At 44, Dr. Brian Elford had it all. A successful ear, nose and throat practice in the South Hills of Pittsburgh, a wonderful wife, four kids and a new home under construction in the suburbs. But on a December night in 2015, Elford awoke writhing in pain. The pain emanated from the lower left part of his abdomen, and he didn't know what to do.

Within an hour the pain subsided, so Elford reacted the way many of us do. He assumed it was something he ate or a symptom of irritable bowel, and toughed it out. However, the same pain occurred a few more times over the following month, so Elford reached out to his long-time friend and colleague, Dr. Mark Cedar, Chief of Gastroenterology at St. Clair Hospital and a physician of Pittsburgh Gastroenterology Associates and the South Hills Endoscopy Center in Upper St. Clair.

**DETECTIVE WORK**

As Dr. Cedar began asking questions, something about Dr. Elford's pain did not add up. He did not have any bowel changes that might suggest Crohn's disease, colitis or celiac disease. He did not have any bleeding, fatigue or weight loss. He also did not have any risk factors for cancer or Crohn's, such as tobacco use, obesity or family history.

Elford had thought perhaps he had celiac disease, so he eliminated gluten from his diet for a short time, and thought he felt a bit better. But, Elford's self-diagnosis of irritable bowel or celiac disease did not make sense, in Cedar's view.

So, Cedar ordered a CT scan and blood tests, hoping to find a simple explanation such as a kidney stone. Instead, the scan showed an irregularity in the colon. Cedar then performed a colonoscopy at South Hills Endoscopy and confirmed Elford had a large, partially obstructing, malignant mass in the left lower part of his colon.

The size of the mass, comparable to a ping pong ball, explained Elford's severe intermittent pain. Abdominal pain is not a typical symptom of colon polyps or colon cancer, which are often asymptomatic until the later stages. Instead, Elford's pain was caused by blockage preceding his bowel movements.

The CT scan showed many prominent lymph nodes near the colon, so Dr. Cedar was concerned the cancer had spread to the lymph nodes or nearby organs.

Three days later, Dr. Leigh Nadler, Chief of Colorectal Surgery at St. Clair Hospital, successfully removed the mass. Luckily, the mass was diagnosed as stage 2 cancer and the lymph nodes were cancer-free, significantly diminishing the risk of cancer spreading to Elford's other organs. It also meant Elford would not need chemotherapy. A few weeks later he was back to work and feeling great.

“A real life-changing event,” Elford says.

**TIME IS OF THE ESSENCE**

The best thing Elford did was not ignore his pain. Otherwise the outcome could have been much different, Cedar says. If someone who is diagnosed with colon cancer is also found to have cancer cells in their lymph nodes, the person's five-year survival rate drops from 90% to between 60% and 70%, according to Cedar. And if it spreads to other organs such as the liver, the five-year survival rate is closer to 10%. Additionally, side effects from chemotherapy could have impaired Elford's ability to perform surgery.

“He was very fortunate,” Cedar says. “Had he waited much longer the tumor would have spread and he would have certainly required chemotherapy.”

It may seem that Elford was too young to have colon cancer, but his story is not unique. A 2016 study from the journal *Cancer* found that 15% of all colorectal cancer patients are diagnosed under age 50. These cancers may also be more aggressive.

Most doctors recommend people begin regular colonoscopies at age 50, but if they have a family history of colon or rectal cancer, they should get their first colonoscopy at age 40. Smoking and obesity also significantly increase the risk of developing colorectal cancer. Dr. Cedar hopes this recent journal article helps push the starting age of colonoscopy earlier.

**THE GOAL OF MOST PREVENTIVE EXAMS IS TO DETECT A CANCER WHEN IT IS SMALL. BUT THE GOAL OF A COLONOSCOPY IS TO REMOVE THE POLYP BEFORE IT EVEN TURNS INTO A CANCER.**

**DR. MARK CEDAR**

PITTSBURGH GASTROENTEROLOGY ASSOCIATES
Although colorectal cancer is the third-most commonly diagnosed cancer in males and second in females, both the incidence and mortality rates have been slowly but steadily decreasing in the United States, Dr. Nadler says. Approximately 8% of all cancer deaths are related to colorectal cancer, he says.

“Over 95% of our patients with colorectal cancer are treated laparoscopically,” Nadler says. “We use the DaVinci robot in select cases, especially rectal cancer. St Clair Hospital also participates in the OSTRiCh Consortium (Optimizing the Surgical Treatment of Rectal Cancer), to provide quality state-of-the-art rectal cancer care through a multidisciplinary team in the evaluation and treatment of rectal cancer. Ultimately, laparoscopic and robotic surgery allows faster recovery with shorter hospital stay, quicker return of bowel function, smaller cosmetic incisions, with no detrimental impact on recurrence or survival compared with open surgery.”

St. Clair recently instituted for all colorectal surgeries an Enhanced Recovery After Surgery protocol, which includes pre-op, intra-op and post-op measures to minimize post-op pain, decrease wound infection and shorten the time hospitalized.

**POWER IN PREVENTION**

About one in 20 people will in his or her lifetime get colon or rectal cancers. This doesn’t have to happen, Cedar says, because colonoscopies allow doctors to potentially preempt the problem.

"I find pre-cancerous polyps (adenomas) in approximately 50% of all average-risk patients who present for their first screening colonoscopy," Cedar says. "Each physician's adenoma polyp detection rate is one of the quality control measures we have been tracking for several years at the South Hills Endoscopy Center, and I would encourage all patients to ask their gastroenterologist in what percent of patients do they find colorectal polyps."

One big barrier to early diagnosis is patients who self-diagnose stomach and abdominal pain, bowel changes or blood in their stool. The diagnosis can sometimes be very difficult and gastroenterologists perform a detailed patient history and exam which may include colonoscopy, lab testing and imaging studies before making a diagnosis.

“I have so many patients who have already searched the internet and labeled themselves with irritable bowel syndrome, or tried gluten-free diets and probiotics for many months or even years before they come to see me,” Cedar says.

“Many of my patients have heard me say that ‘Dr. Google’ is the world’s most dangerous doctor.”

Also, many patients have a tendency to minimize their gastrointestinal symptoms, hoping the problem will just go away. If something is bothering you, Cedar says, don’t wait to get it checked.

“‘There is nothing magical about waiting until age 50 to pay attention to possible gastrointestinal problems. Listen to your body and don’t self-diagnose,’ Cedar says.

“Brian was only 44 at the time of the diagnosis, had no family history and was very active and a non-smoker. He remains cancer free over 16 months later and has an excellent prognosis.

"Remember, colorectal cancer does not discriminate; it can affect anyone regardless of age, gender or family history and it usually does not have any associated symptoms until it has metastasized. Do yourself and your family a favor: Do not put off scheduling your colonoscopy.”