

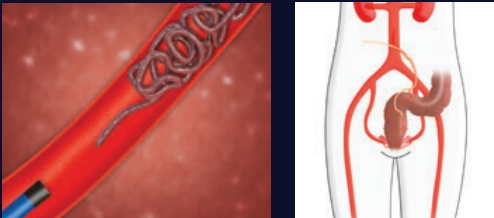
## SUPERIOR RECTAL ARTERY EMBOLIZATION:

# PROCEDURAL DETAILS

An Interventional Radiologist performs this minimally invasive procedure under anesthesia or a 'twilight sleep'.

- 1 A very small catheter is introduced into the artery either in the groin region, or in the forearm.
- 2 Using x-ray for guidance, the catheter is directed into the pelvis toward the arteries providing blood to the hemorrhoids.
- 3 Those arteries are then blocked off with tiny spherical particles as well as coils.

Because only some of the rectal arteries are blocked, the rectum continues to have an adequate blood supply and is not starved of oxygen. The result is reduced blood flow to the hemorrhoids which prevents further bleeding and reduces or eliminates the pain. The whole procedure usually lasts about one hour with a 2-hour recovery. Patients can be moderately active immediately after the procedure and return to full activity after 3 days. In some patients, it may be necessary to repeat the procedure to achieve maximal symptomatic relief.



Hemorrhoidal artery coil embolization is a painless technique. The procedure time is approx. 50 min. After the procedure, patients can return home on the same day.



Urology Associates  
of SENC, P.A.  
WILMINGTON, NC

## FOR MORE INFORMATION



1176 E Cutlar Crossing Dr. Suite C  
Leland, NC 28451  
Tel / Fax: 919-741-4435  
[wilmington@ircenters.com](mailto:wilmington@ircenters.com)



[www.ircenters.com](http://www.ircenters.com)

## OUR TEAM

Our Vascular Interventional Radiologists are National Leaders & Experts in the field of Embolization. The team has led numerous clinical trials, pioneering novel techniques for the treatment of several medical conditions, specifically evaluating Embolization and its application for many novel medical applications. For more information about our expert physicians, please visit our website.



IR CENTERS™  
LEADING MINIMALLY INVASIVE HEALTHCARE

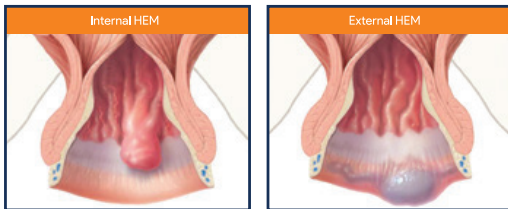
# HEMORRHOIDAL DISEASE



## WHAT ARE

# HEMORRHOIDS?

Hemorrhoids are veins found around the anus that can become abnormally enlarged due to chronic constipation or straining (such as in childbirth or weightlifting). When these veins grow they can cause symptoms such as bleeding, pain, or itchiness and can be associated with a change in bowel habits.



Hemorrhoids can be located internal at the upper part of the anal canal in the rectum or external under the skin around the anus.

## WHAT ARE

# TYPICAL SYMPTOMS CAUSED BY HEMORRHOIDS?

**Bleeding** is the most common presenting symptom as hemorrhoidal tissue has increased blood supply.

- When internal hemorrhoids prolapse through the anal canal the tissue can become traumatized leading to bleeding that is bright red in color

- Internal Hemorrhoids may cause itching around the anus.
- Prolapsing tissue can lead to “fecal soiling” by impeding the ability of the anal verge to seal
- External Hemorrhoids are typically asymptomatic unless they become thrombosed or inflamed
- External thrombosed Hemorrhoids cause a painful perianal swelling



## HOW ARE

# HEMORRHOIDS DIAGNOSED?

### Medical History



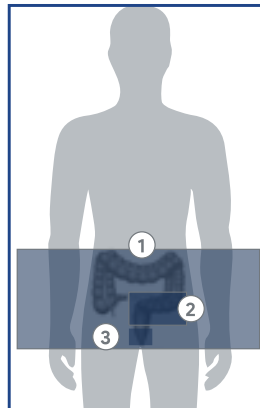
### Physical Examination



A visual inspection of the area around anus area will allow for the description of any external abnormalities.



### Digital rectal examination



#### 1 Colonoscopy

Allows the endoscopic examination of the entire colon.

#### 2 Flexible Sigmoidoscopy

Endoscopic examination of the large intestine from the rectum up to the sigmoid (left side colon).

#### 3 Anoscopy

An anal speculum (anoscope) is used for internal inspection of the lower rectum.

## WHAT ARE

# THE TREATMENT OPTIONS FOR HEMORRHOIDS?

There are several suggested treatments, according to the severity of the symptoms:

### Dietary and lifestyle changes: avoid constipation



### Drug Therapy



### Non-surgical minimally invasive treatments

- Rubber Band Ligation
- Radiofrequency Ablation
- Infrared Photocoagulation
- Sclerosis Injection



### Surgery

#### Minimal invasive surgery

Doppler-guided hemorrhoidal ligation (DGHAL)



» Alternative non-surgical treatment:  
**Embolization of the Superior rectal arteries**

## ADVANTAGES OF

# THE EMBOLIZATION TECHNIQUE

- Leaves hemorrhoidal tissue in place
- No general anesthesia needed
- Preserves anal continence
- Does not involve the creation of rectal wounds
- Good results

