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Summer 2013 healthpoints

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 COLUMBIA UNIVERSITY
 MEDICAL CENTER
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Craig R. Smith, MD, FACS
 Chairman,
 Department of Surgery

Greetings: Message from the Chairman

What could be better than having successful surgery with one of the nation's top surgeons? Not needing surgery at all!

In this issue of Healthpoints, you will learn about two new programs in the Department of Surgery: a one-of-a-kind program to provide essential screening of adults with congenital heart disease, and a newly established CT lung screening program to detect early signs of lung cancer before the onset of any symptoms. These initiatives were established to prevent and detect early signs of disease because we are committed

to doing everything possible to promote patients' health and well-being.

I am very pleased to welcome two division leaders who embody this goal through their emphasis on proactive planning and collaboration among specialists for optimal care. Read within to learn more about **Richard Green, MD, FACS**, Associate Chief of the newly-formed comprehensive Division of Cardiac, Thoracic and Vascular Surgery, and **Ravi P. Kiran, MBBS**, Chief of Colorectal Surgery, whose unique expertise will benefit patients with all forms of colorectal disease. ■



Ravi P. Kiran, MBBS, MS,
 FRCS (Eng), FRCS (Glas),
 FACS, Msc EB (Oxford),
 Chief and Program
 Director of the Division
 of Colorectal Surgery

New Faculty Highlight: Ravi P. Kiran, MBBS

Patients with benign and malignant disorders of the intestine, colon, rectum, or anal canal will directly benefit from Dr. Kiran's arrival.

The Department of Surgery welcomes **Ravi P. Kiran, MBBS, MS, FRCS (Eng), FRCS (Glas), FACS, Msc EB (Oxford)**, as Chief and Program Director of the Division of Colorectal Surgery. Dr. Kiran arrived June 1, 2013, having previously served at the Cleveland Clinic Foundation as 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.

Patients with benign and malignant disorders of the intestine, colon, rectum or anal canal will directly benefit from Dr. Kiran's arrival. He brings a wealth of expertise that enables the division to offer both straightforward and advanced surgical options for a variety of colorectal conditions.

Dr Kiran has extensive experience in reoperative abdominal and pelvic surgery and the management of complex colorectal conditions including inflammatory bowel disease, early and advanced cancer, enterocutaneous fistulae, and other complicated colorectal conditions requiring surgery. He has a unique breadth of experience in the management of patients with Crohn's disease and ulcerative colitis, who often require skilled surgery to eliminate disease while preserving intestinal length and quality of life. This rare experience with the management of advanced and complex

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For physician referrals, please call: **1.855.CUSURGE**

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Fast-track Evaluation for Adults with Congenital Heart Disease

One-of-a-kind program provides single-day evaluation and consultation with senior ACHD specialists.

Adults who had childhood surgery for Tetralogy of Fallot or pulmonary stenosis should continue to be evaluated to ensure that their hearts are functioning well and to determine whether any further treatment may be needed. A new fast-track program at the *Schneeweiss Adult Congenital Heart Center* now makes it possible for patients to obtain thorough, sophisticated testing and expert consultation in a single visit.

Why the need for this special program?

Thirty years ago, the first generation of children to undergo successful repairs of their heart defects on a wide scale represented a new era in cardiac care. For the first time, surgery provided new lifesaving options that allowed many to live relatively normal lives and progress to adulthood and beyond.

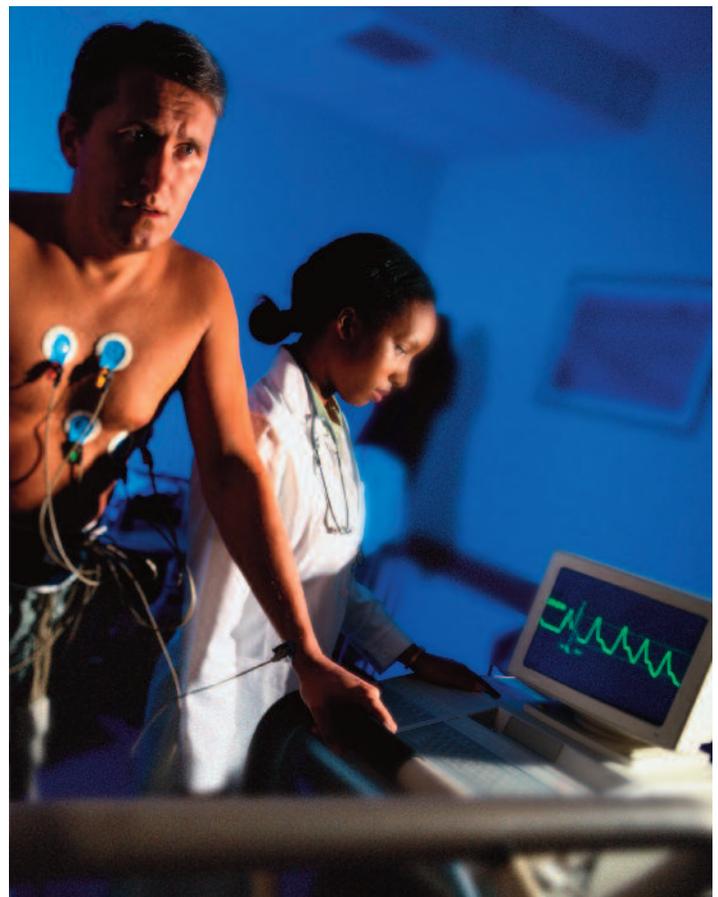
But it turns out that many of these young adults, once considered fully cured, have developed previously unforeseen problems as a result of those early repairs.

Marlon S. Rosenbaum, MD, Director of the *Schneeweiss Adult Congenital Heart Center*, explains, "Surgeons used to think that after early surgery to repair their defects, children with Tetralogy of Fallot or pulmonary stenosis would be fine thereafter. During the last decade, however, we have learned that many patients do have consequences of early surgery that are important to address."

Childhood surgery for these conditions typically involved enlarging a narrowed pulmonary valve, which resulted in a leakage of blood back into the right ventricle. Over decades, such leaks can cause progressive enlargement of the ventricle, interfering with its function. The treatment is to replace the pulmonary valve before there is irreparable damage to the right ventricle.

"A large segment of patients with Tetralogy of Fallot, and increasing numbers of those with pulmonary stenosis, are now requiring pulmonary valve replacement," says Dr. Rosenbaum. Left untreated, this problem can lead to irreversible failure of the right ventricle, an additional leak in the tricuspid valve, arrhythmias, heart failure, and fluid retention. If the heart becomes too enlarged and cannot recover, heart transplantation may be the only option.

Proper evaluation and timely intervention with valve replacement is highly effective in reducing the size of the right ventricle and generally leads to a 30% reduction in the size of this chamber. "Although we continue to refine the timing for pulmonary valve replacement, we do know that too many



During a single visit to the Schneeweiss Adult Congenital Heart Center, a series of tests evaluate the function of the pulmonary valve and tricuspid valve, presence of arrhythmias, enlargement of the right ventricle, and other potentially dangerous problems that may be brewing long after childhood surgery.

patients are still being referred with excessively large right ventricles that should have been addressed earlier with pulmonary valve replacement," says Dr. Rosenbaum.

The problem is two-fold. Across much of the country, patients with Tetralogy of Fallot or other congenital heart diseases often follow up with cardiologists who may be unfamiliar with unique sequelae that occur after childhood heart surgery, explains Dr. Rosenbaum. Patients and their cardiologists alike frequently do not recognize symptoms that could indicate a problem because patients have lived with their conditions their entire lives. Difficulty with stairs, or being unable to run, for instance, just seem normal. Simply put, most cardiologists are not comfortable advising their adult congenital heart patients regarding the need to replace the pulmonary valve.

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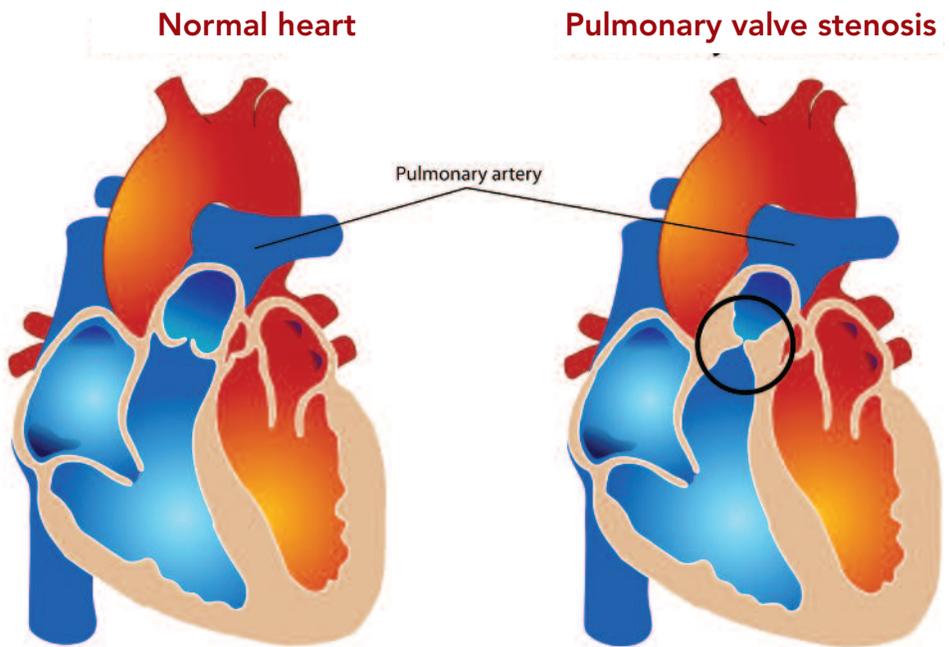
Moreover, even if cardiologists recognize the need for further evaluation, the process of determining whether a patient may need pulmonary valve replacement typically requires multiple visits for a consultation, congenital echocardiography, cardiac MRI, cardio-pulmonary stress test, and sometimes a cardiac catheterization. This multi-stage process is cumbersome, and for people living far from an adult congenital heart center that offers this expertise, too costly or time consuming to arrange.

But as Dr. Rosenbaum explains, "It is extremely important to know if your right ventricle is excessively large and not pumping well, or if other potentially dangerous problems are brewing."

The Fast-Track Evaluation Program

In order to make it possible for patients to obtain evaluation in an expedited fashion, and to provide the experienced decision-making necessary for optimal care, the *Schneeweiss Adult Congenital Heart Center* at Columbia has established an innovative, first of its kind, fast-track evaluation program. When a patient with Tetralogy of Fallot or pulmonary stenosis calls to schedule an evaluation, this sets in motion a discussion with our nurse practitioner, validation of insurance, and a request for pertinent test results. Then, during a single visit scheduled within two to three weeks of the initial call, the patient comes to the center for the three major tests followed by consultation with a senior adult congenital heart specialist to review the test results and discuss treatment needs. "Although this process involves a lot of coordination on our end to get these studies performed and interpreted in one day, it will be a great advantage for the patient who seeks expert advice during a day trip to New York City. At the end of the day, we are able to tell the patient what he or she needs to know," says Dr. Rosenbaum.

In addition to evaluating the need for pulmonary valve replacement, the testing will identify related problems such as a leak in the tricuspid valve,



narrowing of a pulmonary artery, or history of arrhythmias. Up to 20% of patients who underwent repair for Tetralogy of Fallot now have atrial arrhythmias, according to Dr. Rosenbaum. Treatment options range from medication, catheter ablation or arrhythmia surgery during valve replacement.

"It is an exciting time to practice adult congenital heart disease," says Dr. Rosenbaum. "Advances in catheter-based technology such as percutaneous pulmonary valve replacement and a better understanding of late outcomes are changing the way ACHD is practiced at the major programs. Fast-track is our attempt to provide ACHD patients easy access to cutting edge technology and senior-level expertise." ■

The Schneeweiss Adult Congenital Heart Center includes specialists in echocardiography, MRI, electrophysiology, and exercise testing. To learn more or to request an appointment, please visit: columbiaheart.org/congenital.html or call: 212.305.6936.

Pulmonary valve stenosis is a heart valve disorder in which outflow of blood from the right ventricle of the heart is obstructed at the level of the pulmonic valve.

The most common cause of pulmonary valve stenosis is congenital heart disease.

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conditions also translates into optimal management of less complex conditions, which Dr. Kiran also regularly treats in his clinical practice.

Continence Preserving Techniques

One of the most difficult consequences of conditions such as ulcerative colitis, Crohn's disease, familial adenomatous polyposis (FAP), Crohn's colitis, and other diseases of the large intestine and or rectum, can be loss of continence. Depending on the condition, some patients require surgery that would leave them reliant on external appliances for collection of urine and stool. In order to best preserve patients' quality of life, Dr. Kiran has been at the forefront of developing unique, complex procedures that enable many patients to maintain continence. "We understand the distressing, even devastating effects that incontinence can have on patients' quality of life," says Dr. Kiran.

In particular, Dr. Kiran is considered one of the world's foremost experts in creating pouches such as the ileoanal pouch (also called J-pouch). In this procedure, surgeons create a new internal reservoir, or pouch, out of a portion of the small intestine where the rectum used to be. The pouch is attached to the anus, allowing patients to maintain continence and avoid a permanent ostomy after rectal or colon resection. If a patient has suffered pouch failure, Dr. Kiran and his team are able to offer highly advanced options including revisional pouch surgeries, conversion of a J-pouch into a continent ileostomy (K-pouch), and other options available in very few centers. In addition, his expertise in the management of complex colorectal conditions allows for the optimal management of colorectal cancer. According to Dr. Kiran, "We are frequently able to devise surgical solutions to avoid a permanent ostomy, even in such adverse circumstances as multiple previous operations, complicated or severe inflammatory bowel disease, or advanced colon or rectal cancer."

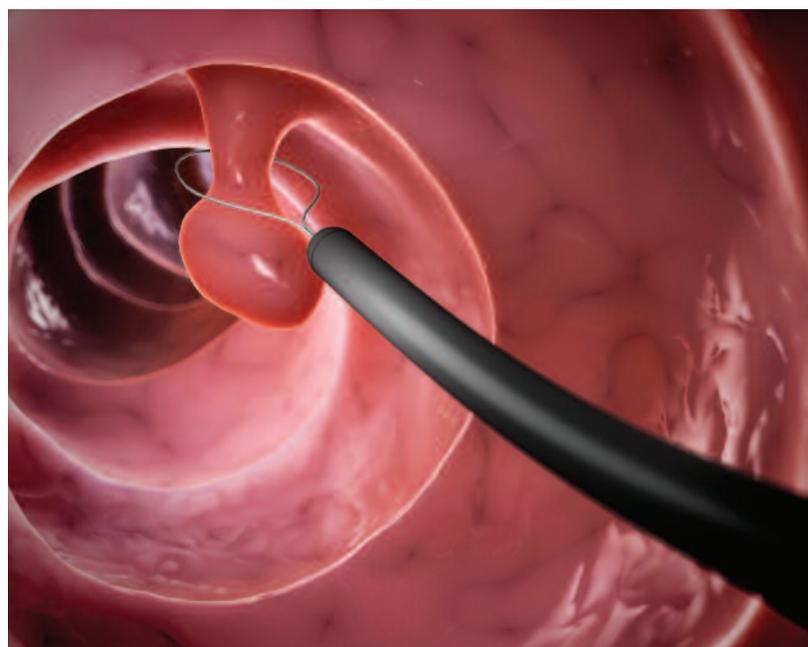
Dr. Kiran's experience also benefits patients who suffer from diverticular disease, anorectal conditions, bowel motility disorders, constipation, and pelvic floor disorders. Dr. Kiran's team offers multidisciplinary care, minimally invasive options, and all surgical options including laparoscopic and robotic surgery.

Moreover, Dr. Kiran is committed to ensuring that patients not only receive optimal care, but that care is available immediately. "We know that symptoms of colorectal disease may require immediate care. To meet patient's needs as well as possible, we now offer same or next-day appointments." Efforts are also underway to streamline the care process for patients with colorectal cancer and their families, with the help of a cancer liaison nurse who works across multiple disciplines.

In addition to his clinical practice, Dr. Kiran devotes time to researching the integration of surgical clinical outcomes and quality to improve patient care. He plans to expand Columbia's colorectal surgery division by collaborating with clinical practitioners and researchers within the Department of Surgery, with other medical specialties, and with the Mailman School of Public Health.

The Division of Colorectal Surgery is available for second opinion consultations for anyone who wishes to confirm a diagnosis or discuss treatment options. ■

Please learn more by visiting www.columbiasurgery.org or schedule an appointment at 1.855.CU.SURGE.



Nearly all cases of colorectal cancer begin with the growth of polyps, or benign growths of tissue, in the intestine. During colonoscopy, your doctor examines the inside of the rectum and entire colon through a flexible, lighted tube. The doctor may remove polyps and collect samples of tissue or cells for closer examination.

CT Lung Screening Saves Lives

NYP/Columbia program offers high quality, low-dose CT screening for people at risk for lung cancer.

The CT Lung Cancer Screening Program at NYP/Columbia offers state-of-the-art low-dose CT screening to individuals at high risk for developing lung cancer. Screening with CT significantly increases the likelihood of detecting cancers at early stages when they are curable, according to **Anna Rozenshtein, MD, MPH, FACR**, Associate Professor of Clinical Radiology at NewYork-Presbyterian/Columbia University Medical Center.

The CT Lung Screening program includes subspecialty-trained chest radiologists as well as Board-certified pulmonologists, oncologists, and thoracic surgeons. Advanced low-dose equipment delivers less than 20% of the radiation dose used in an average diagnostic chest CT exam.

Anyone concerned about his or her risk because of smoking history, family history, or other concerns should call the Pulmonary Nodule Assessment Program, and a pulmonary physician will determine if CT screening is right for you. If so, it can be performed the same day as your consultation. The lung screening team provides seamless referrals for follow-up testing and treatment in the event that any abnormalities are found.

About CT Screening for Lung Cancer

The underlying principle is to screen people at risk before the onset of symptoms in order to detect disease early while it still can be cured. Lung cancer is the most deadly form of cancer, responsible for 1.3 million deaths worldwide each year. Almost 400,000 Americans have the disease, and about half will die within one year of diagnosis. Unfortunately, until recently there has been no effective screening for lung cancer.

It has been determined that chest x-rays are not sensitive enough to detect tumors at a sufficiently early stage when they are most treatable. Screening with computed tomography (CT) became available in the 1990's. Although CT screening provides a more sensitive scan of early tumors, the early technology involved radiation doses that were a concern, and CT scans were expensive. During the last two decades however, the equipment has improved and radiation doses have dropped significantly.

In August 2011, the National Lung Screening Trials (NLST) published clear and compelling evidence regarding the value of CT lung cancer screening. This study of 53,000 current and former smokers found that CT screening significantly reduced the rate of deaths from lung cancer, as well as deaths from all causes overall. "The evidence was robust and compelling," says **Joshua R. Sonett, MD**, Chief, Section of General Thoracic Surgery.

Who should be screened?

New guidelines issued in 2013 by the American Cancer Society and the American College of Chest Physicians recommend CT screening for smokers aged 55-74 in good health with a 30-pack-year smoking history, who are still smoking or who have quit within 15 years.

These guidelines are directly based on the landmark National Lung Screening Trial. Most insurance carriers will not cover the cost of CT screening for patients at high risk of lung cancer, although some will. If insurance is not available, the fee for screening at NYP/Columbia is \$300.00. ■

Call 212.326.8505 for information or to schedule your CT screening.



CT scan of the lungs

This painless, noninvasive test creates precise pictures of the structures in your chest including the lungs.

Doctors use chest CT scans to:

- Show the size, shape, and position of your lungs and other structures in your chest.
- Follow up on abnormal findings from standard chest x rays.
- Find the cause of lung symptoms, such as shortness of breath or chest pain.
- Find out whether you have a lung problem, such as a tumor, excess fluid around the lungs, or a pulmonary embolism (a blood clot in the lungs). The test is also used to check for other conditions, such as tuberculosis, emphysema, and pneumonia.

Did You Know?

You can listen to expert surgeons discuss topics within their specialties on the **Department of Surgery's BlogTalkRadio** channel. Tune in any time for new broadcasts each week: www.blogtalkradio.com/columbiasurgery

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New Faculty Appointment: Dr. Richard Green

Dr. Richard Green, Associate Chief of Cardiac, Thoracic, and Vascular Surgery

The Department of Surgery welcomes **Richard Green, MD, FACS** as *Associate Chief, Division of Cardiac, Thoracic and Vascular Surgery* as of April 1, 2013.

Dr. Green has longstanding experience in fostering collaboration across specialties in order to promote optimal care for patients with vascular disease. We are very excited to have Dr. Green as part of our department leadership team.

Save the Date

These events are free and open to the public, but reservations are required.



Annual Pancreatic Cancer Awareness Day

Saturday, November 9, 2013

New York, NY

Join us for an afternoon of learning and sharing with the experts of NewYork-Presbyterian, Columbia University Medical Center, The Pancreas Center and The Muzzi Mirza Pancreatic Cancer Prevention & Genetics Program.

This community patient education program will address the latest information about screening and early detection of pancreatic cancer. Our faculty provides this forum for patients and their families to learn about treatment options and sources of support.

Information and reservations:

Christine Rein

Telephone: 201.346.7014

Email: cmr2146@columbia.edu

Fall Community Programs

NYP/Columbia University Medical Center will be hosting several community events this Fall. Please visit our website at www.ColumbiaSurgery.org and click on "Events" for the latest information.

Events in the works include:

Community awareness programs on lung cancer, breast cancer, melanoma, and more.

We will also be offering vein screenings and blog talk radio programs on a variety of clinical topics.

For more information and reservations, please contact Christine Rein:

Telephone: 201.346.7014 Fax: 201.346-7011

Email: cmr2146@columbia.edu

Register online: www.ColumbiaSurgery.org