What are hemorrhoids?

Hemorrhoids are a specialized collection of blood vessels under the lining of the anal canal. They are normal structures which enlarge when they fill with blood and return to normal size when they empty blood. Hemorrhoids are sometimes called anal cushions because they are involved in the finer control of stool and gas. Hemorrhoids are located at two levels – internal and external.

Hemorrhoids may cause symptoms when they become dilated, thin walled and hang down.

Internal hemorrhoids

Internal hemorrhoids are covered by mucosa and normally reside in the upper anal canal and low end of the rectum. Internal hemorrhoids are kept inside the anus with special connective tissue that suspends them in their normal position. Internal hemorrhoids may cause complaints if the supporting tissue is damaged; the hemorrhoids may fill up with blood but not empty normally. Over time they may prolapse out of the anus to the outside, and they may bleed and cause discomfort and irritation.

External hemorrhoids

External hemorrhoids are covered by skin and are found in the lower anal canal and beneath the skin about the anal verge. Internal and external hemorrhoids have very different sensations and cause different complaints. External hemorrhoids dilated and cause discomfort, especially with straining to have a bowel movement. They commonly become thrombosed (clotted) which causes sudden swelling and severe pain.

What are the common complaints related to hemorrhoids?

Internal hemorrhoids

Prolapse – Internal hemorrhoids belong inside the anal canal. They are kept inside with special connective tissue that suspends them inside and helps to empty excess blood. If the supporting tissue is damaged, the hemorrhoids may fill up with blood but not empty the blood. The enlarged hemorrhoids may be pushed out along with a bowel movement. Internal hemorrhoids which have been pushed outside the anal canal are called prolapsed hemorrhoids. There are different degrees of prolapse, which is used to describe the severity of the internal hemorrhoid complaints and plan treatment.

1st degree – no prolapse (only complaint is bleeding)
2nd degree – prolapse with bowel movement, goes back inside on its own
3rd degree – prolapse with bowel movement, has to be pushed in by hand
4th degree – constantly prolapsed, cannot be pushed back inside
Bleeding – Internal hemorrhoids are covered by mucosal lining, similar to the rest of the intestinal tract. The mucosa may become thin as the hemorrhoidal blood vessels enlarge. Bleeding occurs initially as harder stools rub across this tissue. Bleeding may also occur when the hemorrhoids prolapse out of the anal and are irritated. The type of bleeding is usually an outlet pattern with blood seen on the toilet paper with wiping, streaking the surface of the stools, in the toilet water, or even squirting into the water or on the side of the toilet bowl.

Discomfort – Internal hemorrhoids have a bowel type of sensation. The discomfort caused by internal hemorrhoids usually only occurs when the hemorrhoids prolapse. It is usually a dull, mild, aching discomfort. It is sometimes described as a pressure feeling or a false urge for a bowel movement. Internal hemorrhoids rarely cause a sharp or localized pain or tenderness to touch unless they become incarcerated (do not return inside) or thrombosed (clotted). These complications are fairly uncommon.

Mucous discharge and itching – The mucosal lining of the intestine, which covers the internal hemorrhoids, produces mucous. This lines and protects the internal surface of the intestines. Since this is secreted internally within the bowel, it mixes with stool and helps to soften it. This mucous is not usually seen since it becomes part of the stool. If the internal hemorrhoids prolapse out of the anus to the outside, the covering mucosa becomes irritated and produces more mucous. This mucous as well as some stool may lie on the skin around the anus. This often results in significant skin irritation and itching. Thus, it is not the hemorrhoids that itch, but the surrounding skin as a result of the moisture, mucous and stool particles.

External hemorrhoids
Lumps or masses – External hemorrhoids develop underneath the skin of the lower anal canal and surrounding skin. Since they start on the outside, they do not prolapse (as internal hemorrhoids may). As the external hemorrhoids dilate, they stretch out the skin and bulge. They may get larger or smaller, particularly with bowel movements, straining and sitting on the toilet. This bulging may produce discomfort and masses that can be felt.

Bleeding and discomfort – Thrombosis (blood clots) is the main acute problem caused by external hemorrhoids. Clots occur in the dilated blood vessels because blood pools and does not flow smoothly. Thrombosis often occurs after a period of heavy physical straining which increases pressure in the anal area (lifting heavy items, straining hard to pass stool), or travel. The clot develops quickly (over minutes to hours) and causes a constant swelling or lump in the anal area. The swelling is tender to touch. Pain is usually constant and may be severe. Occasionally, the skin covering the clot ruptures, releasing some of the blood. This bleeding is often not related to a bowel movement. When the clot ruptures and blood comes out, the pressure in the external hemorrhoids is released and pain improves. The swelling usually decreases dramatically when this happens.

Mucus discharge and itching External hemorrhoids have a skin type covering. This covering is dry and does not secrete mucus. Moisture and itching in the anal area is not caused by external hemorrhoids.

Prolapse External hemorrhoids belong outside the anus. Prolapse does not occur in the external hemorrhoids.
Are my symptoms really from hemorrhoids?

The first step in treating hemorrhoids is making the correct diagnosis. Many patients come in with anal complaints which are blamed on hemorrhoids. This is a conclusion reached by the patient or his or her referring doctor. Unfortunately, hemorrhoids is often the wrong diagnosis for the cause of the anal complaints. It is best to begin with describing the symptoms (anal pain, anal swelling, rectal bleeding) in the anal area, and allowing your surgeon to identify the cause of these complaints as hemorrhoids or some other condition. Other conditions often confused with hemorrhoids include:

- Anal fissure
- Anal abscess
- Anal warts
- Cancer
- Pelvic floor muscle dysfunction
- Improve bowel habits

How are hemorrhoids treated?

**Improve bowel habits** Bad bowel habits, either diarrhea or constipation, may cause or worsen hemorrhoid complaints. It is very important that this be improved and bowel habits be made more normal (soft, formed stool that passes easily without straining). Fiber supplements such as Metamucil or Citrucel are an excellent first step. The fiber is not digested; it passes through you and absorbs water. This can help add bulk and consistency to loose stool, or help hold moisture in harder stool. It acts as a “regulating agent” to help regulate a normal soft, formed consistency of stool. Increasing fluid intake to have at least 8 - 8 ounce glasses each day makes the fiber more effective. Avoiding having a bowel movement when the urge is present is a habit many people have. The longer the stool is present the harder it becomes. This is a bad habit and should be avoided. Sitting for a long time on the toilet is another common, and bad, habit which should be avoided. For some people, these simple measures may be enough to improve complaints from hemorrhoids.

For more information read about the Bowel Management Program [Link – BMP]

**External hemorrhoid thrombosis** The main complaint caused by external hemorrhoid thrombosis is pain. While this is severe, it usually only lasts a few days. Warm water baths and applying an anesthetic gel on the area may help manage the pain. This may be enough comfort to give the body time to slowly dissolve the clot. If the pain is still too severe, the clot can be removed with a minor procedure, either in the office or in the operating room. This is generally helpful if the blood clot has been present for less than 2-3 days, since pain from the procedure will resolve quicker than pain from the condition. If the clot has been present for more than 3 days, the procedure often makes the pain last longer than letting the body dissolve the clot.

**Internal hemorrhoids** There are many treatment options for internal hemorrhoids. The choice is based on the degree of prolapse, severity of specific complaints, and bowel habits. The procedures differ in where they may be done (office or operating room), effectiveness, ease of recovery, and complications. The different options include:

- Rubber band ligation (RBL) [Link - RBL]
- Infrared coagulation (IRC) [Link - IRC]
What are the risks of treatment?

The main risks associated with the treatment of hemorrhoids are recurrence of the hemorrhoids, bleeding, incontinence (loss of control of bowel movements), and short term difficulty passing urine. Not treating the hemorrhoids is not dangerous, as long as the fissure is not caused by infection or cancer.