

MMC Among Nation's Highest Volume Center for Laparoscopic Hiatal/Paraesophageal Hernia Repair



Frank Borao, MD

Hiatal hernias occur when contents of the abdominal cavity protrude through the esophageal hiatus of the diaphragm. Factors that contribute to the development of a hiatal hernia include an enlargement of the esophageal hiatus due to developmental defects, an increased abdominal thoracic pressure gradient, and the depletion of elastic fibers in the phrenoesophageal membrane

with aging. There are four different types of hiatal hernias and management varies depending on the type.

Type I, also known as a sliding hernia, is a simple displacement of the gastroesophageal junction into the thoracic cavity. The stomach remains in the abdominal cavity. This is the most common type of hiatal hernia, accounting for about 95% of all hiatal hernias. Types II-IV are classified as paraesophageal hernias. Type II occurs when the gastroesophageal junction maintains its position but the gastric fundus herniates through the diaphragmatic hiatus. Type III has both the gastroesophageal junction and the stomach herniate above the diaphragm. When more than 30% of the stomach is herniated into the thoracic cavity, it is termed a "giant" paraesophageal hernia. A patient has a type IV hernia when other organs, such as the colon, in addition to the stomach herniate above the diaphragm.

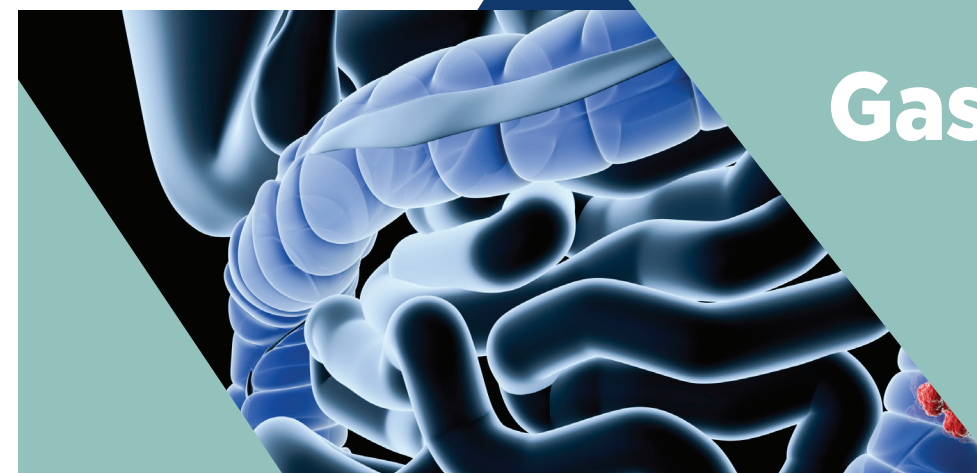
Most type I hernias do not cause any symptoms, but when large, they can cause gastroesophageal reflux disease. Most can be managed medically. Those that are refractory to medications

may require surgery, most commonly a Nissen fundoplication. Similarly, paraesophageal hernias are many times asymptomatic and are often found incidentally on imaging. Mild symptoms include chest and epigastric pain, dysphagia, palpitations, chronic cough, early satiety, post prandial shortness of breath and chronic anemia secondary to erosions of gastric mucosa from gastric distension. Life threatening conditions can occur if the stomach has volvulized. This can lead to serious consequences such as an acute gastric obstruction with ischemia, strangulation and perforation.

Twenty years ago, Monmouth Medical Center was one of the first hospitals in New Jersey to offer laparoscopic hiatal/paraesophageal hernia repair and it has become among the highest volume centers in the nation. We now perform between 150-175 cases per year. We have published our data in peer reviewed journals with documented radiologic recurrence rates of 17% which is less than half of the national average. Monmouth Medical Center was chosen to be one of six hospitals alongside Cleveland Clinic, University of Kentucky, Medical College of Wisconsin, Virginia Heartburn and Hernia Institute and Carolinas Healthcare System for a large national hepatic biological mesh implantation trial in 2015. In addition, we have just completed a textbook on Revisional Foregut Surgery which is the first of its kind and scheduled for publication by Springer in the summer of 2019.

If you have any patients with a hiatal/paraesophageal hernia we would be glad to assist you in evaluating them as a potential surgical candidate. To learn more, call **732-923-6481**.

Winter/Spring 2019



Frontiers in Gastrointestinal Surgery

A publication of
Monmouth Medical Center
for referring physicians

NEW ACS STUDY SHOWS RISE IN EARLY ONSET COLORECTAL CANCER

Colon and rectal cancers (CRC) have historically been thought of as an aging disease with a median age of 63 for both sexes. However a recent study published by the American Cancer Society showed that despite a declining incidence overall, secondary to a more widespread awareness for screening, the incidence has been sharply increasing among middle-aged adults under 50 years old. We have seen an increase from 6% in the early 1990's to 11% in 2013, with most individual in their 40's.

As a result, the American Cancer Society published new guidelines reflecting this rise, recommending that screening age for average risk individuals be lowered from 50 to 45 years. The new guidelines would extend colon cancer screening to an additional 22 million Americans who fall in that age group. In



Roy Dressner, DO

2014, 43% of colorectal cancers diagnosed in those under 50 fell into this subpopulation. It is estimated that over 140,000 Americans will be diagnosed with CRC this year, with around 50,000 deaths, making it the second-leading cause of cancer-related deaths among adults in the U.S. The vast majority will be diagnosed in those over 50, but while the incidence and deaths in those individuals have been declining over the past few decades, secondary to earlier removal of pre-cancerous polyps, recent studies have documented a 50% rise in cancers under 50 between 1994 and 2014.

The recent American Cancer Society study found that adults born in 1990 have double the risk of colon cancer and four times the risk of rectal cancer compared to those born in 1950. Death rates from these cancers have also increased in younger adults from 3.9/100,000 in 2004 to 4.3/100,000 in 2014.

National Surveillance, Epidemiology and End Results (SEER) data showed an increased incidence of CRC in all five-year incremental age groups between 20 and 49, with the sharpest increase among those 40 to 44. Advanced tumors with poor prognostic histo-pathologic features such as mucinous and signet ring cell adenocarcinomas as well as lymphovascular invasion were more common in younger patients. Some population-based studies have suggested early onset cancers occur more often in the left colon and rectum. Younger patients tended to present with a relatively advanced stage attributable to either aggressive tumor biology or delayed diagnosis, or both. It may also be felt that the time interval between polyp to cancer may be accelerated compared to older patients.

It is not well understood what underlying lifestyle, environmental or genetic factors are driving the rise in these tumors. There seems to be no prevailing explanation for this change although the increase in obesity and diabetes has frequently been cited as the culprit. Other hypotheses involve the alteration of the stool micro biome where the composition reflects an interplay between the host immune system, environment and genetics. These findings suggest a possible future role in antibiotic therapy, probiotics and even stool transplantation.

To learn more about these new screening guidelines, or to schedule a consultation with a Monmouth Medical Center colorectal surgeon, call **732-923-6481**.