Sorting out terms: Dysmotility/Functional disorders of the stomach and upper digestive symptoms.

When a structural problem such as ulcers, tumors or inflammation cannot be identified to explain symptoms, the problem may be referred to as a “functional” or “dysmotility” problem within the gastrointestinal (GI) tract (aka: digestive tract). Upper digestive symptoms are thought to be generated by faulty neuro-muscular coordination within the stomach, possibly extending to other parts of the upper intestine, and resulting in weakened or disrupted motor action. For unknown reasons, some aspect of the gut's nervous system, called the enteric nervous system, has become faulty; or the problem may also involve the muscles within the digestive tract.

The difficulty for patients lies in the fact that tests to look for these problems of impaired motor function, or what doctors call “motility” disorders, are not widely used or accepted by community gastroenterologists.

Here is where problems can arise for some individuals. Often these very distressing and disabling upper digestive symptoms are labeled as stress-induced or psychologically driven. Without question, stress may play a role in the symptom expression, but stress is not the cause of gut dysfunction.

How did we get here? People with functional disorders are diagnosed largely based upon subjective findings of various symptom groups. One well known functional disorder is Irritable Bowel Syndrome (IBS). Medicine, as of yet, does not have a rapid or simple way to test for these neuro-muscular problems of motility; and unfortunately, many specialists have been taught that these disorders are caused by psychological impairment.

Science is just beginning to catch up to setting the record straight. Research is revealing the exquisite nature and complexity of gut motility but much is yet to be learned.

The symptom story
The front cover lists upper digestive symptoms that are collectively called “dyspepsia.” When these symptoms are less severe, a patient may be given a diagnosis of: functional dyspepsia, motility-like dyspepsia, non-ulcer dyspepsia, abdominal migraine, or functional abdominal pain. Not everyone has all the symptoms listed, and in the case of some individuals, only one or two of the symptoms predominate. There can be wide variation, and the predominating symptoms help determine the diagnostic label. When standard tests come back as normal, diagnosis is based primarily upon the finding of these symptoms.

Gastroparesis, or GP for short, represents the severe end of the dyspepsia spectrum; and in severe cases, digestive failure results. Gastroparesis is also known as delayed gastric emptying.

There is no agreement among experts were to draw the line between the less severe symptoms of functional GI disorders and the more severe symptoms found in GI motility disorders. All are suffering from the same symptoms, just differing in their intensity and resulting consequences wrought by these symptoms. One individual may be diagnosed as having severe functional dyspepsia, while another specialist will diagnosis the same person with gastroparesis. Much more research is needed at the gut level to better define and refine diagnostic tools.

What is Digestive Motility?
The digestive tract is a long, hollow, muscular organ that processes food. This processing action, churning, kneading, mixing with digestive juices, and synchronized waves of propulsion is called motility.

Faltering or failed motility can occur anywhere along the digestive tract, with each region having its own diagnostic label. Often people suffer with a blend of problems.

Diagnosis
To determine whether or not you have gastroparesis, you can ask your doctor for a gastric emptying test (or GET), the diagnostic test for gastroparesis. Other tests, like an electrogastrography (EEG) too, can help clarify the problem in your gut. An EGG, much like an EKG of the heart, helps to look for abnormal stomach rhythms and compliments other motility testing. A variety of special tests to look for a motility problem can be carried out by a gastroenterologist who has had additional training in the sub-specialty of GI motility.

Causes
What can lead to this failed or weakened functioning within the stomach? GP can be the result of some other
Disease process such as diabetes, Parkinson's disease, scleroderma, or even some types of stomach surgeries. The largest group, by far, to suffer from GP is known as the idiopathic group, that is, no known cause can be found for the onset of gastroparesis. The idiopathic group is comprised primarily of women in the prime of their lives. Some can recall the onset as severe upper digestive symptoms of dyspepsia that persisted after a bout with stomach flu or some gastrointestinal infection.

**Symptom Spectrum and Quality of Life**

The symptoms of gastroparesis can be so severe and unrelenting as to make eating impossible since food is constantly vomited back up. Individuals who suffer to this extent require tubes surgically placed to bypass the non-working stomach and to provide them with a totally liquid diet. Other sufferers do not want to eat due to the nausea, bloating, and feeling of fullness that is intensified by food intake.

Children may suffer bouts of debilitating nausea but rarely vomit. It's hard to attribute the nausea to eating since the child may not be nauseated for several hours after eating. But, the culprit often is the food just sitting there in a slowly emptying stomach.

Some patients suffer with abdominal bloating or pain. Others have bouts of vomiting. The vomiting may occur several hours after eating and is usually undigested food.

GP can promote the development of gastroesophageal reflux disease (GERD). This intense heartburn makes sleeping almost impossible. For some individuals, this may be the only symptom of delayed gastric emptying.

Some patients utilizing drugs to treat GP are able to eat enough to fend off weight loss, but they still may have symptoms that ebb and flow over time, periodically and unpredictably debilitating them despite their medications.

Sufferers may be caught off guard; they feel hungry, they eat, then they greatly regret eating because the symptoms come roaring back several hours after the meal. Hours can be spent on the toilet since many GP patients also suffer with constipation.

GP sufferers may look healthy, but they don't feel well at all as they battle with hidden nausea, bloating, fatigue, and other dyspeptic symptoms.

### Treatments

Prokinetic or promotility drugs are the cornerstones of treatment. It is important to use the drug prescribed for you correctly. Check with your doctor on the timing of medication and food intake.

- Domperidone (Motilium), available in Canada and in the USA through a special access program.
- Erythromycin
- Cisapride, available only under special release in Canada and the USA.
- Zelnorm (Tegaserod) trials occurring studying its use in GP
- Metoclopramide (Reglan/Maxeran)

Prokinetic drugs, alone, may not control symptoms of nausea and/or gastric reflux. Often additional medications are needed to control these symptoms too.

Diet also plays a large role in symptom control. It is generally recommended to:

- Eat small, frequent meals, and chew your food well,
- Stick with low fat,
- During times of symptom flare-ups switch to a liquid/low-fat meal substitute,
- Find out how to time your medication and food,
- Avoid fibrous foods and raw vegetables,
- Avoid foods and substances that increase acid refluxing (nicotine, caffeine, carbonated beverages, peppermint),
- Avoid foods with a high sugar concentration (some juices) as they may be difficult to digest. Intolerance to sugars like lactose or fructose may increase symptoms of nausea and bloating.
- Choose soft and easy to digest meats/protein such as: veal, skinless chicken/fowl, eggs, fish (unbreaded), turkey, cottage cheese, tofu, and stick with small portion sizes,
- Cooked and blanderized as needed: vegetables like: carrots, beets, squash, potatoes, and tomatoes, and;
- Soft fresh fruits, or canned, cooked and or blanderized as needed. Cooked pears, apples and cherries make for a wonderful dessert; just go easy with added sugars.

**NOTE:** Diabetic need to gain good control of blood sugars levels!

### Cures?

There is no cure for gastroparesis. Diet and medications help to control symptoms in chronic sufferers. For some, symptom resolution does occur. Other sufferers of gastroparesis remain disabled with symptoms, unable to hold down a job, attend school, or eat normally. Gastroparesis can be a severe, life-threatening, chronic illness disrupting family life and social functioning and leaving finances in a shambles.

The lack of definitions around these dyspeptic disorders/diseases, the few diagnostic tools to delineate these problems, and the precious few treatments for the more severe sufferers underscore the need for more research.

Fortunately, groups like the American Motility Society are providing leadership in the search for better symptom control and better understanding of gut motility. However, funding for research is desperately needed.

For more information about GP or about donations to support our work, please visit our Web site at:

www.digestivedistress.com