver transplantation, multivisceral/intestinal transplantation, minimally invasive liver surgery, and portal hypertension shunts. Dr. Griesemer will conduct studies in xenotransplantation with a goal of developing tolerance to animal organs transplanted into humans. Dr. Griesemer transitioned to his current appointment at the Center for Liver Disease and Transplantation after completing his Internship in 2004, General Surgery residency in 2011, and his Abdominal Organ Transplant fellowship in 2013 at NYP/Columbia. Between these, he was a Research Fellow in Transplantation Biology and Xenotransplantation at the Transplantation Biology Research Center, Massachusetts General Hospital.

Bindu Kalesan, PhD, MPH

*Epidemiologist and Biostatistician,
Center for Innovation and
Outcomes Research (CIOR)*

An epidemiologist and biostatistician, Dr. Kalesan facilitates collaborative research between the Center for Innovation and Outcomes Research (CIOR) and physicians and surgeons at the Department of Surgery. In addition to establishing research protocols, she collaborates with physicians throughout the Department of Surgery in methodological preparation and data analysis for clinical trials and longitudinal studies they wish to design.

Dr. Kalesan's current projects include studies of firearm-related injury survivorship, the impact of the broad implementation of laparoscopic surgery techniques, and in collaboration with experts in genetics, cardiology, and cancer, she is spearheading innovative new studies in cardio-oncology.

Ravi P. Kiran, MBBS, MS, FRCS (Eng), FRCS (Glas), FACS, Msc EBM (Oxford)

*Chief and Program Director,
Division of Colorectal Surgery*

Dr. Kiran's leadership has been instrumental in expanding the capabilities of the Division of Colorectal Surgery since his arrival. Dr. Kiran is one of only a few surgeons nationwide who performs continent ileostomy reservoir procedures and other complex operations to avoid a permanent ostomy after rectal or colon resection. He brings special expertise in complex reoperative pelvic and abdominal surgery and inflammatory bowel disease, as well as expertise in laparoscopic and open procedures for benign and malignant colorectal conditions. Dr. Kiran's plan to expand Columbia's colorectal surgery division involves close collaboration between multispecialty clinical practitioners and researchers, both within the Department of Surgery and in conjunction with the Mailman School of Public Health. Prior to arriving at NYP/Columbia, Dr. Kiran was Staff Surgeon and Head of the Research Section in the Department of Colorectal Surgery, and Director of the Rupert B. Turnbull School of Enterostomal Therapy, at the Cleveland Clinic Foundation.

Michael D. Kluger, MD, MPH

*Assistant Professor in the
Department of Surgery, Division
of GI & Endocrine Surgery*

An expert in hepatopancreatobiliary surgery and liver transplantation, Dr. Kluger's clinical specialties include minimally invasive pancreatic surgery, liver surgery, gallbladder surgery, repair of bile duct injuries, and treatment of peritoneal mesothelioma. Dr. Kluger is currently seeking to improve the care and outcomes for patients with stage IV colorectal cancer and synchronous liver metastases through a new algorithm-driven protocol. He is also treating patients with initially unresectable pancreatic and liver cancer through a multi-disciplinary approach.

Erin Murphy, MD

*Assistant Professor of Clinical
Surgery, Division of Cardiac,
Thoracic and Vascular Surgery*

Dr. Murphy performs a breadth of vascular surgery arterial procedures including but not limited to carotid stenting, carotid endarterectomy, thoracic outlet decompression, renal and mesenteric artery stenting and arterial reconstructions, lower extremity endovascular interventions, and lower extremity arterial bypass surgery. She performs a variety of venous procedures including vena cava filter placement and removal, treatment of axillosubclavian and iliofemoral DVT, and thoracic decompression for Paget-Schroetter disease.

Kevin Parrack, MD

*Attending Surgeon in the Division
of GI/Endocrine Surgery, Director
of Thyroid Biopsy Clinic*

Dr. Parrack specializes in diseases of the thyroid, parathyroid, and adrenal glands. He directs the newly formed Thyroid Biopsy Clinic, which offers single-day evaluation of thyroid nodules. Dr. Parrack's research efforts include the use of ultrasound in thyroid cancer, thyroid biopsy, and parathyroid disease in renal failure patients. He is also working to create a new protocol for the treatment of secondary hyperparathyroidism and several education initiatives and trials.

Gregory Stanley, MD

*Assistant Professor of Clinical
Surgery, Division of Vascular
Surgery and Endovascular
Interventions*

Dr. Stanley has extensive expertise in the management and treatment of aortic diseases, including aneurysms in the chest and abdomen, aortic dissection, aortic graft and endograft infection, and endograft failure (endoleaks). In addition, he has advanced training with the latest endovascular technology (including patient-customized devices) as well as with open surgical techniques. Dr. Stanley is also experienced in treating a wide spectrum of other arterial and venous diseases, including carotid artery disease, peripheral arterial disease (PAD), and deep venous thrombosis and insufficiency.

Dr. Steven Stylianos, MD

*Chief, Division of Pediatric Surgery
and Surgeon-in-Chief, Morgan
Stanley Children's Hospital*

Dr. Stylianos is a renowned pediatric surgeon with special expertise in neonatal and pediatric trauma surgery. His current appointments at NYP/Columbia mark a return to the institution where he did his general surgical training and spent the early part of his career beginning in 1992. Dr. Stylianos gained significant acclaim when he organized and directed the 50-member team of physicians and nurses who separated conjoined twins in 1993, 1995 and 2000. Throughout the years, Dr. Stylianos has served as Chairman of the Trauma Committee for the American Pediatric Surgical Association (APSA), and he authored the APSA position paper supporting all measures to reduce the toll of firearm violence in children.





Save the Date

Don't miss the following special events hosted by the Department of Surgery! These events are free and open to the public, but reservations are required.

Melanoma Awareness Day

Saturday, November 2, 2013

1:15PM – 4:00PM

New York City

Learn about screening, prevention, treatment options and more from experts at NYP/Columbia, and hear patients share their personal experiences. For more information contact Nina Scatton at: njs2144@columbia.edu

Lung Cancer Awareness Day

Saturday, November 16, 2013

1:15PM – 4:00PM

New York City

Learn about screening, prevention, treatment options and more from experts at NYP/Columbia, and hear patients share their personal experiences. For more information contact Stephanie Scheeler at: sas2258@columbia.edu

Pancreatic Cancer Awareness Day

Saturday, November 9, 2013

1:00PM – 3:00PM

New York City

Join us for an afternoon of learning and sharing with the experts of the NewYork-Presbyterian/Columbia University Medical Center, Pancreas Center, Muzzi Mirza Pancreatic Cancer Prevention & Genetics Program and Herbert Irving Comprehensive Cancer Center. Following the presentations we will host a health fair in the Riverview Terrace where refreshments will be served. For more information contact Christine Rein at: cmr2146@columbia.edu

Bridging the Gap: Enhancing Breast Cancer Prevention, Screening, and Wellness

Saturday, December 7, 2013

8:30AM – 2:30PM

New York City

Bring your friends and family for a day of demonstrations, lectures, exhibits, giveaways, survivor testimonials and more! For more information contact Christine Rein at: cmr2146@columbia.edu

*For location information and to register for events, please visit:
www.columbiasurgery.org/events/ or call 201.346.7001.*

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