Chronic Diarrhea

Information and Practical Approaches for Management

Chronic diarrhea is a debilitating condition. Many sufferers are homebound, isolated. If you and your physician have run-out of things to try in order to help control your diarrhea, then this document may provide some new avenues to explore with your doctor.

Our information handout will take you through a list of possible causes, diagnostic approaches and some very simple remedies that anyone can try—but remember—try nothing without the full knowledge of your physician. Only your doctor knows your complete health history and your current medications.

Causes:

- A long list of disorders and conditions may lead to chronic diarrhea. Sorting through possible causes begins with your family physician.
- Your doctor will start by taking a careful history. Knowing the characteristics of your stool, the pattern of episodes as well as their timing in relation to eating all help to provide direction for narrowing down the possible causes.

A partial list of causes:

Characteristics of stools and patterns:

Oily, foul, and difficult-to-flush stools are a condition called steatorrhea.
Steatorrhea may lead to weight loss, and is found in association with:

- Pancreatic insufficiency
- Small bowel bacterial overgrowth (see GPDA's publication on this topic)
- Prior surgery to remove a portion of the small bowel
- Chronic infections with parasites, example: giardia (beaver fever)
- Hemochromatosis*

Small-volume diarrhea may be bloody and may cause painful cramping; it may be accompanied by a sense of urgency as well as sensations of needing to pass further stools but little more comes out. This collection of symptoms, a condition known as tenesmus, is often a result of inflammation within the large bowel. Possible causes:

- Inflammatory bowel disease such as Crohn's disease or diverticulitis
- C. difficile, which is often a complication arising from antibiotic use. (The episodes of diarrhea may be mild to very severe and often associated with a fever.)
- Other infectious agents (bacteria or parasites)
- Tumours
- Prior radiation treatments to the abdomen
- IBS

- Hyperthyroidism
- Stomach dumping syndrome**, which may occur within 30 minutes after eating (early dumping) or 1 to 3 hours after a meal (late dumping)
- Constipation, which leads to “overflow” diarrhea. In this case a hard stool may act as a plug, causing a backup of a more liquid stool that finally escapes around the compacted stool zone. Bloating occurs, as well as the ability to feel a hard mass (impacted stool) over your abdomen.
- Post-gallbladder-removal (Treatment with either cholestyramine or aluminum hydroxide is usually highly effective for controlling post-gallbladder-removal diarrhea)

Large-volume diarrhea is usually watery; it carries a greater risk of dehydration and may be associated with weight loss/malnourishment. Possible causes:

- Non-cancerous tumours; also, in rare cases, carcinoid tumours
- Post-infectious damage to the small bowel mucosal lining, which commonly leads to lactose intolerance and/or mal-digestion of sugars (fructose, sucrose)
- Ulcerative colitis
- Celiac disease (also commonly found in association with Type I diabetes)
- Cancerous tumours: adenocarcinoma, lymphoma
- Diabetic neuropathy
- Whipple disease (very rare)

Side effects of many different medications can also cause diarrhea.
Talk to your pharmacist to find out if any over-the-counter drugs, supplements, or prescription medications may be the culprit of your diarrhea. Caution: Many probiotic (good) bacteria may cause loose stools.

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* Hemochromatosis

> A hereditary disease causing excess absorption of dietary iron. Iron slowly builds up in various tissues within the body. A wide array of puzzling symptoms, one of which is diarrhea, begins to show up. The hereditary condition is most prevalent in Northern Europeans, especially people from the UK.

> The organs most susceptible to iron build-up are

- The liver, resulting in progressive failure (cirrhosis)
- The pancreas, resulting in the development of Type II diabetes
- The heart, with development of rhythm disturbances or failure
- The joints, resulting in arthritis
- The skin, which may eventually develop a darker hue from iron deposits

> Fatigue, Type II diabetes and sore joints are often the only initial symptoms.

> Blood work helps to diagnose the problem with findings of elevated serum liver enzymes and abnormal transferrin saturation.

> Many other symptoms related to adrenal insufficiency, Parkinson’s-type symptoms, deafness and others may show up over time if the problem goes undiagnosed.

> Treatments: Once iron is deposited within the organs, it cannot come out; however, low blood-iron levels may be maintained and further iron deposits within body tissues may be prevented by avoiding iron in the diet, and with periodic blood removal or chelation therapy.

**Stomach dumping syndrome

>A condition in which the stomach empties too rapidly. Dumping syndrome is an abnormal motor disturbance found in the stomach. It is a fairly common problem associated with Type I and Type II diabetes. Oddly, dumping syndrome may present with similar digestive symptoms (nausea, vomiting, abdominal discomfort, and bloating) as are found in a disorder in which the stomach empties too slowly (gastroparesis). Diarrhea is a common feature of dumping syndrome. For more information on dumping syndrome, please see the GPDA publication titled: "Gas, Bloating and Belching".

> Treatments: During mealtime, it helps to consume liquids apart from solid foods. Liquids can be drunk half an hour before eating anything solid. Avoidance of simple carbohydrates is recommended as well as eating small meals more frequently throughout the day. Some medications have been found helpful. In a carefully selected group of patients, relief from diarrhea may be achieved with a drug called acarbose. Acarbose is used as a treatment for Type II diabetics (and can cause diarrhea as a side effect), but may help non-diabetics who are suffering with diarrhea from dumping syndrome.

Irritable bowel syndrome

One of the most common causes of chronic diarrhea is irritable bowel syndrome (IBS). Characteristic symptoms of IBS include abdominal cramping and bloating as well as changes in stool consistency: either alternating between diarrhea and constipation, or predominately at one extreme (diarrhea) or the other (constipation). Approximately 15% of the cases of IBS occur as a consequence of bowel infection (food poisoning, parasitic or viral infections). Many foods, such as coffee, are found to trigger to the symptoms.

The diagnosis of IBS is one of exclusion, that is, it is based upon finding nothing amiss with standard medical tests. Tests commonly done (or that should be requested) are

- Blood work
- Barium swallow with follow-through
- Colonoscopy
- Abdominal ultrasound
- Stool samples
- Breath tests (to look for small bowel bacterial overgrowth, and sugar malabsorption)

Many people with IBS are able to control their symptoms with diet, stress management and medications.

For others, though, IBS can be disabling and increase in severity over time.

The label or diagnosis of IBS is frustrating for everyone. Since the diagnosis is based upon subjective diagnostic criteria as well as on the absence of evidence of an underlying, organic cause such as blood, pus, scars or ulcers, it tells us very little. Therefore, IBS, in one way or another, is diagnosed based upon symptoms.

The treatment for IBS has tended to emphasize a psychological approach, and, in fact, a considerable amount of research money has been spent looking for a correlation between psychological problems and digestive symptoms. Psychological approaches can help as an adjunctive treatment—but should not be considered as the only treatment option.

Problems arise when some medical professionals, to explain the cause of IBS symptoms, lay the blame on the individual's emotional dynamics. Patients—both adults and children—are often labelled with psychological, maladaptive behaviors, or their families are labelled as dysfunctional.

Some research has shown that patients presenting to a GI specialist's office with IBS symptoms have a higher rate of psychological problems than the general population. However, these findings could indicate nothing more than an under-appreciation, on the part of researchers, of the impact of constant GI symptoms on psychological well-being.

Doctors often report that IBS patients are overly anxious—not surprising since these are very frustrated people who feel that no one in the medical profession is listening to them or taking their digestive complaints seriously. Their digestive symptoms have turned their lives upside down. More than anything these people seek relief, only to be shown the door by the physician. In an endless search for help, some patients expend copious time and finances to locate a specialist who believes them.

There is no question that what underlies IBS symptoms is a faulty gut nervous system that is yet to be adequately studied and articulated by the scientific community. We do not currently have diagnostic tools to define the problem and medications for treatment are very limited. Money to tackle this research has been scant.

When abdominal pain is a predominating feature necessitating prescription painkillers, the disorder may not be IBS, but rather a more pronounced motility (neuromuscular) disturbance in the mid-bowel. A referral to a gastroenterologist with training in the recognition and diagnosis of GI motility disorders is then warranted.

IBS continued:
Several research centres in the US have published some very interesting findings in regards to both IBS-D (irritable bowel syndrome, diarrhea predominate) and IBS-C (constipation predominate). Their findings? IBS was found to be related to an overgrowth of bacteria in the small intestine. A very simple treatment using a poorly absorbed antibiotic (one that stays in the

gut and has very few side effects) cleared up the IBS symptoms. For more information about IBS, please see our GPDA publication on "Small Bowel Bacterial Overgrowth".

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Approaches to try:

- Before trying anything, it is important that you have visited your physician and received a full physical exam and review of your health records, current medications and all supplements. Chronic diarrhea can occur due to severe constipation—in which case—approaches discussed here would be inappropriate. Further, you always need to work closely with your physician before embarking on any suggestions outlined in this document.

- A new, natural product called Florastor by Medical Futures is available over the counter and has been found in clinical trials to be a safe and very effective treatment for chronic diarrhea from a variety of causes. It is a natural yeast (not all types of yeast are bad) that acts as a probiotic and helps to stabilize the lining of the digestive tract. Ask your pharmacist for Florastor or request that it be ordered for you.

- Medications commonly used for treating pain and discomfort from irritable bowel syndrome may also be of help in treating diarrhea. This class of medications—called antispasmodics/anticholinergics—help to relax smooth muscle and have been used for decades in the treatment of spastic bladder and bowel conditions. The anticholinergic effects help to slow transit along the entire length of the digestive tract and alleviate diarrhea. This class of drugs, however, may not provide much relief for the symptom of bloating. You may ask your physician for a short-term prescription to see if one of these medications helps relieve your symptom of diarrhea:
  - Bentyl® (dicyclomine)
  - Levbid®, Levsin® (hyoscyamine)
  - Buscopan® (butylscopolmine)
  - Donnatal®

- For those suffering from abdominal pain along with diarrhea—or constipation—relief may be found through the addition of another drug called:
  - Modulon® (trimebutine maleate). Licensed by Axcan Pharma (a Canadian pharmaceutical company), the drug has been available since the late 1960s. Classified as an antispasmodic, it also helps to regulate lower bowel motility.

- Another drug, which had been formerly used for the treatment of diarrhea-predominating IBS, is Lotronex®, (alosatron). Lotronex proved to be a very potent 5-HT3 antagonist, which resulted in deleterious side effects of ischemic colitis. This rare, but very serious side effect was found to be associated with a number of deaths. Lotronex has since been placed under a special-access program by the US Food and Drug Administration. However, there is another option from this same pharmacological class of drugs: Zofran®. Zofran (ondansetron), too, is a 5-HT3 antagonist, but it does not nearly as potently bind to the 5-HT3 receptors. Zofran is a very expensive drug—but if you are

housebound and disabled due to diarrhea, then the cost of the medication (if it helps) is justifiable. It comes in a liquid or pill formulation. The liquid allows you to fine-tune dosages.

As well, this category of drugs possesses anti-nauseant effects. Many people suffering from lower bowel IBS-D (diarrhea-predominate IBS) symptoms also have trouble with upper digestive symptoms such as nausea. Therefore, relief for diarrhea and nausea can be effectively achieved with Zofran.

- Dietary manipulation can also prove to be highly effective in controlling problems of rapid transit diarrhea. By manipulating the body's normal physiological response to fats when present in the small intestine, it is possible to trigger the ileal break and slow down small bowel transit, thus halting diarrhea. To use this dietary technique requires pure oleic acid (olive oil is primarily oleic acid, but since it contains other acids as well, it won't work) from a food chemical supply house. For more details on how to use this dietary method, please see our patient educational booklet titled: "Gas, Bloating and Belching".

- Cholestyramine is another safe medication that can help reduce diarrhea, especially resulting after removal of the gall bladder. This medication binds bile salts. It can interfere with the absorption of some vitamins and medications, so check with your doctor.

- Caltrate, which is a calcium supplement, can effectively control diarrhea.

- Intolerance to dietary sugars can be another cause of diarrhea. Having chronic upper digestive problems makes it very difficult to sort out contributing factors to digestive distress and problems such as diarrhea. Other sugars, too, like fructose, sucrose and especially sorbitol (found in numerous foods marketed to the diabetic population) can cause persistent diarrhea. Limit your consumption of simple sugars.

- Finally, coconut meat (fresh or dried), or coconut oil, has been found to alleviate IBS-D. The fat found in coconuts is primarily made up of medium-chain triglycerides (MCT). Interestingly, there have been a few studies looking at the impact of MCT on gut motility. Interdigestive motility patterns (the motility activity that takes place between meals) were shortened in length, therefore dampening gut motor activity.

Offered here are suggestions and tips—but it must be remembered that you should not try anything without the guidance of your physician.