

What is Gastroparesis?

Most people have experienced the awful sensation of nausea and vomiting that accompanies a stomach flu, food poisoning or morning sickness. It is difficult to cope with, even knowing that it will fade in a few days. But for some people with gastroparesis, that feeling does not go away.

Many patients affected with gastroparesis — a chronic disorder in which food moves through the stomach more slowly than normal, resulting in nausea and vomiting — live with those ill-effects on a daily basis. Although there are drugs such as Compazine and Reglan available to treat this condition, some patients gain no relief from their use.

Gastric Electrical Stimulation for Gastroparesis

Gastroparesis is divided into three major categories: diabetic, post-surgical and idiopathic (unknown cause). For patients suffering from non-surgical gastroparesis who have not responded to approved medications, there is now potential relief for even the most serious cases. Henry P. Parkman, M.D., Director of Temple University Hospital's GI Motility Laboratory, uses the Enterra™ Gastric Electric Stimulator to bring patients significant symptom relief and help them regain control of their lives.

Since Temple gastroenterologists introduced Enterra™ Gastric Electrical Stimulation therapy in November 2000 — the first facility in the region to do so — positive results have been seen in 50% - 60% of their patients. Successfully treated patients, after years of suffering from the condition, now enjoy a better quality of life with a significant reduction in nausea and vomiting. Many can even eat solid foods that they had been unable to tolerate previously.

This innovative treatment includes a surgical procedure which can be performed through open surgery or less invasively through laparoscopy. Two wires are placed into the stomach muscle and a two-inch neurostimulator (pacemaker) into the wall of the lower right portion of the abdomen. The two-to-three hour surgical procedure, performed by John Meilahn, M.D., of Temple's Department of Surgery, normally requires a three day hospitalization. The device's electrical impulses constantly stimulate the muscle of the stomach, leading to better gastric emptying and a reduction in the symptoms of nausea and vomiting. The stimulator can be adjusted periodically to optimum levels by the physician, using an external programmer.

New Diagnostic Modalities and New Therapies

Gastric Electrical Stimulation Therapy has received FDA approval to treat patients with chronic, intractable nausea and vomiting caused by gastroparesis from diabetes or unknown causes. Patients are evaluated based upon their history and a physical examination, and undergo appropriate diagnostic testing which may include enteroscopy, gastric emptying scintigraphy, gastroduodenal manometry and electrogastrigraphy (EGG). Qualifying patients must receive the approval of their health insurer prior to surgery.

Temple's Section of Gastroenterology, under the direction of Robert S. Fisher, M.D., has been utilizing novel, innovative treatments of GI motility disorders for many years. Ongoing studies involve the use of new pro-motility agents for gastroparesis and functional dyspepsia, including 5HT-4 and motilin receptor agonists and pyloric sphincter muscle relaxants.