In This Issue

The Rise of Early Onset Colon Cancer: More cases in young adults

> Single Incision Surgery: No scars, faster recovery for colorectal patients

healthpoints is published by the Department of Surgery at NewYork-Presbyterian/ Columbia University Medical Center as a service to our patients.

You may contact the Office of External Affairs for additional information and to request additional copies. Please call: 212.304.7810

For physician referrals, please call: **1.855.CU.SURGE** or email: info@columbiasurgery.org

Visit us and sign up for the healthpoints eNewsletter at: www.columbiasurgery.org

Deborah Schwarz, RPA, CIBE Executive Director, Office of **External Affairs**

Iada Fabrizio Design and Photography

Valerie Andrews Managing Editor

More from the Department of Surgery experts at:

Message from the Chairman



Dear Reader,

I am pleased to report on the success of our fourth annual Colorectal Cancer Awareness Day, which drew over 60 patients and members of the community. Our entire issue is devoted to advances in colorectal surgery, and will introduce you to members of Columbia's internationally renowned team who have pioneered the latest minimally invasive approaches.

Craig Smith, MD

While the overall incidence of colon cancer is decreasing thanks to screening colonoscopy, the rate of colorectal cancer among young adults is

on the rise. We consider some of the reasons for this below. Columbia surgeons offer the latest treatment options that result in faster recovery, better control of elimination, reduced need for a colostomy bag, and better quality of life—and that may even add years to patients' lives.

In this issue, we introduce two new members of our faculty, Daniel Geisler, MD, the world's foremost expert in single incision techniques for colorectal surgery and Deborah Keller, MD, MS who studied under Dr. Geisler and specializes in pelvic floor issues as well as minimal access surgery. In a Q&A below Dr. Geisler explains how new minimally invasive techniques are revolutionizing the field of colorectal surgery and helping patients to lead rich and fulfilling lives.

Warmly,

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

The Rise of Early Onset Colon Cancer

More cases in young adults

A recent study published in The Journal of the National Cancer Institute shows that the incidence of colorectal cancer (CRC) in the U.S. is declining rapidly overall but curiously increasing among young adults.

"This study reveals that the demographics of colon cancer are changing," says Benjamin Lebwohl, MD, MS, Director of Clinical Research of The Celiac Disease Center at Columbia. "We are seeing fewer new cases of colon cancer in individuals over age 50, due in large part to screening colonoscopy. But we are seeing more cases in people in their 20s and 30s than in previous decades."

The risk of colon cancer in young adults is still much lower than for people over 50, Dr. Lebwohl notes, adding that general population screening is not recommended for the younger age bracket. "But there has been a detectable rise, and the reasons for this have not

The Rise of Early Onset Colon Cancer ~ Continued on page 4







Single Incision Surgery

No scars, faster recovery for colorectal patients



Daniel Geisler, MD

Columbia surgeons have developed new minimally invasive procedures to help individuals suffering from a range of challenging, painful, and life-limiting colorectal diseases, including severe ulcerative colitis, Crohn's disease, familial polyposis, diverticulitis and colorectal cancer.

For years, patients with these conditions endured long, extensive surgeries associated with postoperative complications and long recovery times. Many ended up with a colostomy bag that compromised their

ended up with a colostomy bag that compromised their quality of life. Now, recent innovations can preserve continence, bring faster recovery and better cosmetic results, and may even add years to a patient's life.

We spoke about these advances with **Daniel Geisler**, **MD**, a pioneer of several new techniques, who recently joined Columbia's world class Colorectal Surgery team.

Can you describe how minimally invasive approaches are revolutionizing the field of colorectal surgery?

Our recent advances are called SILS (Single Incision Laparoscopic Surgery) and TAMIS (Transanal Minimally Invasive Surgery).

With these techniques, we have moved from a foot-long incision to remove the bowel to a single one-inch incision. This is often done through the belly button, leaving virtually no scar.

The single port technique has many advantages for patients who need to have a section of the colon, or the entire colon, taken out. Less cutting means a shorter hospital stay, better quality of life, and less trauma to the body.

The Columbia team also specializes in sphincter-preservation surgery for those with cancers very low in the rectum, severe ulcerative colitis, and challenging Crohn's disease.

As pioneers in the field, we push the envelope to provide highly individualized care.

How did you develop these new minimally invasive approaches?

In 2001, I was the first Board-eligible colorectal surgeon in the world to spend an extra year focusing on minimally invasive approaches for the treatment of colorectal disorders. At that point, we performed most of these procedures through a

foot-long incision. I learned how to accomplish this using 3-4 small incisions. While working with Dr. Ravi Kiran, now head of the Columbia Colorectal Surgery Division, we pared those three small incisions down to a single one through the belly button (SILS). The team at NYP/Columbia now has the most experience in the world with this procedure.

How does recovery time compare to conventional approaches?

With a big incision, patients typically spend 5 to 7 days in the hospital. For the next six weeks they cannot lift more than 15 pounds.

With SILS patients spend only 2 to 4 days in the hospital. They have to take it easy for four weeks, but they have more energy, and they feel like they can get up and about and do a lot of things fairly soon after surgery.

After SILS, our patients have less pain, quicker recovery, and a faster return to eating normally. They also have better cosmetic results.

With SILS, patients with inflammatory bowel disease (ulcerative colitis and Crohn's disease) have better elimination and prolonged remission.

We also think that long-term survival for cancer patients may be improved with SILS as well.

What can patients with different diagnoses expect from SILS or other minimally invasive surgery?

If a patient has severe colitis and has to keep running to the bathroom, removing the diseased portion of the colon with SILS turns their life around. It gets them out with friends and family once again.

A patient with inflammatory bowel disease has similar problems with isolation. But after SILS, they will have greater social ease. They will also tend to have fewer complications, better function, and fewer dietary restrictions.

What about patients who aren't in such good health at the time of surgery?

A minimally invasive approach is much better than open surgery for patients with cardiac, respiratory and other conditions. They typically recover faster with fewer complications.

The elderly also tend to do better with minimally invasive surgery. One patient recently sent us follow-up pictures of herself white water rafting in Juneau, Alaska, on her 92nd birthday! Research shows that a high percent of patients over 70 go to nursing homes after colon resection surgery. But with minimally invasive surgery, we can get patients back on their feet the next day. That means they are much more likely to get discharged sooner and go home instead.

Some older patients also have dementia, and with SILS, they don't have to be restrained for fear that they might forget they had the procedure and hurt themselves by getting up too early. This approach is much easier on them.

You also specialize in helping patients to avoid colostomy and retain continence. Can you describe this surgery?

After extensive colorectal surgery, many patients have a tube that drains into an external bag all day. We refer to this as a colostomy.

I performed the first J-pouch several years ago to help patients avoid the bag. In this surgery, we remove the entire colon and rectum and create an internal reservoir, or holding tank, that's joined to the anal canal. This pouch functions like the large colon, so patients can retain continence.

At other hospitals, patients require a foot-long incision for this surgery. We do this with an incision the size of a quarter.

The J-pouch is useful for patients with ulcerative colitis and familial adenomatous polyposis (FAP), a condition in which polyps form in the colon and eventually turn cancerous.

Dr. Kiran has expertise in the K-pouch, a variant on this approach. Patients with a K-pouch eliminate through a simple tube with a small opening, and do not need an external bag.

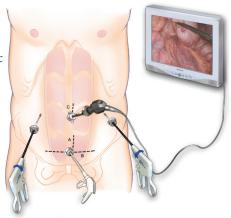
Some of our patients may still require a temporary colostomy. But we do this with a minimally invasive approach, and when the colostomy is reversed, they have much better control.

Dr. Kiran has put together an all-star team of six colorectal surgeons whose expertise is unrivaled anywhere in the world. We can offer full-scope colorectal treatments in the least invasive fashion, giving our patients the option of life without a permanent bag.

Why did you chose this particular specialty?

My dad was a heart surgeon and I thought about following in his footsteps, but I felt I could make a greater difference in colorectal surgery.

My wife was also an inspiration. She is a colorectal patient who, years ago, had a big-incision surgery. She kept up with all the progress that we've made, and has befriended a lot of my IBD patients, encouraging them to be as active as they During laparoscopic surgery, surgical instruments and a tiny camera are inserted through small ports in the abdomen.



can. She's a marathon runner and never lets her diagnosis get her down. So the message we give to everyone is, "Keep on following your dreams. This kind of diagnosis doesn't have to change your life."

I always offer my patients the opportunity to talk with those who've benefitted from our new surgical techniques.

Can you share one of your success stories?

Our patients now have the best chance ever of beating colorectal cancer or colitis, and most can avoid living with a bag. I'm thrilled that we help them beat their disease and go out and conquer the world as if they never had a serious diagnosis.

One of my early single-incision patients was a 13-year-old boy with FAP. This is an inherited disorder that starts with benign polyps. These polyps can start taking over the colon in the early teenage years, and typically turn cancerous by the time the patients are in their 20s. These young kids come in scared as heck, but we say, "We'll get you through this, and you'll have the life you want."

This particular boy wanted to get back to playing baseball and football. We were able to take out his entire colon through the belly button, and we made sure that he didn't need to wear a colostomy bag.

Then there's the second grade teacher with ulcerative colitis who had her entire colon removed. She went on to qualify for the Boston marathon three times. Another patient with ulcerative colitis couldn't make it through nine holes of golf without rushing to a bathroom. After a J-pouch, he can now play 18 holes with ease.

The joy of doing this work is that we get to see a lot of happy patients.

Learn more about Columbia's world class Colorectal Surgery Division here: http://columbiasurgery.org/colorectal

To make an appointment please call 212.342.1155

Continued from page 1 ~ The Rise of Early Onset Colon Cancer



Steven Lee-Kong, MD has received advanced training in and oversees the performance of all robotic procedures in the division of colorectal surgery

been identified." The recent study suggests that rise in CRC in young adults has likely been fueled by steady increases in their excess body fat, but more research is needed to illuminate the cause.

"While these findings do not change current screening recommendations which are to begin screening at age 50 among average risk individuals," says Dr. Lebwohl, "they underscore the need to carefully assess any adult with symptoms such as persistent rectal bleeding, and to keep in mind that colon cancer can occur at any age."

Columbia surgeons are known for treating colorectal cancer with minimally invasive options.

"For most of our patients, we use laparoscopic or robotic techniques, avoiding large incisions," says Columbia colorectal surgeon, **Steven A. Lee-Kong, MD**. "We can preserve function even for those who need a permanent colostomy (an artificial opening created in the abdominal wall to bypass a damaged part of the colon). We are also experts in transanal surgery, an operation for patients with

small early stage rectal cancer that hasn't spread to the sphincter and that also preserves function. In addition, our GI surgeons can remove premalignant lesions with advanced colonoscopic techniques.

Other diseases treated by the Columbia Colorectal surgical team include:

- Crohn's disease. Crohn's affects 780,000 Americans, at any age and is prevalent among adolescents and young adults between the ages of 15 and 35. In Crohn's, inflammation can appear anywhere in the digestive tract, from the mouth to the rectum. It generally affects all layers of the bowel walls.
- Diverticulitis. Diverticulitis, an infected pouch in the colon, is diagnosed in roughly 200,000 people every year.
- Ulcerative colitis. Affecting 900,000 Americans, this inflammatory disease affects only the inner lining of the large intestine (colon).
- Inflammatory Bowel Disease (IBD). Affecting about 1.3 million Americans, IBD is a term applied to disorders that involve chronic inflammation of the digestive tract. The umbrella terms includes both ulcerative colitis and Crohn's.
- Familial Adenomatous Polyposis (FAP) is a genetic condition affecting 1 in 22,000 Americans by some estimates, and as many as to 1 in 7,000 by others. It is diagnosed when patients develop more than 100 adenomatous colon polyps—usually in their mid-teens. If FAP is not treated early, patients have a high risk of developing colorectal cancer later on, and an increased chance of contracting cancer in other organs.

Learn more about Columbia's division of Colorectal Surgery at http://columbiasurgery.org/colorectal

To make an appointment, please call 212.342.1155



Dr. Deborah Keller comes to Columbia with rich clinical experience, a passion for teaching, and research expertise. She completed her colorectal surgery fellowship training in 2017 at Baylor. Prior to Baylor, she was a surgeon and research director at Colorectal Surgical Associates / Houston Methodist Hospital. She is a surgical scientist, with over \$400,000 in grant support since 2013, and will help advance the academic and research missions of Columbia University's Division of Colon and Rectal Surgery. She will also partner with Dr. Geisler to develop the Division's expansion into New Jersey. To make an appointment with Dr. Keller, please call 212.342.1155.

Deborah Keller, MD

Still can't find what you are looking for?

With over 5000 pages on our web site, we probably have it covered. Use the search bar located on the top of every page at: **www.columbiasurgery.org** or email us at **info@columbiasurgery.org**