HEMORRHOIDS SUMMARY

HIST | HEMORRHOID INSTITUTE OF SOUTH TEXAS™

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INTRODUCTION

Hemorrhoids … Everyone has them!!! They are a normal part of human anatomy & probably serve to help with fecal continence. They are usually not symptomatic & cause no problems.

Hemorrhoids help prevent leakage of gas or stool from the anus or sphincter. They help ensure complete closure of anal canal by acting as a plug or as a compressible lining. They act very much like valves preventing the flow of gas or stool from the rectum (the organ that stores stool.)

When they become abnormal and symptomatic is when they need to be treated. The exact reason why hemorrhoids become symptomatic is unknown. Common symptoms include bleeding, anal masses, itching, burning, swelling, pain or anal seepage/ soilage. Hemorrhoids are associated with advanced age, diarrhea/ constipation, pregnancy, pelvic tumors, prolonged sitting and increased pressure in the abdomen.

Hemorrhoids do not become cancer. However, they cause symptoms that can be like those caused by colon cancer. The only way to prove that symptoms are from hemorrhoids and not from colon cancer is to be evaluated and possibly tested by a physician experienced in both diseases and other diseases that can mimic hemorrhoids.

INCIDENCE & PREVALENCE

Hemorrhoids are more common most people think. This is why the symptoms can be confusing.

- Close to 50% of people 50 years or older are affected by hemorrhoids
- National Institutes of Health data (Year: 1983 - 1987) reveal the following epidemiologic data:
    - Incidence: 1 million
    - Prevalence: 10.4 million
    - Hospitalizations: 316,000
    - Physician office visits: 3.5 million
    - Prescriptions: 1.5 million
- 4.4 % of the US population is seen by physician for symptomatic hemorrhoids

HEMORRHOID ANATOMY

In general hemorrhoids occur at the lining of the lower rectum and anus. Hemorrhoids occur at two levels relative to the anus. They are either internal, external or a combination of both. The level of the hemorrhoid influences the type of treatment.

External Hemorrhoid Anatomy:

- Occur below the level of nerve endings therefore treatment can be painful.
- Usually accompany internal hemorrhoids.
- They can make skin tags.
- Typically readily found by patients near the anal opening.

Internal Hemorrhoid Anatomy:

- Above the level of nerve endings and therefore usually don't hurt.
- Cause an anal mass only if they prolapse or descend out of the anus.
- Four (4) degrees are defined based on the degree of prolapse.
- Treatment is based on the degree of the hemorrhoid.

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THEORIES OF PATHOGENESIS
Several theories of pathology (why hemorrhoids occur) exist. None have proven to be universally correct. All result in easily traumatized hemorrhoid tissue leading to bleeding, pain, swelling, prolapse or other symptoms.

TREATMENT OF HEMORRHOIDS
There are many treatments for hemorrhoids. This includes over-the-counter or prescription medications, change in dietary and stooling habits and different surgical interventions. The Hemorrhoid Institute™ understands that patients, their symptoms and hemorrhoid disease are different. As a result, treatment plans are individualized for each patient to maximize results and to minimize pain. Common treatments are listed below.

Common Medical Treatments:
- Diet changes & fluids
- Stool softeners & Laxatives
- Warm baths
- Eliminating straining
- Salves or topical agents

Common Surgical Treatments:
- Rubber band ligation
- Doppler guided ligation
- Sclerotherapy / injection
- Infrared photocoagulation (IRC)
- Bipolar diathermy coagulation
- Laser excision (not done any more)
- Cryotherapy (freezing)
- Radiofrequency (Ligasure™)
- Harmonic energy excision
- Stapling (PPH™) or hemorrhoidopexy
- Dilation

SURGICAL MANAGEMENT OF HEMORRHOIDS
Surgery is reserved for patients that fail medical treatment or less invasive procedures. In general, the larger or more severe the hemorrhoids, the more likely surgery is needed. Less traumatic or office procedure have a higher recurrence rate compared to surgical excision or removal of hemorrhoids. However, in office procedures are typically less painful.

The indications for surgery for hemorrhoids are as follows:
- Refractory 2nd degree hemorrhoids (small, bleeding hemorrhoids that won't go away or resist treatment)
- Symptomatic 3rd & 4th degree hemorrhoids (hemorrhoids that drop out of the anus, bleed and hurt)
- Rectal mucosal (anal lining) protrusion out of the anus
- Low grade hemorrhoids w/ other associated disease(s) like a fissure or tear of the anal canal lining
- Failure of conservative or medical treatment
- Patient request

Regardless of how hemorrhoids are managed by surgery, there are certain criteria that must be satisfied. Essential elements of surgical treatment of hemorrhoids include:
- Ligation or interruption of blood flow to the hemorrhoids
- Excision of extra tissue & dilated hemorrhoidal blood vessels
- Remodeling of remaining anal tissue (excision of skin tags)
- Induction of inflammation & fibrosis or scar to hold any remaining hemorrhoid tissue in place

SURGICAL OPTIONS FOR MANAGEMENT OF HEMORRHOIDS

Surgical Excision:

- Can be done by a variety of techniques
- Usually done with a scalpel, scissors or cautery device
- Performed in outpatient operating room or the office (rarely)
- Local, regional or general anesthesia is used
- Moderate to severe discomfort especially in the first several days after surgery
- Best for high-grade or large internal hemorrhoids or external hemorrhoids
- Has a lower recurrence rate than in-office procedures

Ligasure™ Excision:

- A new way to excise or resect large hemorrhoids
- Another version of surgical excision
- Safe and effective alternative to traditional techniques
- May cause less pain after the operation
- Rapid and nearly bloodless
- No differences compared with standard surgery in post-op based on multiple studies

Procedure for Prolapse and Hemorrhoids (PPH™)

- Also called stapled hemorrhoidectomy or hemorrhoidopexy
- The hemorrhoids are lifted back into position
- Requires special training and experience
- Offers less pain & a quicker recovery in comparison to conventional hemorrhoid techniques.
- PPH™ has similar safety parameters and complications compared to excision.
- PPH™ is quicker to perform

Doppler-guided hemorrhoid ligation

- New technique
- Done in the operating room
- Requires anesthesia
- The hemorrhoids are lifted back into position
- Minimal pain compared to excising (or removing) the hemorrhoid in recent studies
- Quick recovery compared to excising the hemorrhoid
- Useful for large, internal hemorrhoids that protrude
- Indicated for severe 2nd degree hemorrhoids and 3rd and 4th degree hemorrhoids

Laser treatment

- Considered for low grade internal hemorrhoids
- Can be an office procedure. No anesthesia is needed in most cases
- A large medical study showed no difference compared with other procedures
- Another large, randomized study showed higher cost & prolonged healing
- American Society of Colon and Rectal Surgeons task force doesn't support its use.
- Not commonly used and abandoned by most experts

OFFICE TREATMENT OR LESS PAINFUL PROCEDURES

Rubber Band Ligation of Hemorrhoids

- Most common office procedure
- Band placed using special instruments. Must be placed high in the anal canal or severe pain will result
- Band draws excess mucosa at the top of hemorrhoid, causes scar & fixation of lining of anal canal to prevent prolapse.

In one study on rubberband ligation there were 240 patients. The patients were followed for 32 months. Results based on grade of hemorrhoids:

- Grade 1 - 100 % success rate
- Grade 2 - 97% success rate
- Grade 3 - 69% success rate
- Grade 4 - 0% success rate

Another study showed there are better results & no difference in complications with multiple bands vs. one band

Complications of rubberband ligation:

- Delayed hemorrhage: 1% at 1 - 2 weeks
- Thrombosis of external hemorrhoids: 3%
- Rectal tenesmus or spasm: 11%
- Mild anal pain 7.4% (esp. with multiple bands)
- Dysuria: 4.3%
- Transient anal bleeding: 3.7%, usually 5-7days
- Rectal sepsis or major infection: Rare

Infrared Coagulation

- Can be an office procedure
- Regaining popularity
- No anesthesia is needed in most cases
- Infrared radiation coagulates or burns tissue protein
- Destruction of the hemorrhoids depends on intensity & duration of treatment
- Decreases hemorrhoidal blood flow by coagulating the blood vessels feeding the hemorrhoids
- Does not treat excess redundant tissue
- Requires more treatments than rubberband ligation
- Less painful than rubberband ligation

Bipolar diathermy

- Electrical energy is used to coagulate the hemorrhoidal tissue and the feeding blood vessel.
- Useful for small, internal hemorrhoids
- Performed above the level of the nerves
- Less painful than most techniques
- Can be performed in the doctor's office
- May require multiple treatments

CLOSING

Management of hemorrhoids can be difficult. There are many alternatives that can be used some of which result in little pain. Symptoms of other diseases can mimic hemorrhoids. Patients should consider consultation with a physician experienced in treating all of these diseases.

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