#### What are hemorrhoids?

All people have hemorrhoidal tissue as part of their normal anatomy. Only in a minority of people do hemorrhoids become enlarged or symptomatic. Hemorrhoids lie within the anal canal and consist of blood vessels, connective tissue, and a small amount of muscle. Approx. 5% of people develop symptoms attributable to their hemorrhoids but only a small fraction will require surgery.

#### **Internal Hemorrhoids**

Painless rectal bleeding or prolapse of anal tissue is often associated with symptomatic internal hemorrhoids. Prolapse is hemorrhoidal tissue coming from the inside that can often be felt on the outside of the anus when wiping or having a bowel movement. This tissue often goes back inside spontaneously or can be pushed back internally by the patient. The symptoms tend to progress slowly over a long time and are often intermittent. Internal hemorrhoids are classified by their degree of prolapse.

Grade One: No prolapse

Grade Two: Prolapse that goes back in on its own

Grade Three: Prolapse that must be pushed back in by the patient

Grade Four: Prolapse that cannot be pushed back in by the patient (often

very painful)

Bleeding attributed to internal hemorrhoids is usually bright red and can be quite brisk. It may be found on thetissue, dripping into the toilet bowl, or streaked on the stool itself. Not all patients with symptomatic internal hemorrhoids will have bleeding. Instead, prolapse may be the main or only symptom. Prolapsing tissue may result in significant irritation and itching

around the anus. Patients may also complain of mucus discharge, difficulty with cleaning themselves after a bowel movement, or a sense that their stool is "stuck" at the anus.

### **Anal Skin Tags**

Patients often complain of painless, soft tissue felt on the outside of the anus. These can be the residual effect of a previous problem with an external hemorrhoid. Skin tags will occasionally bother patients by interfering with their ability to clean the anus, while others just don't like the way they look. Usually, nothing is done to treat them beyond reassurance. However, surgical removal is occasionally considered.

## **Non-Surgical Treatment of Internal Hemorrhoids**

There are a wide variety of treatment options available for symptomatic hemorrhoids depending upon their grade and the severity of symptoms. Often, adherence to the dietary/lifestyle changes detailed below will relieve your symptoms. However, if you fail to respond to these changes alone, or if your symptoms are severe enough at the outset, there are a number of outpatient and surgical procedures available.

## **Dietary/Lifestyle Changes**

The cornerstone of therapy, regardless of whether surgery is needed or not, is dietary and lifestyle change. The main changes consist of increasing your dietary fiber, taking a fiber supplement, drinking plenty of fluids and exercising. This is all designed to regulate, not necessarily soften, your bowel movements. The goal is to avoid both very hard stools and diarrhea, while achieving a soft, bulky, easily cleaned type of stool.

#### **Outpatient treatments**

The most commonly used office procedures are rubber band ligation and sclerotherapy.

### **Rubber Band Ligation**

Rubber band ligation can be used for Grades 1, 2, and some Grade 3 internal hemorrhoids. At the time your doctor performs an proctoscopy, he or she can place a device through the proctoscope, which can pull up the redundant internal hemorrhoidal tissue and place a rubber band at its base. The band cuts off the hemorrhoid's blood supply and it falls off (with the band) at roughly 5-7 days, at which time you may notice a small amount of bleeding. If you are taking blood thinners you will not be a candidate for this procedure. Your doctor may place anywhere from one to three rubber bands per visit and this may require several short visits to achieve relief of your symptoms, but is not associated with any significant recovery time for most people. Rubber band can be associated with a dull ache or feeling of pressure lasting 1-3 days that is usually well-treated with Ibuprofen. In some cases the pain can be very severe. If your symptoms return, repeat banding certainly can be considered. Hemorrhoidectomy is always an option if significant progress is not made with banding. Complications are uncommon, but may include bleeding, pain and infection.

# **Sclerotherapy**

Sclerotherapy is another treatment for Grades 1 and 2 internal hemorrhoids. It involves the injection of chemical irritants into the hemorrhoids, resulting in scarring and shrinkage by reducing the blood vessels present in the hemorrhoidal tissues. Sclerotherapy is similarly quick, often painless, has few complications, and may take several short sessions to achieve relief of

symptoms. This has the potential to be used in patients taking blood thinning agents.

## **Operative Treatment of Hemorrhoids**

Fewer than 10% of all patients evaluated with symptomatic hemorrhoids will require surgical management. Most patients respond to non-operative treatment and do not require a surgical procedure. Hemorrhoidectomy, or surgical removal of the hemorrhoidal tissue, may be considered if a patient presents with symptomatic large external hemorrhoids, combined internal and external hemorrhoids, and/or grade 3-4 prolapse. Hemorrhoidectomy is highly effective in achieving relief of symptoms and it is uncommon to have any significant recurrence. However, it also causes much more pain and disability than office procedures and has somewhat more complications.

Hemorrhoidectomy may be done using a variety of different techniques and instruments to remove the hemorrhoids and the particular technique is usually chosen based on a particular surgeon's preference. In basic terms, the excess hemorrhoidal tissue is removed and the resultant wound may be closed or left open. Hemorrhoidectomy is performed in an operating room and may be done while you're completely asleep (general anesthesia), under a spinal block (analogous to an epidural injection during childbirth), or with a combination of intravenous relaxing medications and local anesthesia injected around your anus after you're relaxed.

In an attempt to avoid some of the postoperative pain associated with hemorrhoidectomy, a more recently developed option has emerged, called a stapled hemorrhoidopexy (sometimes inaccurately referred to as "stapled hemorrhoidectomy"). The procedure involves a circular stapling device which removes some of the tissue located upstream from the hemorrhoids, thereby pulling the hemorrhoids upward, returning the problematic hemorrhoidal tissue to its normal position, and staples this tissue up into place. Most or all of the staples later fall out over time. Studies comparing stapled hemorrhoidectomy to standard hemorrhoidectomy have found it to be equally safe and associated with a shorter time to full recovery. Long-term recurrence rates are higher than with hemorrhoidectomy, and this operation is not effective for treating large external hemorrhoids. All operative procedures for hemorrhoidal disease carry their own set of risks and benefits and the ultimate choice of procedure must be made between you and your surgeon.