Special Report

Anal Health Care Basics

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ABSTRACT

Despite the fact that countless patients suffer from anal problems, there tends to be a lack of understanding of anal health care. Unfortunately, this leads to incorrect diagnoses and treatments. When treating a patient with an anal complaint, the primary goals are to first diagnose the etiology of the symptoms correctly, then to provide an effective and appropriate treatment strategy.

The first step in this process is to take an accurate history and physical examination. Specific questions include details about bowel habits, anal hygiene, and fiber supplementation. Specific components of the physical examination include an external anal examination, a digital rectal examination, and anoscopy if appropriate.

Common diagnoses include pruritus ani, anal fissures, hemorrhoids, anal abscess or fistula, fecal incontinence, and anal skin tags. However, each problem presents differently and requires a different approach for management. It is of paramount importance that the correct diagnosis is reached. Common errors include an inaccurate diagnosis of hemorrhoids when other pathology is present and subsequent treatment with a steroid product, which is harmful to the anal area.

Most of these problems can be avoided by improving bowel habits. Adequate fiber intake with 30 g to 40 g daily is important for many reasons, including improving the quality of stool and preventing colorectal and anal diseases.

In this Special Report, we provide an overview of commonly encountered anal problems, their presentation, initial treatment options, and recommendations for referral to specialists.

INTRODUCTION

Despite the fact that countless patients suffer from anal problems, there tends to be a lack of understanding of anal health care. Unfortunately, this leads to incorrect diagnoses and treatments. This problem is compounded by the stigma associated with suffering from anal problems, which discourages patients from seeking help and getting the appropriate care.

The Basics

When treating a patient with an anal complaint, the primary goals are to

1. diagnose the etiology of the symptoms correctly
2. provide an effective and appropriate treatment strategy
3. confirm with a follow-up appointment that the problem has resolved or is under control. If symptoms have not improved, additional evaluation may be needed.

The chief complaint and history of the present illness are the first pieces of the puzzle to put together to reach the correct diagnosis. Obtaining specific information from the patient is imperative. For example, a chief complaint and history of present illness of "hemorrhoids" is not sufficient and frequently is counterproductive.

History

Discovering the patient's main symptom(s) is key: pain, bleeding, itching, tissue prolapse, excessive tissue, and drainage are some of the most common symptoms of underlying anal disease. Investigating the details of the patient's symptoms is important because "hemorrhoids" comprise less than half of the diseases causing these anal symptoms. For example, although there are many problems that can lead to anal pain, one of the most common is an anal fissure, which is frequently misdiagnosed as hemorrhoidal disease.[1]

Important history questions:

- How often do you have a bowel movement?
- What is the quality and consistency of the bowel movement (ie, hard, soft, watery)?
- How long do you sit on the toilet?
- Do you read or play games on your phone while having a bowel movement?
- Do you have anal pain/bleeding/incontinence to stool or gas?
- How do you clean the area? Do you use any wipes or ointments?
- Do you currently take a fiber supplement? If yes, which type and how much?

ANAL HEALTH PHYSICAL EXAMINATION

The physical examination comprises three components:

1. External Visual Examination

- Thorough visual inspection is important. This requires manual retraction of the surrounding buttocks with both of your gloved hands to expose the perianal skin.
- Look for signs of acute or chronic skin irritation, contact dermatitis, a punctate external fistula opening, erythema and painful raised area (abscess), or thrombosed external hemorrhoid with or without overlying skin ulceration.
- Be knowledgeable about the difference between an anal skin tag, an external hemorrhoid, and a sentinel skin tag adjacent to a fissure that might not be evident.
- Evaluation for anal fissure can be difficult as the patient typically has anal

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Table 1. Anal itching (pruritus ani)	
What is it?	Itching around the anal area, often iatrogenic or because of excessive moisture, cleaning, or harsh chemicals in wipes or ointments. This problem is unrelated to hemorrhoids.
Symptoms	Itching, discomfort, irritation, burning sensation in the perianal area. The itching sensation can be so severe that patients scratch in the middle of the night.
Treatment	1. Properly bulk the stool with adequate fiber to bind any bile irritants or other food or digestive-related irritants to the anal area (Table 8). 2. Clean with water only; excessive cleaning is discouraged. 3. Anal or intimate wipes will induce or exacerbate anal itching. The chemicals found in these products are irritants to the sensitive perianal skin.[2-5] 4. Dry the area without wiping or rubbing. Pat dry, air dry, or use a blow-dryer on low/medium heat if needed. 5. Apply skin-protecting barrier ointments to dry and clean perianal skin (zinc oxide 40%). 6. Avoid petroleum-based topical ointments because patients can develop contact dermatitis with daily use.[6] 7. Anesthetic ointment with dibucaine can decrease the urge to scratch the skin. 8. Stop any scratching. 9. Avoid irritating clothing (avoid G-strings and panty liners; wear underwear made of undyed cotton). 10. **Do NOT prescribe steroid-based hemorrhoid treatments**. They can harm the patients, especially with extended use.[7] 11. There can be visible skin changes, but if those are not resolving over time, the patient may need a biopsy to rule out another pathology (ie, Paget disease).
Key point: Anal itching is most often a dermatologic problem unrelated to hemorrhoids or other anal diseases. Anal itching is typically a secondary symptom of topical remedies for "hemorrhoids" and/or of excessive anal hygiene behaviors.	

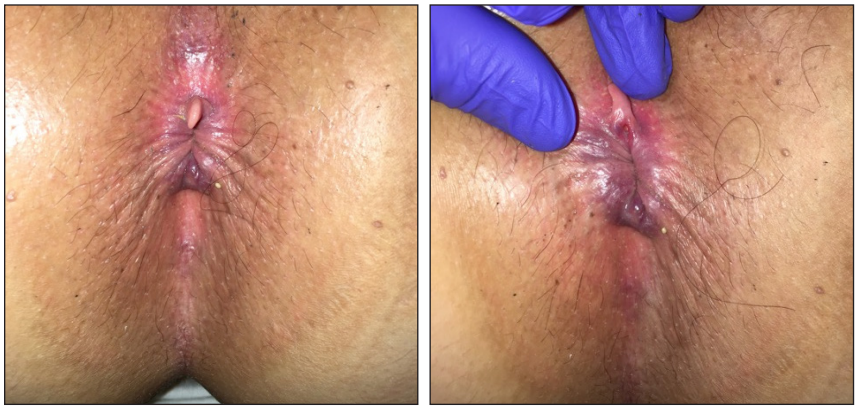

Figure 1. Repeated tearing and healing of an anal fissure can lead to a sentinel tag (1a, left). An anal fissure (1b, right) can be seen in the posterior midline with upward retraction. *Photos courtesy of Daniel Popowich, MD, FACS, FASCRS.*

Table 2. Anal fissure	
What is it?	A cut or tear in the anal canal typically caused by passing a hard stool. Patients often complain of severe anal pain and bleeding with bowel movements. On physical examination, you may see the fissure or just the sentinel tag. If the examination appears normal, you can elicit point tenderness. We recommend against continuing the digital rectal examination or anoscopy if the patient is having pain during the examination. You will need to use both gloved hands or have an assistant help to retract the buttocks and perianal skin to examine the anal canal. Patients frequently have anal hypertonia (spasm) as well, further making the anal canal more difficult to visualize.
Symptoms	Pain and bleeding, often after a hard stool or trauma. Pain can persist for days to years and radiate down to the legs, even when bleeding is no longer present. The patient may also have a burning or tearing sensation.
Treatment	The primary goals are to properly bulk the stool with adequate fiber and relax the anal muscle. Specific steps include the following: 1. Properly bulk the stool with adequate fiber to minimize constipation and diarrhea (Table 8); both frequent bowel movements and hard bowel movements can lead to an anal fissure.[8] 2. Temporary use of laxatives such as daily Miralax or senna. The dose of Miralax can be titrated up or down to achieve desired results. As the patient's fiber supplementation increases, the need for Miralax will diminish. Note: AVOID docusate (Colace) and other stool softeners because these agents are typically ineffective. 3. Chronic use of laxatives should be avoided because it can lead to worsening colonic function and constipation. 4. Diltiazem 2% ointment is to be placed on the anal muscle 3 times daily—continue for a minimum of 8 weeks, even if symptoms improve earlier.[9] 5. If a patient cannot tolerate diltiazem, or is breastfeeding or pregnant, 0.2% nitroglycerin-compounded ointment can be prescribed. However, the proper dose of nitroglycerin is important as too high of a dose can cause severe headaches.[10] 6. Do NOT prescribe hemorrhoid ointments or suppositories, especially steroid-based ones. Steroid ointments **do not** help. They **do** cause perianal skin thinning and dermatitis. At best, they act as a placebo, but they often are used chronically and cause unpleasant perianal skin changes.[11] 7. Use mental anal muscle relaxation: Actively thinking about relaxing sphincter tone. 8. Consider sitz baths: Soaking the anal area in warm water induces relaxation. Warmer water induces more relaxation. No additives are needed.[12] 9. Surgical intervention (such as Botox injections or sphincterotomy) is considered for patients whose symptoms do not improve with the above management strategies. It is imperative that the patient increases fiber and water intake so bowel movements are very soft before surgical intervention to maximize chances of postoperative healing.[13]
Tip: Dibucaine 1% ointment can be added for local pain control. This is for local anesthesia and skin protection and is not a replacement for diltiazem. Tip: Avoid prescribing narcotics because this will make the patient more constipated and prevent the fissure from healing. *Key point: When a chief complaint is anal pain and bleeding, anal fissure should be high on the differential even if the actual fissure is not clearly seen on an examination that is limited because of anal pain.*	

hypertonia (anal spasm) as well. You may need an assistant to help you fully retract the peri-anal skin and efface the anal canal for a complete visual examination. If you find an anal fissure, do NOT proceed with digital rectal examination or anoscopy at this time; digital examination and anoscopy are extremely painful examinations for the patient with an anal fissure. You should perform a digital examination and anoscopy after the patient's symptoms resolve (typically six to eight weeks later with appropriate treatment).

2. Digital Anal Canal and Lower Rectal Examination

- Although it is uncomfortable, most patients without an active fissure, abscess, or thrombosed external hemorrhoid are able to tolerate this examination.
- If a patient reports too much pain to attempt or tolerate the examination and external pathology is not seen (except skin tags), then reexamine the external area and gently press with your finger or a cotton swab to place pressure on all soft tissue circumferentially around the anal area to check for an area of maximum tenderness. If such an area is found, occasionally the more thorough external examination alone reveals the source, such as a fissure or deeper abscess.

3. Anoscopy

Do NOT perform anoscopy if any of the following are present:

- The patient has a midline (anterior or posterior) anal fissure.
- The patient is having anal pain during digital examination or cannot tolerate a digital examination.
- A tender purple marble-like "ball" that is firm is present—it is likely a thrombosed external hemorrhoid.
- A red, fluctuant, tender area is present—it is likely an abscess.

Key point: If a mass is seen on external examination or anoscopy and there is any question of pathology such as malignancy, the area should be evaluated by a physician familiar with diseases of the anus and rectum to further determine whether biopsy is indicated.

COMMON ANAL PROBLEMS

Benign Anal Disease

Many problems may be categorized as hemorrhoids by the general public. However, the etiologies and management can vary, so it is important to differentiate between entities such as anal itching (Table 1), anal fissure (Figure 1, Table 2), hemorrhoids (Table 3), and anal abscess/fistula (Figure 2, Table 4). Another benign anal problem that patients may attribute to hemorrhoids is anal incontinence (Table 5).[2-26]

Table 3. Hemorrhoids

What is it?	Hemorrhoidal venous cushions are normal structures of the anorectum. The term "hemorrhoids" is commonly used to describe the pathologic state when these blood vessels become engorged, become thrombosed, or protrude.
Internal hemorrhoids	
What is it?	Hemorrhoids above the dentate line. These can prolapse below the dentate line and appear as protruding from the anal area. Internal hemorrhoids often bleed, especially during a bowel movement. They typically do not cause severe anal pain. However, internal hemorrhoid prolapse can be associated with discomfort or pressure.
Symptoms	Typically patients will complain of painless bleeding with a bowel movement either in the toilet, on cleaning, or both. Hemorrhoidal tissue may protrude when straining or when having a bowel movement. The tissue may self-reduce or need manual reduction with firm pressure.
External hemorrhoids	
What is it?	Hemorrhoids below the dentate line. These can become thrombosed when blood clots form because of straining or excessive time on the toilet. External hemorrhoids are painful only when thrombosed. This problem tends to be self-limited in duration, with pain decreasing daily after the first 2 or 3 days and the thrombosis resolving over days to weeks.
Symptoms	Anal pain with a firm marble-like area around the anus, typically purplish in color. Bleeding occasionally occurs when there is pressure necrosis and the clot erodes through the overlying ulcerated skin. Pain is usually the worst in the first 48 hours.
Treatment for internal and external hemorrhoids	
1. Properly bulk the stool with adequate fiber and water to minimize constipation and diarrhea (Table 8); both frequent bowel movements and hard bowel movements can lead to hemorrhoidal problems.[14,15]	
2. Temporary use of laxatives such as daily Miralax or senna.[16] The dose of Miralax can be titrated up or down to achieve desired results. As the patient's fiber supplementation increases, the need for Miralax will diminish. Note: AVOID docusate (Colace) and other stool softeners or laxatives because these agents are typically ineffective. Chronic use can lead to worsening colonic function and constipation.	
3. Consider prescribing dibucaine 1% ointment to act as a lubricant helpful for reduction of prolapse or for pain control in the case of thrombosis.	
4. Restrict sitting on the toilet to no longer than 1 to 2 minutes.[17]	
5. When on the toilet, place a stool under the feet to mimic squatting position.[18-21]	
6. Do not recommend donut-shaped pillows, which can worsen the problem because this places more stretch and tension on the anal skin.	
7. Do NOT prescribe hemorrhoid ointments or suppositories, especially steroid-based ones. Steroid ointments *do not* help treat hemorrhoidal problems and do not induce shrinking of hemorrhoidal tissue. They *do* cause perianal skin thinning and dermatitis. At best, they act as a placebo, but they often are used chronically and cause unpleasant perianal skin changes.	
Tip: Thrombosed external hemorrhoids are typically self-limited. Surgical treatment with elliptical excision of the clot and overlying skin has the best results when performed within the first 48 hours of symptom onset or if there is skin ulceration or necrosis. Clot evacuation only relieves symptoms but can eventually result in a skin tag disliked by some patients. Surgical excision of the clot and overlying skin performed after 48 hours of symptoms typically results in worsening pain and bleeding compared with the pain level associated with spontaneous clot absorption.[8,22]	
Key point: Hemorrhoidal disease is a result of inadequate fiber intake that leads to constipation, diarrhea, straining, and spending excess time (more than 2 minutes) on the toilet. A change in lifestyle and bathroom habits is key for relief of symptoms and to prevent recurrence. Even in cases where surgical intervention is needed, implementing these changes first results in better short- and long-term results after surgery.[23-25]	

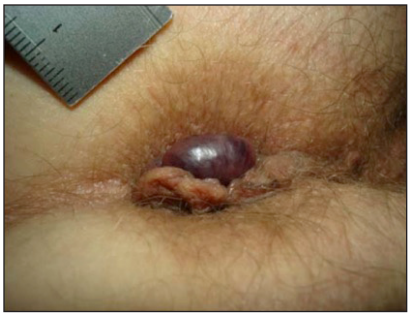

Figure 2. Thrombosed external hemorrhoid.[1]

1. Gebbensleben O, Hilgery Y, Rohde H. Aetiology of thrombosed external haemorrhoids: a questionnaire study. BMC Res Notes 2009 Oct 23;2:216. DOI: http://dx.doi.org/10.1186/1756-0500-2-216. Copyright policy—open access: https://openi.nlm.nih.gov/faq.php#copyright; License: http://creativecommons.org/licenses/by/2.0.

Table 4. Anal abscess/fistula (cryptoglandular disease)

What is it?	Infection of the anal gland. The anal abscess is the acute phase, and the fistula is the chronic phase. A fistula occurs when an anal abscess develops a connection to the perianal skin. This occurs approximately 50% of the time.
Anal abcess	
Symptoms	Acute pain and redness around the anal area. They spontaneously drain or need incision and drainage. Some forms, such as intersphincteric abscesses, can present with a normal external examination but with tenderness and fullness on digital rectal examination.
Treatment	Typically immediate incision and drainage is best; often antibiotics alone are inadequate. Outpatient surgical referral can lead to a delay in treatment. *Key point: Severe new-onset perianal pain without a visible finding could indicate a higher abscess that is not yet visible at the skin. Early surgical evaluation is indicated.*
Anal fistula	
Symptoms	Chronic drainage from the anal area where usually a small opening near the anus with surrounding granulation tissue can be seen. The drainage can include stool, pus, or blood.
Treatment	Referral to surgery department is appropriate.

Common Anal Masses

Similarly, not all masses near the anus represent hemorrhoids, though the difference can be subtle. Anal skin tags (Figure 3, Table 6) are usually the result of excess skin after repeated scarring (such as healing from an anal fissure), and anal warts (Figure 4, Table 7) are commonly outgrowths of tissue caused by viral infection.

DIETARY AND LIFESTYLE CHANGES

Fiber

The Industrial Revolution has resulted in a diet lacking in sufficient fiber. People tend to lack knowledge about how much fiber they are consuming, or how much they should consume.[27] In addition, fiber is typically marketed as a "laxative," and patients with diarrhea or loose stool are frequently nervous about taking a product that is for "constipation." Fiber works by absorbing and retaining fluid,

Table 5. Anal incontinence (accidental bowel leakage)

What is it?	Inability to control stool and/or gas.
Symptoms	Inability to hold in stool and/or gas whenever desired.
Treatment	Primarily consists of increasing fiber intake to bulk stools (Table 8). Kegel exercises and physical therapy referral can be useful.[26] In patients who are taking metformin or other medications that are associated with diarrhea and fecal urgency, alternative medical treatment strategies and therapies can significantly improve the patient's baseline continence level. If the patient has not had a colonoscopy, endoscopic evaluation may be helpful to diagnose inflammation of the colon and rectum that can lead to increased urgency and accidental bowel leakage. For refractory cases in otherwise healthy patients, surgical referral is an option.[8] However, adequate fiber intake and bulking of stool is a necessary prerequisite to all surgical interventions. Therefore, ensure that you have provided this education and management strategy before surgical referral.

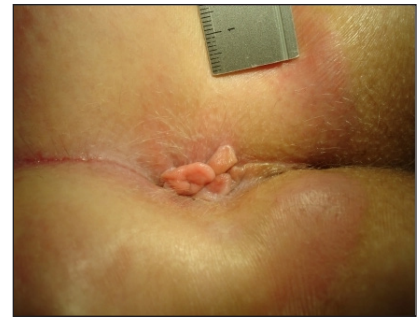

Figure 3a. Anal skin tags.

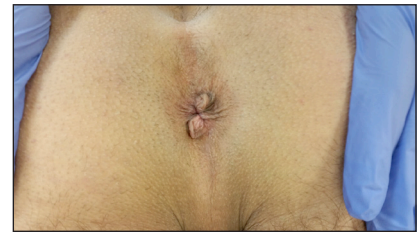

Figure 3b. Anal skin tag.
Photo courtesy of Talar Tejirian, MD, FACS.

Table 6. Anal skin tag

What is it?	A piece of excess skin located around the anal area that often results from healed thrombosed external hemorrhoid or anal fissure and is exacerbated by excess cleaning or rubbing. There should be no pain or bleeding, but patients can be bothered because excess skin is present.
Symptoms	Piece of extra tissue near or in the anal area. It typically starts small but with repeated trauma of excessive cleaning or recurrent thrombosed hemorrhoids or anal fissures, it slowly increases in size.
Treatment	1. Treat the underlying cause, such as recurrent external thrombosed hemorrhoids. 2. Excision can be performed if the patient desires, but it is important for the underlying problem to be addressed first. For example, if the patient gets recurrent anal fissures or thrombosed hemorrhoids, s/he must implement bowel and bathroom habits so these problems do not reoccur after skin tag excision.

thereby softening hard stool and thickening loose stool. Adequately fiber-bulked stool results in more complete evacuation with bowel movements, less sputtering of bowel movements, less straining with bowel movements, and more regularity with bowel movements.

The US Department of Agriculture and US Department of Health and Human Services recommend that you eat 25 g to 40 g of fiber daily,[28] but most people get less than half this recommendation.

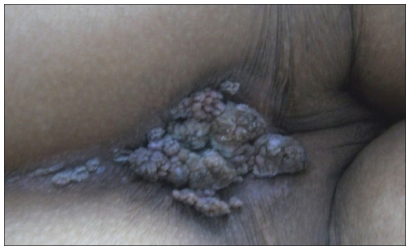

Figure 4. Anal Warts.

Reprinted from Gude D, Chennamsetty S, Jha R. Stalwart approach to stall wart. Indian J Palliat Care 2011 May;17(2):168-9. DOI: http://dx.doi.org/10.4103/0973-1075.84543 with kind permission from IJMS Publishing Team: Ivyspring Inquiry: www.medsci.org.

Table 7. Anal warts (condyloma acuminata)

What is it?	Growths of tissue in the area around and inside the anus that are caused by human papillomavirus. They may first appear as tiny spots or growths but can grow quite large and cover the anal area.
Symptoms	Usually, they do not cause pain or discomfort. Some patients may experience itching, bleeding, mucus discharge, or a feeling of a lump or mass in the area.
Treatment	If warts are small and located only on the skin around the anus, they may be treated with a topical medication such as podophyllin, trichloroacetic acid, and bichloroacetic acid. Topical agents that can be applied at home include imiquimod or 5-fluorouracil. They can also be treated in the office with cryotherapy (freezing with liquid nitrogen). For larger lesions, patients can be referred to a surgeon for fulguration and/or excision.

Table 8. Fiber supplementation instructions

My daily fiber intake goal	25-40 g daily
The US Department of Agriculture and US Department of Health and Human Services recommend that I eat 25 g to 40 g of fiber DAILY	1. Adequate fiber will regulate my bowel movements by a. softening hard stool and reducing the frequency of constipation b. adding bulk to loose stool and reducing the frequency of diarrhea. 2. Adequate fiber will improve my anal problems and bleeding by a. softening hard stool and making bowel movements less traumatic b. thickening loose stool and making bowel movements less traumatic. 3. Adequate fiber will reduce my risk of developing a. colon and rectal cancer b. diverticulosis c. complications of diverticulitis: Perforation, infection, emergency surgery. 4. Adequate fiber will reduce my cholesterol
How much fiber is in the food I eat?	1. The fiber content in foods that you eat can be found on the "Nutrition Facts" label for processed foods. 2. For fresh foods, fruits, and vegetables, there are a variety of Web sites that can give you the amount of fiber per serving. For example: www.NationalFiberCouncil.org; search for "fiber counter."
Go slow and keep it up	*Gradually* work your way up to taking 20 g of fiber daily in the form of a fiber supplement AND increase fiber in your diet so that you are eating at least 10 g to 20 g of dietary fiber daily. **Fiber supplement[a]: 20 g daily** **Dietary fiber: + 10-20 g daily** **Total fiber intake: 25-40 g daily**
Slow and steady fiber supplement ramp-up plan	Week 1: 1. Start counting the amount of fiber you consume in your diet on a daily basis. 2. Purchase a fiber product that you will be able to take every day for the rest of your life. Read the label to check the fiber content. Many fiber products, especially fiber pills, have very small amounts of fiber. Choose a fiber product with 5 g or more of fiber per serving. 3. Start drinking 8 to 10 glasses of water daily.
	Week 2: 1. Supplement your diet with 5 g of additional fiber daily. 2. Drink 8 to 10 eight-oz. glasses of water daily.
	Week 3: 1. Supplement your diet with 10 g of additional fiber daily. 2. Drink 8 to 10 glasses of water daily.
	Week 4 and beyond: Continue to increase the amount of additional fiber daily by 5 g per week until you reach your goal of 25 g to 40 g of fiber daily for life. TIP: If you feel bloated or develop excessive gas, you are increasing your daily fiber too quickly. You may need to increase your daily fiber over a longer period of time.

[a] Common fiber supplements: Metamucil, Konsyl, Citrucel, Fiber One. Choose the fiber supplement that works best for you. Be sure to calculate the fiber amount per serving size. Choose a fiber supplement that you would be willing to take every day as a 20-g dose (goal at the end of the ramp-up period). If you experience diarrhea with a natural fiber supplement or fiber supplement that claims "easy to take/dissolves in water," consider changing to one of the above brand names because some natural fiber supplements contain natural laxatives as well.

Warning: If you take Coumadin (warfarin), please be sure to speak with your primary care physician or cardiologist before starting a fiber supplement because fiber may interfere with your Coumadin international normalized ratio levels.

Adequate fiber intake is important for many reasons:

1. Fiber helps regulate bowel movements by softening hard stool to reduce constipation and adding bulk to loose stool to reduce diarrhea
2. Common anal problems such as fissures and hemorrhoids are caused by inadequate fiber and water intake
3. Adequate fiber will reduce the risk of developing colorectal cancer, diverticulosis, and complications of diverticulitis
4. Adequate fiber will reduce cholesterol.

When advising patients regarding increasing fiber intake (Table 8)

- stress the fact that most people do not consume adequate fiber
- advise patient to keep a log of the daily fiber intake for one week to see exactly how much the intake really is
- ask them to read food labels thoroughly to check fiber content instead of assuming labels such as "whole wheat" mean a high fiber content
- adding fiber supplements is helpful, but caution is needed when choosing the fiber supplement. Commonly used supplements like "fiber pills" and orange-flavored psyllium are inadequate. Reading the labels of these products, including the serving size and fiber content, is important. For example, most fiber pills have half a gram of fiber. Therefore to get 20 g of additional daily fiber, someone would need to take 40 pills a day
- increasing water intake to at least 64 oz daily is needed so fiber can work properly. Daily intake of caffeinated beverages would increase the need for water intake owing to caffeine's diuretic properties.

Proper Bowel Movements

When advising patients on a proper bowel movement, the following key points should be emphasized:

- Spending excessive time on the toilet is harmful. Avoid sitting on the toilet more than two minutes
- The rectum empties better when in a squatting position. When using a Western toilet, place a stool under your feet and lean forward to mimic that position
- Do not clean excessively and avoid cleansing wipes. Use water without chemicals. Using a bidet attachment eases the cleaning process in a quick and simple manner.

CONCLUSION

Most anal health problems are a result of inadequate fiber and water intake along with poor bowel and bathroom habits. With improved awareness and understanding on the physician's part, and guided changes in dietary intake and bathroom behavior modifications on the patient's part, most patients will have complete resolution of their symptoms. Accurate evaluation and diagnosis are the key. This can be achieved with a thorough history and physical examination. The assumption by patients and physicians that most anal problems are caused by "hemorrhoids" leads to an error in diagnosis, incorrect management strategies, worsening of disease-related symptoms, development of new symptoms such as contact dermatitis, and delay in accurate diagnosis and resolution of symptoms. Avoiding harmful products such as anal wipes and steroid ointments or suppositories is important because contact dermatitis is associated with worsening of the anal symptoms and delayed symptom improvement, once an accurate diagnosis has been made. If there is a question as to the correct diagnosis or treatment, referral to a specialist in diseases of the anal and rectal area can be helpful. Online resources may be found in the Sidebar: Useful Online Resources. ❖

Useful Online Resources

The American Society of Colon and Rectal Surgery Web site is an excellent resource for both patients and physicians. There are a variety of online learning tools for physicians. In addition, each and every anal disease that we covered in this article is thoroughly presented in a patient-friendly format that can be printed for additional patient education. The Web addresses are as follows:

www.fascrs.org
www.fascrs.org/patients/disease-condition/pruritis-ani
www.fascrs.org/patients/disease-condition/anal-fissure
www.fascrs.org/patients/disease-condition/anal-fissure-expanded-information
www.fascrs.org/patients/disease-condition/hemorrhoids
www.fascrs.org/patients/disease-condition/hemorrhoids-expanded-version
www.fascrs.org/patients/disease-condition/abscess-and-fistula-expanded-information
www.fascrs.org/patients/disease-condition/bowel-incontinence
www.fascrs.org/patients/disease-condition/anal-warts-and-anal-dysplasia-expanded-information

Patient friendly educational material is available from: www.bootymd.org

Disclosure Statement

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How to Cite this Article

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Bubo

Bubo is an apostem breeding within the anus in the rectum with great hardness but little aching. This I say, before it ulcerates, is nothing else than a hidden cancer … . Out of the bubo [cancer] goes hard excretions and sometime they may not pass, because of the constriction caused by the bubo, and they are retained firmly within the rectum … . I never saw nor heard of any man that was cured … but I have known many that died of the foresaid sickness.

— John of Arderne, 1307-1392, English surgeon: Father of English Surgery