Alarm Symptoms: Cause for Alarm?

By: W. Grant Thompson, M.D., F.R.C.P.C., F.A.C.G., Professor Emeritus, Faculty of Medicine, University of Ottawa, Ontario, Canada

The lack of an obvious cause, and the absence of a physical abnormality in the gut (intestines) are features common to all the functional gastrointestinal disorders. We may take comfort that these disorders are more common than structural diseases, and that they are not life threatening. To be sure, the symptoms are real and often impair quality of life, but there is no identifiable pathology. Nevertheless, the presence of a functional disorder does not exclude the possibility of a coincidental disease, and your doctor will be on the lookout for worrying symptoms and signs. The following discussion describes so-called “alarm symptoms” that are not explained by any functional disorder, and therefore demand further inquiry.

A functional disorder refers to a disorder or disease where the primary abnormality is an alteration in the way the body works. These disorders generally cannot be diagnosed in a traditional way; that is, as an inflammatory, infectious, or structural abnormality that can be seen by commonly used examination, x-ray, or blood test.

Alarm Symptoms

**Bleeding** – Bleeding from the gut implies that there is a break in the integrity of the intestinal lining (mucosa). Bleeding can occur throughout the length of the gut and possible causes include: benign and malignant tumors; inflammation such as infectious colitis or inflammatory bowel disease (IBD); ulcers such as peptic ulcers; esophagitis; or a traumatic tear such as may occur in the anus (fissure) or the lower end of the esophagus. Often the source of the bleeding is not obvious, although its nature may offer clues as to its origins. Intestinal bleeding is potentially serious and demands investigation – often as an emergency.

Bright red blood covering the surface of the stool means the bleeding is at or just above the anus. It is a common symptom and usually turns out to be a tear of the anus itself (anal fissure), especially if the stools are very hard and painful to pass. Less commonly such bleeding can be due to a proctitis (inflammation of the lower rectum usually due to IBD) or a rectal tumor. Inspection of the anus and sigmoidoscopy can identify these. In those who have a family history of colon cancer, or who are older than 50 years of age, the doctor may order a colon examination to exclude it – usually a colonoscopy.

Bright red blood mixed with the stools indicates the bleeding is acute and likely in the colon. Causes include infections, IBD, diverticula, or tumor. If a great deal of blood is lost, an emergency colonoscopy will be necessary. Sometimes bleeding from the stomach can be so perfuse that it appears as bright red blood from the rectum. In this case, the patient may be faint and show signs of blood-loss shock. Such an emergency requires blood transfusion, followed by discovery and control of the source of the bleeding.

Slower bleeding from the upper gastrointestinal tract (esophagus, stomach, or duodenum) will show as darker blood or even as black, tar-like stools. Bleeding ulcers (often due to NSAIDS), or ruptured esophageal veins seen in liver disease are common causes. Emergency esophagogastroduodenoscopy (EGD – endoscopic inspection of the upper gut) will usually discover the cause and permit the doctor to staunch the bleeding.

Sometimes the bleeding is very slow, and of insufficient volume to discolor the stool. Here the bleeding is said to be occult, and may be detected if the doctor notices a person is pale or if blood tests reveal an anemia (low blood hemoglobin). There are several types, but only iron deficient anemia indicates bleeding. Of course, iron deficiency can occur if there is excessive bleeding from other sources such as heavy periods in a woman, or even in very rare instances of malabsorption of iron. In the absence of these, silent bleeding must be assumed to originate in the gut, and appropriate endoscopy will usually establish the cause.

Vomiting can be a functional or structural disorder, and itself will require investigation. However, vomiting blood is definitely due to a structural cause such as a stomach or duodenal ulcer, stomach cancer, esophageal vein bleeding, or esophagitis. Paradoxically, violent vomiting from any cause, including a functional one, can tear the lower esophagus and initiate bleeding.

No matter whether the bleeding is bright red, dark red, black and tarry, or occult, there must be a structural cause. Diagnosis of the bleeding source and control of the bleeding are priorities. Coincident functional disturbances are innocent bystanders that can be dealt with later.
Fever – Fever is the body’s reaction to inflammation, which may be infectious as in acute bacterial gastroenteritis, or non-infectious as in IBD. Since there is no overt inflammation in the functional gut disorders, fever is always due to something else. Most fevers turn out to be due to an acute, brief illness, but a fever must be investigated if it persists. Normally, oral temperature does not exceed 98.6 degrees Fahrenheit (37 degrees Celsius).

Weight Loss – People lose weight for reasons other than illness. These may include increased activity, eating less, or deliberate dieting. Normally functional gut disorders do not cause weight loss unless there is accompanying depression or anxiety disorder. As a rule of thumb, a loss of 10 pounds (4.5 kilograms) over 3 months is significant and in the absence of an explanation may require some investigations.

Difficulty Swallowing – Also known as dysphagia, difficulty swallowing food is an important symptom. Distinct from globus (where a person feels “a lump” in the throat unassociated with meals and can swallow when asked), dysphagia suggests there is something partially obstructing the esophagus. Occasionally, swallowing may also be painful (odynophagia), and accompanied by hoarseness or throat pain. Prompt endoscopy is required to find the source of the obstruction which can be a benign narrowing (stricture), a fibrous band at the lower end of the esophagus (Schatzki ring), failure of esophageal motility (e.g. Achalasia), or a benign or malignant tumor. Only rarely, when all causes of esophageal obstruction have been excluded by tests, can dysphagia be deemed “functional.”

Sometimes food becomes stuck in the esophagus. Such bolus obstruction requires timely disimpaction that is sometimes hazardous. Hence, prompt attention to dysphagia is important to avoid such a situation.

Chest Pain – If one has repeated chest pain, it is of primary importance to exclude angina pectoris due to heart disease. Characteristic features of angina include a feeling of a heavy weight on the chest, extension of the pain to the left arm or neck, provocation by physical activity, and relief with rest. Normally a cardiologist will do the appropriate tests, and if they are negative refer the patient to a gastroenterologist to look for an esophageal cause. A careful history usually, but not always, differentiates the chest pain from heartburn. In many cases, the pain is due to gastroesophageal reflux and responds to adequate doses of a gastric acid suppressing drug such as a proton pump inhibitor (PPI). Some tests of esophageal motility may be helpful, but they seldom make a precise diagnosis. Functional chest pain is uncommon and diagnosed only when all structural causes are excluded.

Other Circumstances – A sudden change in bowel habit or other gut symptom in someone over 50 years of age should attract diagnostic attention. Sometimes that means a cancer in the colon, esophagus, or stomach, requiring endoscopy to exclude it. The gut goes to sleep when we do, and is normally undisturbed by functional gut symptoms, although there are exceptions. Therefore, night-time pain, when it occurs, may be a symptom of structural disease and requires further examination.

Many structural gut diseases run in families, so it is important to know and report a patient’s family health history. Colon cancer, IBD, and celiac disease are more common in the first-degree relatives of affected persons. A family history of colon cancer should prompt a colonoscopy to screen for precancerous polyps whose removal can prevent cancer. Many experts are now recommending colonoscopy in persons over 50 years of age whether symptoms are present or not. Here the indication for colonoscopy is not the functional gut symptoms, but rather the unrelated increased risk of cancer.

Physical Examination
When a new gut complaint is present, a physician will normally do a physical examination, which in this case will include inspecting and examining the abdomen and anus. In particular, he or she will look for an abdominal mass, which might be due to inflammation as in Crohn’s disease and diverticulitis, or a tumor. In addition, the physician will check that the liver, spleen, kidneys, and pelvic organs are not enlarged. Intense tenderness may also indicate structural disease. In the case of bright red blood from the rectum, especially if it is painful to pass stools, the doctor may see a tiny tear in the anus, like a paper cut. By inserting a gloved finger into the rectum, the physician can feel the prostate, the uterine cervix, and detect any tumors or tender spots. While such findings are signs rather than symptoms, like the alarm symptoms discussed above they cannot be explained by functional gut disorders and should prompt appropriate tests.

Conclusions
The functional gastrointestinal disorders are characterized by gut symptoms emanating from any level of the gut with no observable structural or biochemical abnormality. Alarm symptoms such as those described above indicate structural disease and cannot be attributed to a functional disorder. On the other hand, they do not exclude the coincidence of a functional disorder. Alarm symptoms and physical signs in the abdomen require investigation in their own right.

IFFGD Suggested Reading
Thompson WG. Difficult to interpret intestinal complaints. IFFGD Fact Sheet No. 179, 2013.