Gastroparesis is a chronic gastric disorder in which food moves more slowly than normal through the stomach, in the absence of mechanical obstruction, resulting in nausea and vomiting and significantly affecting quality of life. The effect of gastroparesis on physical well being can be devastating and lead to malnutrition, dehydration, altered blood glucose level and significant decrease in work performance and social activities.

**Causes of Gastroparesis**
Diabetes, especially in those patients who have had it for more than ten years, is the most common cause of gastroparesis. Gastroparesis is present in approximately 30 percent of patients with Type 2 diabetes. Other causes are vagus nerve damage after stomach surgery, esophageal surgery, Parkinson’s disease and vascular disorders. In a significant number of patients, the cause of gastroparesis cannot be determined and it is called idiopathic gastroparesis. Patients with idiopathic gastroparesis are typically young or middle aged and approximately 90 percent are women.

**Symptoms**
Nausea and vomiting typically occurring a few hours after eating are the most common symptoms. This prevents a person from eating normally and may lead to dehydration, malnutrition and electrolyte imbalance. Other symptoms may include bloating, early fullness after eating and heartburn.

**Diagnostic Tests**
Upper Endoscopy (EGD): This test is necessary to exclude other conditions such as gastric ulcer and gastric outlet obstruction. A trained gastroenterologist passes a thin, flexible tube with a camera on the end through the patient’s mouth after mild sedation and examines the inside of the stomach.

Gastric Emptying Test (GET): This X-ray test determines the speed with which food empties from the stomach and enters into the small intestine. A patient eats a meal, commonly a scrambled egg containing a small amount of radioactive material, and the food is viewed traveling through the gastrointestinal system. GET is most accurate way to diagnose gastroparesis.

**Treatment**
Treatment options are limited, with only a few medicines available to help. Therapy includes dietary measures, prokinetic agents, Reglan, Erythromycin and anti-emetics such as Phenergan and Compazine. Injections of Botox endoscopically into the pylorus provide some relief of symptoms, at least transiently. One study showed reduction of symptoms for five to six months.

**Enterra Therapy**
Enterra is a gastric stimulation device about the size of a pocket watch surgically placed in the patient’s abdominal wall and connected to two electronic leads implanted in the stomach muscle. Enterra is indicated in patients with chronic drug refractory symptoms due to gastroparesis of diabetes or idiopathic origin.

The Enterra device sends mild electrical impulses to stimulate gastric muscle and nerves to help move food from the stomach to the small intestine and control symptoms of nausea and vomiting.

**Post-Implant**
During an office visit, the gastroenterologist can adjust the neurotransmitter and customize therapy for the patient’s needs using a hand-held programmer. Impact in symptoms can be seen in as soon as a few days, or in some patients it can take up to three months. Enterra therapy is not a cure, but with it, patients are offered new hope for relief from this debilitating and chronic condition. Until now, Memphis and Mid-South patients had to travel to Vanderbilt University in Nashville or to Mississippi to have the surgery and again to have the device adjusted. Now Dr. Siddiq is offering these patients new hope at a chance to live a normal life.

Muhammad S. Siddiq, M.D., has served as a gastroenterologist in Memphis for over eight years. He completed his fellowship in gastroenterology at Cook County hospital in Chicago, Ill. and his residency in internal medicine at St. Vincent Medical Center, Staten Island, N.Y. Dr. Siddiq performs in-hospital and office consultations for patients with liver and gastrointestinal problems.