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Constipation & Hemorrhoids

Constipation and hemorrhoids are two common gastrointestinal complaints that are interrelated. This informative pamphlet will begin with a discussion of constipation, followed by a discussion of hemorrhoids, a common complication of constipation.

Constipation

Constipation is one of the most frequent gastrointestinal complaints, affecting all of us at some time. In addition, about half of the United States population is chronically affected by the problem. Constipation results in over 2 million physician visits each year and U.S. residents spend over \$400 million per year on remedies alone.

Everyone knows what constipation is, having learned from experience!

By definition, constipation means infrequent or difficult passage of stool (feces). The definition of "infrequent" is highly individualized, though, depending on what is normal for you. *Irregularity*, another term commonly used to describe the problem, implies that bowel movements are not "regular." *Regular*, however, depends on what's regular for you.

What's normal?

A bowel movement every three days or once a week is considered normal by some people. For others, normal means having a bowel movement after every meal. Most of us consider normal as occurring somewhere between those extremes.

Just as there are wide variations in the normal frequency of bowel movements, there are also many normal variations in color, size, consistency and bulk of bowel movements. Changes in those aspects of elimination normally occur as a result of one or many life-style factors, such as diet, liquid intake and level of stress. Temporary variations in size, consistency, bulk or color shouldn't be alarming. The obvious exception is when there is blood in the stool. Blood may appear black (tarry or coffee-



ground appearing) or bright red. Bleeding is not normal and should be investigated by your physician.

Persistent changes or deviations from *your* normal lasting over two to three weeks indicate an underlying problem and should be checked by your gastroenterologist.

What are the symptoms related to constipation?

A general rule of thumb is to consider constipation when you have not had a bowel movement in three days. You must take your normal frequency into consideration, however.

Usually the symptoms of constipation are no greater than a "bloated" or "full" feeling. People who experience chronic severe constipation may complain of dizziness, headache, pain and a variety of other discomforts.



Why does constipation occur?

Normally, the amount of time needed for food to pass through the entire GI tract is about three days. That period of time is known as *transit time*, which varies tremendously between individuals. The following description will explain how constipation is related to transit time.

The digestive process is a combination of mechanical and chemical processing that occurs all along the digestive tract. The

actual movement of food through the GI tract is helped by continuous waves of muscular contractions known as *peristalsis*.

Food enters the digestive tract through the mouth, where it is chewed and mixed with saliva. Food is then swallowed and enters the *esophagus*, which is the long tube leading to the stomach. While in the stomach, the food is further processed, both mechanically (by a continual "churning" motion) and chemically (by digestive juices that are present in the stomach).

The contents of the stomach then empty into the *small intestine*, where nutrients are absorbed through the intestinal wall into the blood stream. The remaining material passes into the *colon*, where liquids are absorbed from the waste matter, making it drier and more solid.

As the waste continues on through the colon, liquids continue to be absorbed until the waste is passed from the body through the anus.

If food moves slowly, and transit time is long, constipation is more likely because the liquid in the stool continues to be absorbed, making the stool increasingly hard, dry, and difficult to pass.

In contrast, if transit time is too rapid, the stool is not within the colon long enough for liquid to be absorbed, therefore the stool is watery and diarrhea may occur.

At the time that waste matter fills the rectum, a message is sent through a sophisticated nerve network, telling you that it's time to empty. If that message is ignored, it will typically go away and will not return for some time. During that time interval, liquid continues to be absorbed from the stool, making it increasingly dry and hard, contributing to constipation.

The most common causes of constipation

As mentioned, transit time is related to the development of constipation, however many factors affect transit time and/or the development of constipation.

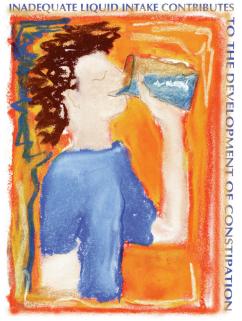
Inadequate fiber and liquids

A diet that does not contain enough fiber contributes to constipation, as does a diet with inadequate liquid intake.

Fiber, the part of food that is not digested, adds bulk and serves to hold water in the stool. Modern food processing has taken away much of the roughage or naturally-occurring fiber, so the average American diet does not contain enough fiber. Now, fiber is actually added back to cereals, breads and

many other foods. Constipation is almost unheard of in less developed cultures where the typical diet contains an abundance of fiber. The recommended daily fiber intake is 30 to 40 grams per day, but some people require more than that, so a supplement may be prescribed.

If you would like assistance in increasing the amount of fiber in



your diet, ask your GI Doctor for the patient education pamphlet entitled "High fiber/low fat diet," which will give you guidelines and tips to assure an adequate fiber intake.

Inadequate liquid intake also contributes to the development of constipation. Adults should consume 6 to 8 glasses of water a day. Some of the liquid requirement can come from liquids other than water, such as fruit juice, but caution is advised. Caffeine-containing beverages actually have a diuretic effect, causing fluid loss. Similarly, alcohol also tends to deplete body liquids.

Lifestyle changes

Changes in everyday patterns of living that result from travel, an illness or increased levels of stress can affect elimination, contributing to constipation.

Activity helps maintain normal elimination by promoting peristaltic contractions. A decrease in your usual level of activity, caused by travel, injury or illness can alter your elimination patterns.



Poor toilet habits

Not heeding "the urge" to defecate can contribute to constipation. Since many of us are always in a hurry, we tend to delay bowel movements until we have a block of uninterrupted time. Such delay can contribute to constipation.

Less common causes of constipation

Medications can cause constipation

Some medications, both prescription and non-prescription can cause constipation. Some drugs known to have that effect are:

- Calcium supplements
- Iron supplements
- Antacids containing aluminum or calcium



- Narcotics and some pain medications
- Antidepressants
- Diuretics
- Anti-convulsants (for treatment of epilepsy or seizures)
- Other drugs, such as anticholinergics, that have a drying effect (many sinus or allergy medications fall in this category)

Discomfort or pain

Some people experience pain at the time of defecation, therefore they often avoid or delay bowel movements (either consciously or subconsciously). A common cause of such pain is *hemorrhoids*.

Obstruction or mechanical compression

Infrequently the colon or rectum may become partially or completely blocked for a variety of reasons including *impaction* (a condition in which the blockage is caused by hardened feces), or a growth such as a tumor. Blockages can also be caused by scar tissue from previous surgery. Similarly, the compression of the colon that pregnant women experience (from the pressure of the growing child) may cause constipation.

Laxative habituation

Abuse of laxatives can also cause constipation. As laxative overuse occurs, the body becomes used to the laxative, sometimes resulting in an inability to eliminate without the help of the laxative. In such cases, the peristaltic action of the digestive tract becomes



sluggish and ineffective. Preoccupation or overconcern with the elimination process can lead to overuse of laxatives. In addition, many people have misconceptions about what is "normal".

If bowel movements do not occur according to expectations, some individuals become anxious and think they are constipated, resorting to laxatives in order to have a bowel movement. Often they were originally within the normal range of frequency, but through continual laxative usage, their bodies have become habituated and constipation is the ultimate result.

Use and abuse of laxatives, suppositories and enemas can cause not only constipation, but other serious problems, such as *electrolyte imbalance*, as well. Historically, there have been instances of deaths occurring from excessive "cleansing" enema use. The "myth" of the cleansing enema originated from ancient ideas that an enema would rid the body of poisons. <u>Research shows that no health benefit results from the process</u>.

Another abuse of laxatives is their use to achieve weight loss. Like "cleansing enemas," serious health problems result from this practice and it does not contribute to weight loss.

GI illness

Some chronic gastrointestinal illnesses can cause constipation. For example, inflammatory bowel disease (IBD) often causes bouts of constipation, which sometimes alternate with bouts of diarrhea.

Other conditions and illnesses

Some temporary conditions contribute to constipation. For instance, women often complain of constipation during pregnancy. It is thought to result from the pressure of the baby on the colon, and because of the numerous hormonal changes taking place in the woman's body. Some women also notice constipation immediately prior to the onset of their menstrual cycle.

Illnesses such as *diabetes*, *kidney failure*, *hypothyroidism*, *dehydration* from any cause, and *depression* may also cause constipation.

Additionally, *nerve injury*, such as that occurring with spinal cord injury, Parkinson's disease or multiple sclerosis can cause constipation.

Is constipation more common among the elderly?

Complaints of constipation are about five times more common among older adults when compared to younger age groups. The underlying reasons are varied.

Both diet and dietary habits change with age. Those who are widowed often do not enjoy eating alone, thus "pinch hit" at mealtime, eating convenience foods rather than cooking balanced meals that are high in fiber. Loss of teeth and/or poorly-fitted dentures also often result in an avoidance of high fiber foods.

Decreased activity contributes to constipation among the elderly, with those who are bedridden at the highest risk. Increased medication usage may cause constipation also.

The lack of stimulating activities that sometimes accompanies old age may result in an increased focus on self that can lead to preoccupation with bodily functions. Overuse or abuse of laxatives, suppositories or enemas is often related to the increased internal focus.

Finding the cause of constipation

Because constipation is a symptom, it is important to determine the underlying cause. Together with your GI Doctor, the cause

can be determined and a treatment plan started, to avoid complications of constipation. A thorough history and your accurate description of symptoms will help determine why you are constipated.



Sometimes routine blood and urine tests will be needed to determine the cause. Your gastroenterologist may also want you to collect samples of stool (feces) for other tests. Often a *proctoscopic examination* (often called a procto) will be advised to detect underlying problems of the lower colon or rectum. The procedure involves the insertion of a hollow lighted tube into the rectum, through which the physician can inspect the walls of the lower colon and rectum, to determine whether or not abnormalities exist that would cause constipation. The examination also serves to rule out more serious problems, such as cancer.

A *lower GI X-ray* (called a barium enema) and other tests may also be recommended as part of the diagnostic process.

What kind of treatment is needed for constipation?

The best treatment for constipation is *prevention*, through such measures as adequate fiber in the diet, plenty of liquids, adequate exercise, stress management, and good toilet habits.

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Infrequent constipation caused by temporary disruptions in your routine may respond to lifestyle changes, such as increasing dietary fiber or adding exercise. If you have made all the lifestyle

adjustments needed to promote healthy elimination and

constipation is still an occasional bother, ask your gastroenterologist

to prescribe a mild laxative that can be used occasionally. Laxatives, however, should be a last resort.

When constipation is caused by an underlying problem, such as pain, another illness or a prescription medication, that problem must be addressed. In unusual cases surgery may be needed to correct the problem. An example would be obstruction due to scar tissue from previous surgery.

<u>Never</u> use laxatives or suppositories for an extended period of time without a physician's advice. If you are laxative dependent, your gastroenterologist can work with you to gradually retrain your GI tract to function without laxatives. That typically involves gradual withdrawal from laxatives, facilitated by prescription of progressively weaker ones until the body adjusts to being without them.

Toilet retraining

Healthy toilet habits contribute to the prevention and treatment of constipation. We have also been socialized to various toilet habits from infancy. For instance, some people spend "hours" in the bathroom, while others spend only the least amount of time

necessary. If you have learned or developed toilet habits that are detrimental to health, toilet "retraining" may be needed. The following pointers may help avoid constipation and its complications:

- 1. Plan for uninterrupted time when you usually have bowel movements. If you do not have an established time, right after breakfast works well for many people.
- 2. Never ignore the urge to have a bowel movement and allow adequate time for it to occur.



3. Avoid straining. If a bowel movement does not occur in a reasonable time, say ten minutes, do something else for awhile until the urge is noticed again. Prolonged sitting on a commode may promote the development of hemorrhoids, through increased pressure on abdominal blood vessels.

When is constipation serious?

If constipation symptoms are severe and prolonged or if the symptoms of constipation are disabling, causing disruption of your usual daily activities, you should seek medical attention.

Severe constipation should be investigated to rule out serious underlying illness. In cases where there is an underlying disorder, that disorder must receive prompt medical treatment.

If prolonged constipation is accompanied by weight loss, swollen abdomen, severe abdominal cramps, nausea and vomiting, fever, pain, bleeding or pencil-thin stools, do not delay seeing your gastroenterologist.

Complications of chronic constipation include *hemorrhoids* (a protrusion of blood vessels in the anal area), *bleeding* and *rectal prolapse* (a portion of the intestinal lining protruding out from the rectal opening).

In summary...

Constipation is a common gastrointestinal symptom that most people experience at some time. Because it is a symptom of an underlying problem, it is important to discover the cause for two reasons—to make sure there is not a serious underlying illness and to determine the best method of treatment.

Working with your GI Doctor, relief can be found for this common but uncomfortable problem.

Laxatives

There are many different types of laxatives, each with different mechanisms of action and each with distinct advantages and disadvantages.

When a laxative is needed, your gastroenterologist should determine the type of laxative best suited to your needs, based on the underlying cause of constipation.

Types of Oral Laxatives

Stimulant or Irritant: Cause contractions of the small intestine or colon and increase the secretion of liquids into the colon.

Bulk: Made from natural sources, using the husks from grain. Increases bulk in the stool and absorbs water, increasing moisture in the stool.



Lubricant: Softens

stool and lubricates the intestinal wall, so stools move easily.

Osmotic: Causes rapid influx of water into the colon.

Stool Softeners: Cause increased moisture within the stool to prevent dryness.

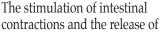
Other:

Enemas: The introduction of liquids into the rectum to be retained for a brief period of time, then expelled with stool.

Rectal Suppositories: A suppository is inserted into the rectum, where it melts and serves to lubricate the rectum and stimulates the defecation urge.

Is prune juice a laxative?

Prunes have long been thought of as a natural remedy for constipation. Although evidence does suggest that prunes and prune juice do have a laxative effect, scientists have yet to prove the exact mechanism responsible for that action.





liquid into the colon caused by prunes and prune juice seems to be due to more than the fiber contained in the fruit. Prunes have about $8\frac{1}{2}$ grams of fiber per half cup or 3 ounce serving. Although that is a good fiber source, it is not enough to cause the laxative effect.

Some researchers suggest that it is *sorbitol*, a naturally occurring sugar alcohol that is responsible. Others have traced a chemical compound similar to *oxyphenisatin*, a laxative drug. No studies thus far have been able to prove exactly how prunes work as a laxative.

Prunes are a good source of Vitamin A and fiber. Use of prunes or prune juice as a preventive or remedy for constipation probably causes no harm and is certainly preferable to harsher types of laxatives!

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Hemorrhoids

What are hemorrhoids?

The anal and rectal area are well supplied by blood vessels. Under extreme pressure, those veins become swollen and distended, much like varicose veins that occur in the legs.

Hemorrhoids, also commonly called *piles*, are swollen veins of the anus or rectum. Hemorrhoids that occur inside the rectum are known as internal hemorrhoids, while those occurring just under the skin of the anus (outside the body) are known as *external hemorrhoids*.

How common are hemorrhoids?

Hemorrhoids are common among men and women of all races, economic levels and occupations. They most frequently occur among persons from ages 30 to 55. Over half of U.S. residents will have hemorrhoids at some point in time. The tendency to have hemorrhoids seems to run in families, although some individuals that experience hemorrhoids do not have a family history of the problem.

What are the symptoms?

Bleeding from the rectum may be the only symptom noticed from internal hemorrhoids. However, if internal hemorrhoids stretch, they may protrude through the rectum to the outside of the body, causing irritation and pain. External hemorrhoids may become large and painful and may have blood clots within them, a complication known as *thrombosed hemorrhoids*. Such hemorrhoids may bleed if they are broken by straining during a bowel movement, or rubbing. Itching is a common symptom of external hemorrhoids.

What causes hemorrhoids?

Anything that causes increased pressure on the veins within the rectum and anus can contribute to the development of hemorrhoids. The most common cause is constipation, resulting from a diet that lacks sufficient fiber. When constipated, the straining during the passage of a stool causes increased pressure in the veins. Over time, the veins become weakened and permanently dilated. Once hemorrhoids are present, dry hard stool can further irritate them, causing bleeding.

Pregnant women are especially prone to hemorrhoids, because of the increased pressure (from the growing child) on the veins within the pelvic area. Almost all pregnancy-related hemorrhoids disappear completely after the baby is born.



How are hemorrhoids diagnosed?

Hemorrhoids are diagnosed through a number of simple procedures. Your gastroenterologist will visually inspect the anal area to detect the presence of external hemorrhoids. The examination will also usually include a digital rectal examination, which involves the insertion of a gloved, lubricated finger into the rectum, so that the physician can feel for the presence of internal hemorrhoids. Additionally, an anoscope (a hollow tube) is often used to inspect the inside of the anus and rectum.

Sometimes, your GI Doctor will recommend additional tests to rule out the presence of other GI problems.

Treatment of hemorrhoids

Treatment of hemorrhoids may involve one or more of the following: diet, hygiene, pain relief and medication.

Diet

Once hemorrhoids are present, it is extremely important to avoid constipation, to prevent complications. Prevention of constipation is best achieved by following a diet that is high in fiber and contains plenty of liquids (especially water).



Hygiene

The anal area should be kept clean and dry, to avoid irritation. Rubbing or scratching of the area should be avoided.

Good bathroom habits should also be followed. See the "toilet retraining" section of the previous discussion about constipation for suggestions.

Pain relief

Cold packs or sitz baths (a warm bath) may be recommended to help ease the pain of hemorrhoids. In addition, your physician may recommend various ointments, rectal suppositories or other medications.



Hemorrhoid Removal

In some cases removal of hemorrhoids may be recommended. Internal hemorrhoids can often be removed by the use of a constricting band that is placed around the base of the hemorrhoid to cut off circulation. The hemorrhoid simply dries up and falls off as a result. Chemical injections may also be used around the vein to reduce the size of a hemorrhoid.

In severe cases, surgery (hemorrhoidectomy) may be recommended to remove hemorrhoids. Depending on the extent of the problem, the surgery may be minor or major.

In summary...

Hemorrhoids are a result of increased pressure within the veins of the anus or rectum, usually resulting from constipation. If the underlying problem is not long-term, small hemorrhoids usually cause no major problems and simply disappear without treatment. If the underlying cause of hemorrhoids is a long-term situation, hemorrhoids can become large and painful, causing bleeding and significant discomfort.

The very best way to avoid hemorrhoids is to prevent constipation through the guidelines presented in the discussion of constipation.

If hemorrhoids are present, there are a number of treatment methods that will help you deal with this common problem. Working with your GI physician, a treatment plan can be found and followed that will keep hemorrhoids from becoming a major health problem.