



Chronic Constipation: A Comprehensive Overview



By: Darren M. Brenner, M.D., AGAF, FACG, Associate Professor and Director of the Neurogastromotility Program, Division of Gastroenterology, Northwestern University Feinberg School of Medicine, Chicago, IL

International Foundation for Gastrointestinal Disorders (www.iffgd.org)

🕒 Reading time: 21 minutes © Copyright 2021 by the International Foundation for Gastrointestinal Disorders

Introduction

Constipation is a common disorder affecting approximately 1 out of every 6-7 people worldwide, and annually leading to more than 1.5 million healthcare provider visits in the United States alone. People can experience short-term constipation as a result of medication use, dietary changes, or even travel. However, most cases of constipation are a chronic or long-lasting condition. *Chronic Constipation (CC) has a large economic impact. It has been estimated that, on average, more than \$7,500 is spent in direct care of each person with constipation. The result is an estimated 6 billion-plus dollars spent diagnosing and 500 million dollars spent treating this disorder.* On a personal level, constipation can be quite debilitating and significantly impact a patient's quality of life. It can lead to social isolation, reduced participation in social activities, and decreased productivity and/or increased absences from school and work. The overall impact of constipation should neither be minimized nor ignored.

Definition of Chronic Constipation (CC)

CC is a cluster of symptoms which can vary from person to person. Common symptoms of constipation are:

- reduced number of bowel movements (BMs) (Less than three BMs per week is considered low. However, people have different ranges of what is normal.)
- passage of hard or pellet-like BMs
- having to strain or excessively push to start or complete a BM
- the patient's feeling as though they did not empty completely after a BM
- a sensation that the necessary muscles will not relax enough to allow stool to be passed
- needing to change positions on the toilet, push around the groin, or manually pick BMs out of the *rectum*.

The **rectum** is the final section of the large intestine where bowel movements are stored before being emptied.

Abdominal symptoms are also common in individuals with constipation. These symptoms include:

- abdominal pain - pain varying from dull to sharp that occurs in the belly area
- abdominal discomfort - discomfort varying from dull to sharp that occurs in the belly area
- bloating - a buildup of gas or swollen feeling in the stomach or intestines
- distention - an uncomfortable swelling in the intestines that causes the abdominal area to visibly expand
- nausea – often including an urge to vomit
- vomiting.

While it may seem odd, diarrhea can also be a symptom of constipation. *Overflow diarrhea* occurs when someone has diarrhea caused by constipation. This occurs when a person has an *impacted bowel movement (BM)*. This causes such severe constipation that BMs become liquid and are

Impacted bowel movements are hardened BMs that have gotten stuck in the rectum.

passed as loose BMs around the impaction. However, there may still be straining and the feeling of not completely passing a BM. If this is the case, discuss this with your healthcare provider.

Given the various symptoms associated with CC, it can be helpful to keep a bowel movement diary prior to your visit with a healthcare provider. Recording how often you are having bowel movements, their texture, and other associated symptoms can be beneficial for making an accurate diagnosis and deciding on further diagnostic and treatment plans. See the section on Consulting Your Healthcare Provider About Constipation below.

What Causes Someone to Develop Chronic Constipation (CC)

Multiple contributing factors have been linked with the development of chronic constipation. The most common of these include:

- increasing age (especially over the age of 65)
- female sex (potentially due to physical and hormonal differences)
- reaction to medications (prescription and over-the-counter)
- decreased fiber and water intake
- reduced physical activity.

Studies also show that CC is found more commonly in certain demographic populations:

- non-Caucasians
- those with lower levels of education and income
- patients with histories of depression or abuse.

Learn more about types of constipation

IFFGD Fact Sheet #101
Irritable Bowel Syndrome

IFFGD Fact Sheet #237
Dyssynergic Defecation

Also visit IFFGD websites
AboutConstipation.org
youandconstipation.org

Despite these factors, constipation can and does affect individuals of all ages, genders, races, and socioeconomic backgrounds.

Types of Chronic Constipation (CC)

In general, causes of CC can be separated into two major categories: primary or secondary.

Primary Constipation

Primary constipation is also often referred to as Chronic *Idiopathic* Constipation.

These primary disorders can be broken down further into three distinct categories:

Idiopathic: diseases or conditions that occur suddenly with no identifiable cause.

normal transit constipation (NTC), slow transit constipation (STC), and evacuation disorders.

- *Normal Transit Constipation (NTC)* - NTC, as its name implies, indicates that BMs move at a normal speed through the colon. Most individuals with NTC have symptoms consistent with irritable bowel syndrome with constipation (IBS-C). See *IFFGD Fact Sheet 101 – Irritable Bowel Syndrome Overview*.

- *Slow Transit Constipation (STC)* – STC, as its name implies, indicates that BMs move more slowly through the colon. This is caused by gut dysmotility. This form of constipation is often treated with fiber and laxatives. However, if this does not help, a healthcare provider can discuss other options for relief.

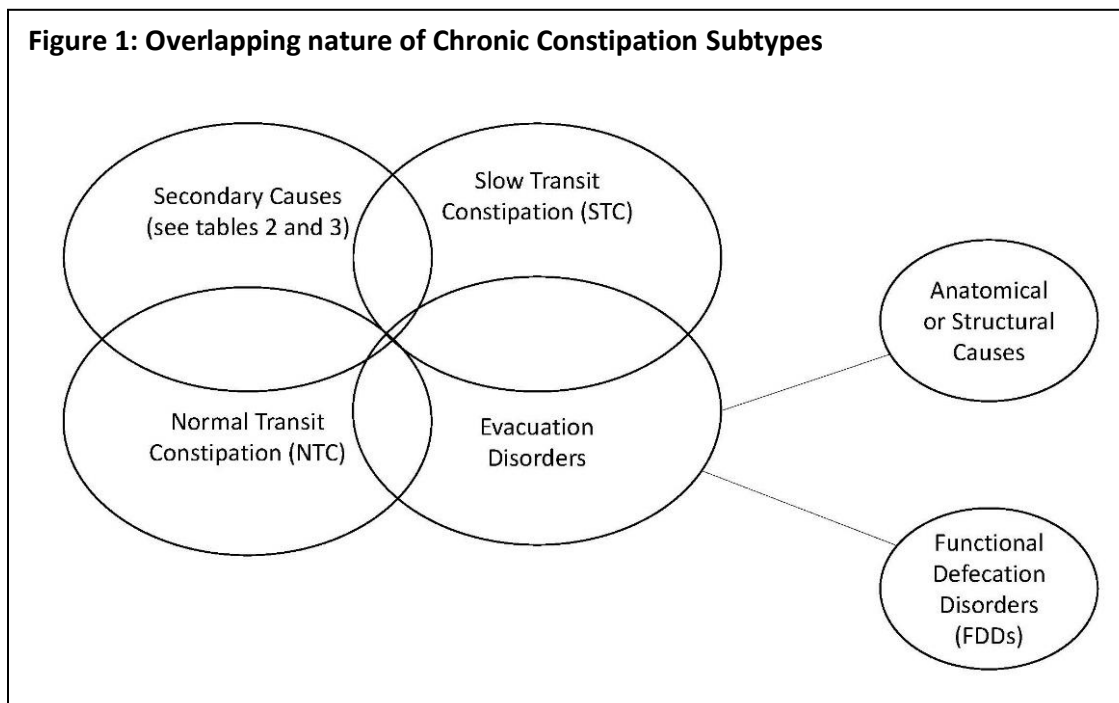
Dysmotility refers to slowed movement through the GI tract. This occurs when the speed, strength, and/or coordination of muscles in the GI tract changes.

- *Evacuation disorders* are causes of constipation linked to the *pelvic floor*, a group of muscles supporting the organs in the lower part of the abdomen, located between the hip bones. These muscles help bowel movements. *Anatomical (or structural) abnormalities* in the pelvic floor can affect your bowel movements. Some people are

born with such abnormalities; others experience them after changes to the pelvic floor, such as surgery. However, *functional defecation disorders* (FDDs) are the most common form of evacuation ailment. FDDs occur when the colon's muscles do not appropriately allow the passage of BMs out of the last part of the colon. In many instances, this causes *dyssynergic defecation* (DD)—an inability to relax your pelvic floor muscles to have a BM and/or spasms in the pelvic floor muscles which lead to difficulty passing BMs. Imagine there is a closed door at the bottom of the colon: when we receive the urge to have a BM and bear down or push to have a BM, the muscles in the pelvic floor should relax so that the door opens to allow the BMs to pass. With FDDs, however, the door does not open

enough or tightens even further. It is important to identify this condition early because the treatment is different than the treatments for NTC and STC. These will be addressed more extensively later in this handout (see Treatment section).

It can be difficult for healthcare providers to tell the difference between these disorders because symptoms alone in most instances cannot be used to separate one type of constipation from another. Some people have several contributing factors leading to their constipation. For example, up to 50% of patients with a FDD will also experience STC at the same time. Consequently, these syndromes can overlap, and identification of all the underlying issues is essential for developing the best treatment plan (Figure 1).



Secondary Constipation

Secondary implies that the constipation is caused by, or associated with, another medical condition or use of a medication known to cause constipation. Many of the most common medication and non-medication-related causes are listed here in Tables 2 and 3.

Table 2: Medications Associated with the Development of Chronic Constipation*		
<i>Prescription Drug Family</i>	<i>Common Usage</i>	<i>Examples</i>
Opioids (narcotics)	Pain relief	Hydrocodone, Oxycodone, Fentanyl, Morphine, Codeine
Anticholinergics	Relief of muscle spasms/cramps of the bowel/bladder	Hyoscyamine, Dicyclomine, Belladonna
Tricyclic antidepressants	Depression/Functional Bowel Disorders	Amitriptyline, Imipramine
Antihypertensives	Reduce Blood Pressure, Beta-blockers, Calcium channel blockers, ACE inhibitors	Metoprolol, Nifedipine, Enalapril
Diuretics	Reduce fluid retention	Furosemide, Bumetanide
Bile acid sequestrant	Reduce cholesterol	Cholestyramine, Colestipol
Anticonvulsants	Reduce potential for seizures	Phenytoin, Valproic Acid
<i>Nonprescription Drug Family</i>	<i>Common Usage</i>	<i>Examples</i>
Antacids (calcium & aluminum containing)	Relieve heartburn and stomach discomfort	Maalox, Mylanta, Gaviscon, Tums, Rolaids
Iron supplements	Iron deficiency anemia	Iron sulfate
Calcium supplements	Calcium deficiency	Calcium carbonate, Calcium citrate
Antidiarrheal agents	Reduce diarrhea	Loperamide, Bismuth
Nonsteroidal anti-inflammatory agents (NSAIDs)	Reduce inflammation	Aspirin, Ibuprofen, Naproxen, Diclofenac, Meloxicam
Antihistamines	Control allergies	Diphenhydramine
*This list is NOT all-inclusive. It represents common categories of drugs known to cause constipation. Other families of drugs and drugs within these families may also cause constipation. Some categories include both prescription and non-prescription treatments. If you are concerned that a medication you are taking may be causing constipation, please consult your healthcare provider, pharmacist, or the medication's package insert.		

Table 3: Medical Conditions Associated with the Development of Chronic Constipation*	
<i>Potential Secondary Causes</i>	<i>Examples</i>
Mechanical Obstruction	Strictures, Inflammation, Tumors, External compression
Endocrine/Metabolic Disorders	Diabetes, Hypothyroidism, Hyper/Hypocalcemia, Hypokalemia, Hypomagnesemia, Cystic Fibrosis, Uremia, Heavy Metal Poisoning
Neuropathies/Myopathies	Scleroderma, Parkinson's Disease, ALS, Stroke, Spinal Cord injuries or congenital defects, Multiple Sclerosis, Dysautonomia
Pregnancy	

Opioid-induced constipation (OIC) is a commonly seen example of secondary constipation. Opioids are strong pain medicines that slow bowel movements (BMs), causing fewer or more difficult BMs than normal—hence the term “opioid-induced” constipation. Your healthcare provider might prescribe opioids if you have a condition that causes moderate to severe pain. Healthcare providers may prescribe opioids for pain from a procedure, such as surgery or dental work, an injury or accident, a chronic, or long-lasting, condition that causes pain, cancer, or illness at the end of life. While opioids can treat pain effectively, they have known side effects. Between 50 and 80 percent of people who take opioid medicines have constipation. OIC is the most common side effect that opioids have on your digestive system. However, there are others. Opioid-induced bowel dysfunction, or OIBD, is the medical term for the effects on the digestive system caused by opioids. Besides constipation, other symptoms of OIBD include heartburn, nausea, vomiting, a bloated feeling, as well as chronic, or long-lasting, abdominal pain.

Consulting Your Healthcare Provider About Chronic Constipation

It may be uncomfortable to talk to a healthcare provider about your constipation, but keep in mind that it is a very common condition, and your provider is there to help. To assist with this discussion, keep a diary of symptoms, preferably when you are not taking laxatives. The following are important things to record:

- when your symptoms began
- how frequently they occur
- any associated pain
- how often you have bowel movements (BMs)
- the texture of your BMs (hard, lumpy, sausage-like, soft and mushy, watery)
- if you are straining on the toilet
- if you are having difficulty passing a BM
- if you feel as though something’s blocking your BM from coming out
- if you must remove BMs manually
- any factors which you feel worsen or improve your symptoms.

Your healthcare provider may also ask if you have

developed any alarm signs or alarm symptoms (see box). This will help rule out diseases or conditions other than chronic constipation. It is important for you to also discuss how the symptoms are affecting your life.

A physical examination should be performed. This will focus on your abdomen and the area in and around the anus. These exams may detect secondary complications caused by constipation including, but not limited to:

- Hemorrhoid(s) - The veins around the anus or lower rectum that are swollen and inflamed
- Anal fissure - A crack, cut, or tear in the skin in or adjacent to the anus or anal canal

“Alarm Signs” or “Alarm Symptoms”

Healthcare providers use the checklist of symptoms below to make sure something other than constipation is not causing your constipation. They are often called “Alarm signs” or “Alarm Symptoms,” and they include:

- Blood in bowel movements – This blood can be bright red to black in color and may be in or around bowel movements.
- Low blood counts (anemia) – This is determined by blood work or lab tests ordered by a healthcare provider.
- New onset of symptoms over the age of 50
- Losing weight without trying
- Diarrhea that wakes you up from sleep at night
- A family history of IBD, colon cancer, or celiac disease.

These alarm signs are usually not explained by constipation and can indicate other medical problems. If these symptoms occur, bring them to the attention of a healthcare provider to perform additional tests.

- Rectal prolapse - A condition where rectal tissue comes out of the anus when attempting to have a bowel movement.

Your healthcare provider may also perform a digital rectal examination (DRE) in an initial attempt to identify a functional defecation disorder (FDD). Your provider will insert a gloved, lubricated finger in your anus to check for any abnormal findings. They may ask you to push, squeeze, or attempt to expel the finger. These maneuvers evaluate your ability to coordinate the muscles of the pelvic floor used to pass BMs. In women, a rectocele (a bulge of the rectum into the vaginal wall) may

A **stricture** is a narrowing of a passageway in the body.

be detected. Abnormal masses or *strictures* can also be identified during this exam.

Diagnostic Testing

In most instances, no diagnostic testing is required. However, if the constipation doesn't respond to standard treatments, has begun suddenly, or is associated with alarm signs or symptoms (see above), further testing may be needed. These studies may include simple blood tests to more advanced studies as described below (Table 4).

- **Abdominal X-ray:** This is a simple x-ray of your abdomen and can be useful for evaluating the amount of BM in your colon. Your healthcare provider may order this test if the constipation begins suddenly, is worried that an obstruction (blockage) is causing the constipation, or if your symptoms seem consistent with overflow diarrhea.
- **Colonoscopy:** A colonoscopy is a simple test that does not involve cutting into the body. A physician using a long flexible tube called an endoscope. This tube has a camera and light on the end. This tool allows your physician to see inside your GI tract to examine the lower portion of the GI tract. This flexible tube is inserted through the anus, into the rectum and large intestine.
- **Anorectal Manometry (ARM):** This test is used to identify evacuation disorders in individuals whose constipation is not helped by laxatives. ARM specifically evaluates the coordination of the pelvic

floor muscles. A small probe containing sensors with a balloon at its tip is inserted approximately 10 centimeters (cm) into the rectum. You will be asked to perform a set of simple and usually painless maneuvers which include squeezing the anal muscles, coughing, and attempting to push the probe out of your bottom. The sensors will provide estimates of the strength of the pelvic floor muscles and whether these muscles relax (to allow for easy passage of BMs) or spasm (blocking BMs from exiting the body). The balloon at the end of the catheter is used to check the nerves in the rectum. The balloon is slowly inflated, and you will be asked to let the healthcare provider know when you first can feel the balloon, when it causes an urge to have a BM, and when the urge is so strong that it can no longer be ignored.

- **Balloon Expulsion Test (BET):** This study, usually performed with the ARM, has the highest accuracy for diagnosing a functional defecation disorder (FDD) because it simulates an attempt to pass a BM from the rectum. The balloon at the tip of the probe is filled with 50 milliliters of water. Then, while lying on your left side or while sitting on a toilet, you will be asked to try to pass it like you would a normal BM.
- **Radiopaque Marker Study (ROM):** Unlike the ARM and BET, which are used to diagnose FDDs, the ROM test is more useful for identifying evidence of slow transit constipation (STC), or delayed movement of BMs through the colon. There are

Table 4: Diagnostic Testing for Primary/Idiopathic Causes of Chronic Constipation	
Diagnostic Study	What the test is checking for
Abdominal X-ray (AXR)	Evidence of Obstruction
Colonoscopy	Evidence of Obstruction
Anorectal Manometry (ARM)	Evacuation Disorder
Balloon Expulsion Test (BET)	Evacuation Disorder
Defecography	Evacuation Disorder
Radiopaque Marker (ROM)	Slow/Delayed Transit (Colon)
Wireless Motility Capsule (WMC) Whole Gut Scintigraphy	Slow/Delayed Transit (Whole Gut)
Colon Manometry	Neural or Muscular Causes of Delayed Colon Transit

multiple variations of this study. However, the patient will be asked to swallow capsules which contain small markers that can be detected via x-ray. The healthcare provider will use a special camera to take pictures to see how far the substance has moved through the body at specific times. This test is usually performed after the ARM and/or BET because approximately 50% of individuals with a FDD will develop STC. Therefore, testing for a FDD should be performed first.

- **Defecography:** This is a test that is used to evaluate for anatomical causes of evacuation disorders, and/or identify lack of coordination of the pelvic floor muscles not detected by ARM. For this study, a barium solution is inserted into the rectum. You may be asked to either sit on a commode in the natural seated position or lie on an exam table on your back or left side. While in this position, you will be asked to perform a set of simple and usually painless maneuvers which include squeezing the anal muscles, coughing, and attempting to push the barium solution out of your bottom. The study will use either X-Ray or MRI imaging to capture how the body performs these tasks. In some instances, anatomical changes may be found during this study which are secondary and not the cause of the constipation. It is important to carefully review the findings of this study with your healthcare provider.
- **Wireless Motility Capsule (WMC)/ Whole Gut Transit Scintigraphy (WGTS):** Though they use different methods, these two studies both help your healthcare provider evaluate food products' transit throughout your entire GI tract (stomach, small intestine, and colon). The wireless motility capsule (WMC) is a small pill containing sensors for pressure, temperature, and pH. You will be given the pill to swallow, along with a device to wear that records the information the capsule transmits as it passes through your GI tract. Afterwards, your healthcare provider will send the device off for the information to be translated. Whole gut transit scintigraphy (WGTS) uses a radioactive substance, usually eaten as part of a meal, which can be

detected by a special gamma camera. The healthcare provider will use a special camera to take pictures to see how far the substance has moved through the body at specific times. Both tests can be used to identify the time it takes for contents to empty from the stomach to the small intestine, from the small intestine to the colon, and from the colon to exiting the body. Both provide assessments of both regional and whole gut transit. These tests can be very useful when delays in motility are suspected in more than one area of the GI tract or when determining whether surgical options are appropriate for treating constipation.

- **Colon Manometry:** A large catheter is placed in the colon and is used to measure the strength of the muscles in the colon. It is used to try to determine the cause of delays in the time it takes for things to move through your colon.

Learn more about testing with IFFGD Fact Sheet No. 219
How to Prepare for Tests

Treatment

Effective treatment for constipation depends upon an accurate diagnosis. Unfortunately, no specific symptom(s) can be used to differentiate one cause from another, and symptoms sometimes significantly overlap, as shown in Figure 1: Overlapping Nature of Constipation Subtypes. Generally, the initial treatment for someone with mild chronic constipation (CC) involves a recommendation of diet changes including increased fiber intake, or over-the-counter (OTC) medications. Some healthcare providers may recommend increased hydration and exercise.

- **Fiber:** Many healthcare providers will ask patients with constipation to increase their fiber intake. This can be done by eating high-fiber foods or by taking fiber supplements. Many Americans consume only a small amount of the daily recommended 20–35 grams of fiber. For some, this is due to an inability to tolerate fiber. *Fiber fermentation* is a chemical process where bacteria break down substances. This process can cause increased gas production,

leading to abdominal bloating, distention, increased belching, or flatus (intestinal gas). Adding fiber

IFFGD's **Dietitian Listing** is a resource that allows you to search for a dietitian who is in your area or who treats a specific condition.
<https://www.iffgd.org/resources/dietitian-listing.html>

gradually and slowly over time may reduce the likelihood of this developing. Substituting one fiber source for another may also reduce these effects, should they occur—a person may tolerate one type of fiber better than another. It may be helpful to work with a dietitian who specializes in gastrointestinal disorders to help with this process.

- **Osmotic Laxatives:** Osmotic laxatives work by increasing the amount of fluid in the intestinal tract. This softens bowel movements (BMs) and speeds up the movement of them through the colon. They are usually recommended as an initial treatment option for slow transit constipation (STC) as they are available OTC. Clinical trials have shown that these drugs can improve BM frequency and texture, but not necessarily abdominal symptoms (pain, bloating, distention). In some studies, these products made abdominal symptoms worse. If this happens, starting with a low dose and increasing slowly over time may help. Examples of these drugs include polyethylene glycol [PEG]-based products, magnesium-based products, and non-absorbable carbohydrates.
- **Stimulant Laxatives:** Stimulant laxatives improve constipation by increasing colon movement and/or changing colon fluid secretion. While some healthcare providers may recommend them for daily use, they are most commonly used when a successful BM has not been achieved after 3-4 days. There are two major classes of this drug.
 - Anthraquinones, such as senna, cascara, and aloe
 - Diphenylmethane derivatives, such as bisacodyl and sodium picosulfate
- **Secretagogues:** These agents are a class of drugs

which increase fluid secretion and movement in the GI tract. These drugs also can improve pain, discomfort, and bloating. There are three classes of secretagogues approved by the Food and Drug Administration (FDA) for the treatment of CC. These drugs include:

- the chloride-channel activator (lubiprostone),
- the guanylate cyclase C receptor activators (linaclotide and plecanatide), and
- the sodium-hydrogen ion exchange inhibitor (tenapenor).

There are slight variations in the side-effects that can occur with these drugs. The most common side-effect occurring in individuals taking linaclotide, plecanatide, and tenapenor is diarrhea. Mild nausea is more commonly experienced by those taking lubiprostone.

- **Prokinetics:** These drugs increase the frequency of contractions in the GI tract, which may improve gut motility and stomach emptying. Two prokinetic drugs are currently FDA approved for the treatment of CC:
 - Prucalopride for slow transit constipation (STC)
 - Tegaserod for constipation predominant irritable bowel syndrome (IBS-C).

The most commonly occurring side effects caused by these drugs include headaches, abdominal pain, nausea, and diarrhea. In most cases, these develop early during treatment and do not last very long. There were also initial concerns that these drugs increased the risk of cardiovascular (CV) or heart-related events. However, there has been no evidence to prove an increased CV risk with prucalopride. Tegaserod, originally approved in 2002 for the treatment of IBS, was voluntarily withdrawn from the market in 2007 after a small but significant increased risk of CV events were found. In 2019, tegaserod was reintroduced for use by female IBS-C sufferers under the age of 65 without a history of CV disease. Reevaluation of the data showed no cases of major CV events in this limited population.

- **Combination Therapy:** Combination therapy refers to the use of two or more treatments or drugs at one time to treat a specific condition. Some people with severe returning symptoms may respond to combination treatment, although this has been not verified by significant scientific evidence. This treatment should be attempted after disorders of obstructive defecation have been ruled out, and individual therapies have failed. Doctors recommend that medications from different classes (e.g. osmotics + secretagogues, osmotics + prokinetics, secretagogues + prokinetics) be used.
- **PAMORAs: Peripherally Acting Mu-Opioid Receptor Agonists (PAMORAs):** PAMORAs are a special class of drugs created to treat opioid induced constipation (OIC). These drugs were specifically designed to reverse the constipating effects of opioids in the GI tract while having little potential to penetrate the central nervous system (CNS). Opioids cause delayed gut motility, reduced fluid secretion, and increased fluid reabsorption. By entering the CNS (brain, spinal cord, nerves) these drugs could cause some pain relief and possibly help with opioid withdrawal. There are currently three FDA-approved drugs in the class:
 - methylnaltrexone bromide is available for the treatment of OIC in people with chronic non-cancer pain conditions.
 - naloxegol and naldemedine are only approved for the treatment of OIC in people with non-malignant pain syndromes. Non-malignant pain is pain that lasts far beyond a typical injury or illness and does not occur with cancers. Unlike methylnaltrexone, these drugs are metabolized by enzymes in the liver. You should speak with your healthcare provider about all medications you are taking to ensure they prescribe the proper dose of medication for you.

The most common adverse events associated with these medications are GI related (abdominal pain, nausea, diarrhea). Evidence of opioid withdrawal is very rare.

The Food and Drug Administration (FDA) is one of the U.S. government's regulatory agencies. This agency oversees a broad range of topics that pertain to food, drugs, and other products used on a daily basis.

The FDA works to protect public health by assuring that foods and drugs for humans and animals are safe and properly labeled. The FDA also ensures that vaccines, other biological products, and medical devices intended for human use are safe and effective.

Products approved by the FDA have been deemed safe, with benefits that are worth the possible risks. This is done after reviewing studies and tests that have been performed on a product.

- **Biofeedback/Pelvic Floor Physical Therapy:** This type of physical therapy is often the first treatment prescribed for people with evacuation disorders. Healthcare providers may try one or more laxatives together for those with evacuation disorders, but these are effective less than 5-10% of the time. When a patient with an evacuation disorder is paired with a dedicated pelvic-floor physical therapist, symptom improvement can be as high as 70-80%. Many therapists may perform abdominal massage, work internally on the muscles of your pelvic floor, and provide you with home exercises, but *biofeedback* should also be included in this treatment.

Biofeedback has three major components. Some people may require treatment with only one component, and others may require all three. In many cases, this can be determined through testing. Healthcare providers may use Anorectal Manometry (ARM) and/or a Balloon Expulsion Test (BET).

 - The first component of biofeedback is used to reverse incorrect contracting or relaxing of the pelvic floor muscles. This is usually done using small probes (similar to the probe used in ARM) which are connected to a computer. During this treatment, people are taught how to correctly relax their pelvic floor muscles while attempting to have a bowel movement (BM).

- The second component involves the placement of a balloon (similar to the balloon used in BET) filled with various amounts of air or water in the rectum. The person receiving the therapy then practices passing the balloon either in the standard seated position or lying on their side. This is used to simulate the passage of solid BMs from the rectum.
- The final component is used when people are unable to feel that a BM is in the rectum waiting to come out. They do not get normal urges telling them it is time to have a BM. In this situation, a balloon is placed into the rectum. The balloon is then inflated until individuals can better recognize urges for BMs at lower levels of rectal expansion.

It is strongly recommended that all people referred to a pelvic floor therapist ask whether biofeedback will be a part of their treatment. This treatment has been proven in clinical trials to be more effective than physical therapy alone.

- **Surgery:** Surgery should only be considered in very rare circumstances. Surgery should never be performed on people who have not been evaluated for, or have evidence of, a functional defecation disorder (FDD). No surgery can correct defecation disorders, and removal of the colon or a portion of the colon will only reduce the amount of large intestine available for BM storage.

One exception to this occurs for people with slow-transit constipation (STC) in a specific section of the intestine. Some people may benefit from removing the colon and then reattaching the small intestine to the rectum (known as ileorectal anastomosis). The results of this surgery cannot always be accurately predicted. The surgery may not correct the constipation and/or may lead to diarrhea. Colectomies—the removal of part or all of the colon—have also been linked with the development of recurrent small bowel (also known as small intestine) obstructions. Overall patient satisfaction after this surgery ranges from as low as 39% to as

high as 100%. People with both delayed colon transit and reduced stomach and/or small intestinal transit, may not experience improvements in upper GI symptoms (pain, bloating, distention, nausea) after colectomy.

There are a number of other rare cases where surgery may be considered:

- A woman with a large rectocele who must use a finger in her vagina to push back toward the rectum to allow for easier BMs may be considered for surgical rectocele repair.
- People with evacuation disorders that return even with biofeedback may be candidates for experimental options.
- In severe cases, a permanent ostomy may be formed to bypass the pelvic floor entirely.

Conclusion

Chronic Constipation (CC) is a complex, symptoms-based disorder that may occur as a result of multiple factors. Most cases of CC can be treated prior to extensive diagnostic testing unless there are alarm symptoms present. If the first few attempts at treatment do not work, testing may be used to identify specific causes. This will help find a treatment program that best fits the patient. Working closely with a healthcare provider and discussing the symptoms thoroughly will help you find the best treatment plan for you. Treatment decisions may be based on a combination of factors including ease of use, treatment effectiveness, safety, cost, insurance coverage, and therapy goals.

About IFFGD

The International Foundation for Gastrointestinal Disorders (IFFGD) is a 501(c)(3) nonprofit education and research organization. We work to promote awareness, scientific advancement, and improved care for people affected by chronic digestive conditions. Our mission is to inform, assist, and support people affected by gastrointestinal disorders. Founded in 1991, we rely on donors to carry out our mission. Visit our website at: www.iffgd.org, AboutConstipation.org or youandconstipation.org.

IFFGD

537 Long Point Road, Unit 101
Mt Pleasant, SC 29464

About the Publication

Opinions expressed are an author's own and not necessarily those of the International Foundation for Gastrointestinal Disorders (IFFGD). IFFGD does not guarantee or endorse any product in this publication or any claim made by an author and disclaims all liability relating thereto. This article is in no way

intended to replace the knowledge or diagnosis of your doctor. We advise seeing a physician whenever a health problem arises requiring an expert's care.

For more information, or permission to reprint this article, contact IFFGD by phone at 414-964-1799 or by email at iffgd@iffgd.org