

## Gastroparesis

Gastroparesis (GP) is a chronic motility disorder of the stomach, sometimes called “lazy stomach.” The goal for treatment of gastroparesis is to decrease symptoms such as nausea or bloating, but unfortunately a complete cure is unlikely.

In gastroparesis, the stomach has difficulty emptying (or is unable to empty) its contents into the small intestine. The result is that ingested food, liquid and swallowed air remain in the stomach instead of passing through normally. Nausea, vomiting, bloating, reflux and abdominal pain are common in people with gastroparesis. These symptoms are directly related to the immobility of the stomach. **Our goal is to improve your symptoms.**



### Causes

In our clinic at National Jewish Health, most people with gastroparesis acquired the disease for an unknown reason (idiopathic). Other causes include diabetic neuropathy, post-surgical issues or side effects of medications such as narcotics. There is some evidence to suggest that gastroparesis can be caused by viruses, neurological disorders, autoimmune diseases, hypothyroidism, hyperthyroidism, mitochondrial diseases and eating disorders.

### Diagnosis

Once symptoms of GP are identified, objective testing (gastric emptying study) is often done to confirm the diagnosis. A gastric emptying study (GES) involves eating a meal, usually scrambled eggs, labeled with trace amount of radioactive material. Scans are then taken at different time intervals, up to 4 hours, to watch the progression of the meal through the stomach. Based on the remaining amount of stomach contents at the end of each interval, gastroparesis may be diagnosed.

### Treatment

Regardless of the cause, the treatments are the same.

There is no cure for gastroparesis, but there are treatments available for symptomatic relief that vary in their effectiveness. Most people with gastroparesis require a combination of treatments

#### Treatment — Diet

The main goals of diet include low-fat, low fiber and small frequent meals. General diet guidelines include:

- Eat frequently — 5 small meals a day — and avoid large meals.

- Decrease high fat meals. However, fats in liquids, such as milkshakes, can be a great source of needed daily calories that are well tolerated, because they are in liquid form and pass easily through the stomach.
- Start with the solid part of the meal, and follow with the liquids. This can aid to flush food through the stomach.
- Chew foods to a puree, especially with meats.
- Using digestive enzymes can help break down proteins, fats and carbohydrates. Examples are enzymes such as sorbitol, lactose, sucrose and fructose.
- Remain upright after eating for at least an hour. Incorporate walks after eating.
- Continually check your weight. This can be the first sign that you are not taking adequate nutrition.
- Keep hydrated, even when symptoms (i.e., vomiting) are at the worst. Take small sips of liquids. Avoid using straws. Dehydration can make the symptoms worse.

### **Diet modification includes:**

- Avoid certain foods, such as fatty foods. It is known that fats slow stomach emptying, even in the general population.
- Avoid spices.
- Avoid certain meats — especially red meat.
- Avoid high fiber content foods.
- Avoid certain fruits and vegetables.

### **Recommended foods include:**

- Soups
- Crackers
- Hard candy
- Starches such as pasta, rice and potatoes. These tend to provoke stomach emptying.
- Meats such as baked chicken and fish.

You may want to ask for a referral to a dietitian at National Jewish Health to tailor a healthy eating plan for you.

### **Remember — the goal is to help your stomach empty.**

- Fats and fiber empty the slowest, while large meals will take longer to empty.
- Therefore, low-fat, low fiber and small frequent meals are the mainstay.

### **Treatment — Medication**

**Prokinetics** (increase motility): Unfortunately, prokinetic options have been dramatically reduced over recent years due to safety concerns, making alternative therapies even more important. However, domperidone is still in a reasonable option, but is not FDA approved.

- Domperidone
  - In the setting of gastroparesis, it is used as a prokinetic (increases stomach motility). In fact, trade names for the drug stem from its action, i.e., Motilium.
  - It has also been shown to have some anti-emetic (anti-vomiting/nausea) effects.
  - The medication does improve symptoms in some people with gastroparesis, and it may be

advisable for you to take on the responsibility of obtaining the medication on your own and use it at your own risk, if the benefit outweighs the poorly tolerated symptoms of gastroparesis.

- This medication can only be filled at a compounding pharmacy OR by mail order from a pharmacy in New Zealand. The contact number for the pharmacy in New Zealand is 1.877.271.6591. This medication is not covered by insurance and costs approximately \$60 per month.
- **Anti-emetics** (help to prevent nausea and/or vomiting) such as Zofran or Phenergan®.
- **Narcotics DO NOT successfully treat the symptoms.**

## Treatment — Natural Remedies

### Dai-kenchu-to

- This is an herbal medicine produced in Japan containing Dai-kenchu-to extract powder and malt sugar.
- It has been shown to increase intestinal motility in people that have had cessation of intestinal motility following surgery.
- Remember to check with your health care provider before using herbal remedies.
- This can be prepared by an acupuncturist familiar with Chinese herbal formulas.
  - Inner Gate Acupuncture and Herbal Clinic is familiar with this formulation.

Located at: 1421 SE Ankeny St., Portland, OR 97214

Phone: 503.284.6996

Website: [www.InnerGateAcupuncture.com](http://www.InnerGateAcupuncture.com)

## Treatment — Surgery

Many people are referred to our clinic by a gastroenterology specialist after nonsurgical treatments have been unsuccessful. Therefore, most people referred to our clinic will be offered a surgical option to help treat their gastroparesis. Your surgeon will discuss if a surgical procedure is right for you.

### Pyloroplasty

- This procedure is done in the operating room under general anesthesia. It is done with a minimally invasive surgery technique. The surgery permanently opens the valve at the end of your stomach that allows contents to pass more easily into the small intestine. In gastroparesis, this valve functions poorly and remains closed, impeding stomach emptying, resulting in the symptoms.

### Gastric Nerve Stimulator (GNS) — Product name Enterra®

- This procedure is done in the operating room under general anesthesia. Electrodes are implanted at certain locations in your stomach wall. They carry an impulse from a transducer placed in the abdominal wall. The impulses act to increase the stomach's motility. The transducer is accessed transcutaneously (across the skin without the use of needles) to monitor its strength of contractions and for maintenance.

### Gastrostomy tube (G-tube)

- This is a procedure that can be done in the operating room or in the endoscopy suite. A tube is placed into your stomach, and comes out of your abdomen, to act as a vent for air to escape that would normally cause bloating, distension and nausea. This can be helpful as part of another procedure or by itself.

## Jejunostomy tube (J-tube)

- This is a tube that placed in the operating room while you are under general anesthesia. The tube enters your intestine through your abdominal wall. It aids to provide nutritional supplements to meet recommended goals by bypassing your diseased stomach.

## Gastrectomy

- This procedure is used as a last resort. This is done in the operating room under general anesthesia, and the stomach is removed. The small intestine takes the place of the stomach, bypassing the problem organ.

### Additional references:

[www.g-pact.org](http://www.g-pact.org)

[www.digestivedistress.com](http://www.digestivedistress.com)

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