Digestive System

43640-43641

43640  Vagotomy including pyloroplasty, with or without gastrostomy; truncal or selective
43641  Vagotomy including pyloroplasty, with or without gastrostomy; parietal cell (highly selective)

Plain English Description

The vagus nerve is the tenth cranial nerve. It arises from the brainstem and travels through the neck, thorax, and abdomen, giving rise to multiple branches along its path. At the stomach, the vagus nerve divides into branches that innervate different parts of the stomach and upper digestive tract. Cutting of the vagus nerve is performed to decrease excessive acid production in the stomach to help prevent peptic ulcers. A midline upper abdominal incision is used to expose the stomach and vagus nerve. In 43640, a truncal or selective vagotomy is performed. The vagus nerve is identified and freed from surrounding structures. To perform a truncal vagotomy, the main vagal trunks are located and divided. To perform a selective vagotomy, the main vagal trunks are identified and dissected up to the branch leading to the biliary tree. This branch is followed to the hepatic branch and the nerve is transected as close to the hepatic branch as possible. In 43641, a highly selective vagotomy is performed. The vagal nerve is identified and followed to the Latarjet. Abs nerve branches, also referred to as the parietal cell branches. These branches are divided beginning at the esophagogastric junction and continuing along the lesser curvature of the stomach. Because vagotomy also affects gastric motility, which may delay gastric emptying, a pyloroplasty is performed to enlarge the opening from the stomach to the duodenum. The gastroduodenal junction is exposed and the pyloric sphincter is incised longitudinally and the incision repaired transversely to relax the sphincter and enlarge the opening. A gastrectomy may also be performed. Two concentric pursestring sutures are placed in the stomach around the planned incision site. The serosa of the stomach is incised in the center of the pursestring sutures, the inner mucosal layer is grasped and a small portion excised. The hole in the mucosa is dilated to allow placement of a balloon catheter. The balloon catheter is inserted into the stomach, the balloon inflated, and traction applied to the external catheter to position the balloon against the wall of the stomach. The pursestring sutures are securely tied around the catheter. The stomach is positioned against the abdominal wall and the site of the abdominal incision determined. A stab incision is made in the abdomen, a forceps inserted through the skin into the abdominal cavity, the catheter grasped, and exteriorized. Anchoring sutures are placed on the internal abdominal wall. The abdominal incision is closed in layers.

43644-43645

43644  Laparoscopy, surgical; gastric restrictive procedure; with gastric bypass and Roux-en-Y gastroenterostomy (roux limb 150 cm or less)
43645  Laparoscopy, surgical; gastric restrictive procedure; with gastric bypass and small intestine reconstruction to limit absorption

Plain English Description

These procedures are performed to treat morbid obesity. A small portal incision is made and a trocar placed in the upper abdomen and pneumoperitoneum established. The laparoscope is then introduced. Several more portal incisions are made in the upper abdomen for introduction of surgical instruments. The liver is retracted and the upper aspect of the stomach exposed. The gastroesophageal junction is identified. The gastrohepatic ligament is incised at the edge of the lesser curvature of the stomach and a tunnel is created behind the upper aspect of the stomach. An endoscopic linear stapler is used to transect the stomach and create a small gastric pouch in the proximal aspect of the stomach. The ligament of Trietz is identified and the jejunum is transected a few cm distal to this point. In 43644, a Roux-en-Y gastroenterostomy is then performed. The distal Roux-en-Y limb is mobilized and brought up to the gastric pouch through a tunnel in the transverse mesocolon. The mesenteric defect is closed around the distal Roux limb. The jejunum is anastomosed to the small gastric pouch using a side-to-side technique. The proximal Roux limb is measured to ensure that it does not exceed 150 cm and it is then anastomosed to the jejunum. In 43645, small intestine reconstruction is performed to limit absorption. This procedure combines gastric restriction with bypass of a large segment of small bowel to promote fat malabsorption. This also involves creation of a Roux limb of greater than 150 cm. The physician may either create a short biliopancreatic limb (20-90 cm) with a very long Roux limb (>150 cm) or a very long limb (>150 cm) that is anastomosed distal to the ileocolic valve.

43647-43648

43647  Laparoscopy, surgical; implantation or replacement of gastric neurostimulator electrodes, antrum
43648  Laparoscopy, surgical; revision or removal of gastric neurostimulator electrodes, antrum

Plain English Description

Laparoscopic implantation or replacement of gastric neurostimulator electrodes within the antrum of the stomach is done for cases of medically refractory gastroparesis. This is also known as a gastric pacemaker. The neurostimulator or generator portion of the device is implanted into a subcutaneous pocket created in the abdominal wall beneath the rib cage. Two intramuscular lead wires with electrodes are implanted in the muscle wall of the stomach antrum. The electrodes provide continuous high frequency, low energy electrical stimulation to the nerves of the lower stomach. The electrical stimulation encourages the stomach to contract and this helps relieve accompanying symptoms of severe vomiting, nausea, and related gastrointestinal problems of gastroparesis. Code 43647 for initial implantation or replacement of gastric neurostimulator electrodes via laparoscopy. Code 43648 for revision or removal of previously placed gastric neurostimulator electrodes via laparoscope.

43651-43652

43651  Laparoscopy, surgical; transaction of vagus nerves, truncal
43652  Laparoscopy, surgical; transaction of vagus nerves, selective or highly selective

Plain English Description

A surgical laparoscopy is performed with transection of the vagus nerves, also referred to as vagotomy. The vagus nerve is the tenth cranial nerve. It arises from the brainstem and travels through the neck, thorax, and abdomen giving rise to multiple branches along its path. At the stomach, the vagus nerve divides into branches that innervate different parts of the stomach and upper digestive tract. Cutting of the vagus nerve is performed to decrease excessive acid production in the stomach to help prevent peptic ulcers. Vagotomy used to be a common procedure but is now performed rarely due to the success of pharmacologic treatments for ulcers. Cutting of the vagus nerve is performed to decrease excessive acid production in the stomach to help prevent peptic ulcers. Vagotomy used to be a common procedure but is now performed rarely due to the success of pharmacologic treatments for ulcers. A small incision is made in the upper abdomen, a trocar placed and pneumoperitoneum established. The laparoscope is introduced. Additional portal incisions are made to allow introduction of surgical instruments. The vagus nerve is identified and freed from surrounding structures. In 43651, a truncal vagotomy is performed. The main vagal trunks are divided. In 43652, a selective or highly selective vagotomy is performed. To perform selective vagotomy, the main vagal trunks are identified and dissected up to the branch leading to the biliary tree. This branch is followed to the hepatic branch and the nerve is transected as close to the hepatic branch as possible. To perform highly selective vagotomy, dissection continues to the Latarjet. Abs nerve branches which are divided beginning at the esophagogastric junction and continuing along the lesser curvature of the stomach. Upon completion of the procedure, surgical instruments and the laparoscope are removed. Air is released from the abdomen and the portal incisions are closed.