Pruritis ani

OVERVIEW

Pruritis ani is a common medical problem affecting both men and women. This information was composed to help patients understand pruritis ani, its symptoms, evaluation, and treatment options. This information may also be helpful to individuals or caregivers of patients who are suffering from pruritis ani.

Pruritis ani most commonly affects adults, affecting from 1% to 5% of people in the general population. Men are more commonly affected than women with a 4:1 ratio. The condition is most common in people age 40s to 60s. There are many causes of pruritis ani, and an accurate diagnosis is important in order to treat the specific cause. Medical management of pruritis ani often provides patients with relief of their symptoms and improves their quality of life.

WHAT IS PRURITIS ANI?

Pruritis ani is a Latin term meaning “itchy anus” and is defined as an unpleasant sensation of the skin around the anus (i.e., rectal opening) that produces the desire to scratch. Pruritis ani is classified as primary or secondary. The primary form is the classic syndrome which may not have an identifiable cause (referred to as “idiopathic”) and the secondary form has an identifiable, and often specifically treatable, cause.

Minimal stimulation of the skin may cause itching. The subsequent scratching may cause injury to the skin which produces a larger area of irritated skin. Continued scratching causes the need to scratch more, making the problem worse.

WHAT CAUSES PRURITIS ANI?

This symptom of pruritis or itching is common to many anorectal conditions. One must consider hemorrhoids, excessive skin tags, fecal soilage or incontinence, anal fistulae (abnormal passageways between the bowel and an organ or skin surface), anal fissures (painful clefts or grooves) and anal warts as possible causative agents. It is not always understood what causes the long-standing history of primary pruritis ani. It is believed that an irritating secretion from the anal canal may cause the itching. The local nerve fibers in the skin may become chronically active with repetitive trauma or scratching for prolonged periods of time. There can also be itching related to disorders of nerve pathways or itching related to a central nervous system stimulus such as medications. Occasionally, itching may also be psychogenic (symptoms arise from the mind, as opposed to another organ).

Other potential causes of irritation include moisture from sweat, stool and mucus. Studies have shown that the relief of symptoms can occur promptly after the stool has been cleansed from the perianal area, indicating that stool is likely an irritant causing of itching. In addition to difficult or inadequate hygiene, overzealous or aggressive hygiene with the use of many irritating soaps, scents, and lotions may cause pruritis ani, resulting in this condition occasionally being referred to as “polished anus syndrome.” Overzealous cleaning, in addition to the use of topical steroids, can

destroy natural skin barriers and cause trauma to the anal skin, making the problem worse. In a way, trying to keep it “too clean” may worsen the problem.

Dietary factors may also play a role with pruritis ani, although there are not definitive studies implicating particular food items or diets. Coffee, either caffeinated or decaffeinated, is thought to be a major contributing factor. Coffee consumption may lower the anal resting pressure (normal strength of muscle contraction at rest) and contribute to anal leakage of stool. Other dietary agents which are possible causes of pruritis ani include tea, cola, energy drinks, chocolate, citrus fruits, tomatoes, spicy foods, beer, dairy products and nuts.

Infectious processes may also result in pruritis ani. Examples include bacterial skin infections, fungal infection (although a common fungus, Candida albicans, appears to be a normal inhabitant of the perianal skin), parasitic infections with pinworms or scabies, and viral infections with anal warts.

Numerous skin conditions also cause secondary pruritis ani. Conditions that are potential causes of pruritus ani include psoriasis, seborrheic dermatitis, atopic dermatitis, contact dermatitis, lichen planus, lichen simplex, and lichen sclerosis. Local cancers such as Bowen’s disease or extra mammary Paget’s disease are also potential causes of pruritis ani.

Medical diseases that affect the entire body may also cause pruritis ani. The examples include diabetes mellitus, leukemia and lymphoma, kidney failure, liver diseases (obstructive jaundice), iron deficiency anemia, or hyperthyroidism.

While this is a wide variety of potential causes, it is important to understand that in many cases the itching has no identifiable source.

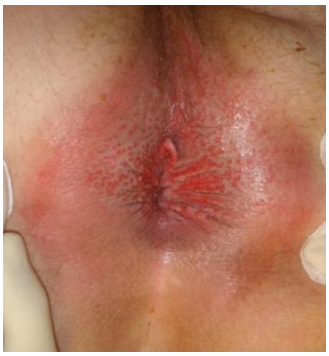
PATIENT EVALUATION

A careful medical history must be obtained from the patient focusing on the timing and duration of the pruritis ani as well as any accompanying symptoms. Toileting behaviors must be evaluated, including the frequency and quality of stools, possible stool or mucus leakage, perianal moisture sensation, or the sensation of incomplete evacuation of stool. In addition, hygiene rituals or cleansing methods after a bowel movement must be evaluated.

Travel history and current medications, including all topical agents used, must be reviewed. A detailed diet history should be taken with close attention to known dietary agents suspected of causing pruritis ani. Often a heavy consumption of caffeine with coffee, tea, cola, or energy drinks is present. Lastly, investigation regarding possible infectious agents, such as pinworms in children, should also be considered. Adults rarely harbor pinworms.

Your doctor will perform an office physical examination to provide information regarding a possible cause of the symptoms. Examination should include a thorough inspection of the skin around the anus. The skin may appear normal or may have findings such as open wounds or cracks, redness, or possible characteristic changes of thickened skin due to repeated scratching and irritation.

Primary or idiopathic pruritis ani is classified by a staging system used at Washington Hospital Center, and is based on the physical features of the skin. Stage 0 is normal skin, stage 1 is red and inflamed skin, stage 2 has thickened skin, and stage 3 has thickened skin, coarse ridges, and often ulcerations.



In addition to inspection of the perianal region, your doctor may place a finger through the anus into the rectum (digital rectal exam). Part of the evaluation of the anal canal may be completed with a small instrument or anoscope which is referred to as "anoscopy." An office biopsy with a small 3 or 4 mm piece of tissue may also be obtained to help with diagnosis and decision-making regarding treatment. Skin swabs or scrapings may also be obtained. Physical examination may also involve inspection of other sites of involvement.

The detailed anal examination is necessary, but brief, and patients should not feel embarrassed. The examination may have some feelings of discomfort but should not be painful.

TREATMENT OF PRURITIS ANI

The goal of therapy is to restore clean, dry, and intact skin. Treatment can be challenging, as many cases have no clear identifiable cause. It is important to use bowel medications to thicken stool and create a formed bowel movement to minimize leakage or seepage and also to allow for complete evacuation. The goal is a soft, bulky, easy to clean stool. Most people can benefit from taking a fiber supplement (Citrucel®, Metamucil®, Fibercon®, Benefiber®, and Konsyl® are examples). This can be taken in powder or capsule/tablet form and is usually taken once or twice daily. The fiber serves to absorb the moisture from the stool, adding bulk and allowing for complete evacuation of stool during bowel movements.

If stools still remain loose, additional medications may be helpful. Imodium® is an antidiarrheal medication which can thicken or firm stool and help decrease seepage. In more difficult cases, prescription medications such as Lomotil® may be needed to thicken the stool. Your physician can help decide which medications may be best for you.

Dietary changes are often necessary for treatment. There are several common foods which may be related to pruritis ani. These food and beverages include coffee, colas, tea, chocolate, tomatoes and beer. These items may possibly decrease your sphincter tone which can cause some seepage or leakage. Avoiding overuse of these items

may improve symptoms. It may be helpful to remove one item at a time from your diet for several weeks. If your symptoms improve, you could try reintroduction of the item in smaller volume and see if there is a limit to which you may have that item without producing symptoms.

It will also be important to modify bowel hygiene or cleaning habits. It must be stressed that the anus does not need to be scrubbed or sterilized. Cleaning with plain water rinses is quite helpful. Soaps, perfumes, dyes in tissue or clothing, and baby wipes containing deodorants should be avoided because they can act as irritants. Alcohol and witch hazel agents should similarly be avoided. Bathing with Dove® soap is recommended, as it is free of conventional soap. Also, hand held detachable shower heads can be used to clean and wash away any remaining soap residue. The same effect can also be created with a bidet, although they are not common in the U.S.

Balneol® is a gentle and soothing cleaning agent. It is commercially available mineral oil-based preparation that can be used at home or taken along in a pocket or a purse for use in public facilities. Another possible cleaning agent is dilute white vinegar. One tablespoon in an 8 ounce glass of water can be kept in the bathroom and applied with a cotton ball. Burrow's solution, diluted at 1:40 (one Domeboro® tablet in 12 ounces of water or one tablet in six ounces of water for 1:20 solution) is also a gentle and non-irritating cleanser. It can be kept in a plastic squeeze bottle in the refrigerator and used in place of soap and water.

The ultimate goal of treatment is to create dry, healthy, and intact skin. The skin can be dried after cleansing using a hair dryer on low setting. An athlete's foot powder or Zeasorb®, a lubricating and drying agent in powder form can also be used to absorb moisture. After drying, the athlete's foot powder or Zeasorb® can be applied, and a small piece of cotton can be placed between the buttocks and against the anus to help absorb the moisture. Tight fitting, synthetic undergarments should be avoided.

One of the most important, but often most difficult, aspects of the management of pruritis ani, is to avoid trauma to the skin. This means no scratching with hands or dry toilet paper. Behavioral modification is often very difficult to achieve, due to the intense desire to scratch. Many people also scratch during sleep and are not aware of it until they wake to find themselves scratching. It is often recommended to have patients cut their nails and wear a pair of light, soft, cotton gloves on their hands at night so they are not able to scratch.

In order to control symptoms, a short course of a steroid ointment may be tried. A weak topical steroid such as 1% hydrocortisone cream used two to three times a day for a short period of time can be effective in relieving symptoms of pruritis. A long-acting topical steroid such as betamethasone may also be effective. Strong steroids or prolonged use can lead to skin atrophy (weakness and thinning) which sometimes worsens pruritis ani. High potency steroids should not be used for more than four to eight weeks. If there is thinned or denuded skin, topical antibiotics may occasionally be helpful. It should be noted that cream forms of medication cause more thinning or atrophy than ointment forms.

A skin barrier cream such as zinc oxide may also be helpful in protecting the skin around the anus from irritants. Additional topical agents such as numbing medications,

menthol, phenol, camphor, or a combination of them may be helpful. Calmoseptine® is used frequently, with a combination of zinc oxide and menthol and can be very beneficial at relieving patients' symptoms. If there is any concern that there may be an infection, topical antibiotics (gentamicin, clindamycin, or bacitracin) or antifungals (clotrimazole, nystatin) may be added in conjunction with other therapies. They can be applied at nighttime before bed and again in the morning after bathing.

Patients coming to the doctor for evaluation of pruritis ani with moderate to severe changes of the skin, may be treated by application of Berwick's dye (which is a combination of gentian violet and brilliant green pigment) with alcohol. It can relieve itching but will sting if there are open wounds. Your physician can dry the dye with a hair dryer and it can be sealed in place with Benzoin tincture and then again dried in place. This dye can stay in place for several days and will often give great relief while the skin is able to regenerate or re-epithelialize. This treatment is performed in an office setting, but is not used in the home setting.

You may notice that your problems will improve for some time with treatment but then recur. For a small number of patients, pruritis ani can be quite difficult to manage, and it may be difficult to completely relieve their symptoms. In these patients, it may be beneficial to try topical capsaicin. Capsaicin comes from Capsicum chili peppers. It is believed to work by depressing the feelings or desensitizing certain nerves. This medicine has been studied with a small number of patients, and up to 70% of patients had relief of their symptoms for up to almost 11 months. The medicine is applied with a very low concentration of 0.006%.

A very small number of patients find only minimal relief from all attempted treatment options. These individuals may benefit from injectable therapy. This particular therapy is saved for patients with persistent and intense pruritis ani. Methylene blue is a dye which can be injected into the skin and may relieve symptoms by causing destruction of the nerve endings. The methylene blue can be mixed with topical anesthetics and injected into and below the affected perianal region. Many patients do experience a change in sensation in the injected area. It may feel somewhat numb like have a local anesthetic for a dental procedure. It also will turn the skin in the area blue. In very rare cases, this may be injected too close to the surface of the skin and may cause some skin breakdown or ulcerations.

WHAT IS A COLON RECTAL SURGEON?

Colon and rectal surgeons are experts in the surgical and non-surgical treatment of diseases of the colon, rectum, and anus. They have completed advanced surgical training in the treatment of these diseases, as well as full general surgical training. Board-certified colon and rectal surgeons complete residencies in general surgery and colon and rectal surgery, and pass intensive examinations conducted by the American Board of Surgery and the American Board of Colon and Rectal Surgery. They are well versed in the treatment of both benign and malignant diseases of the colon, rectum and anus and are able to perform routine screening examinations and surgically treat conditions, if indicated to do so.