Internal Hemorrhoids: Causes, Symptoms, Diagnosis, and Treatment

Overview of Internal Hemorrhoids

Internal hemorrhoids are swollen veins that form within the rectum, just inside the anal canal. They are one of the most common types of hemorrhoids and differ from external hemorrhoids, which develop outside the anal canal. Internal hemorrhoids often go unnoticed because they are located above the dentate line, an area without pain receptors, making them generally painless. However, they can cause symptoms like bleeding, prolapse (protrusion outside the anus), and discomfort if they become enlarged or irritated.

Causes and Risk Factors for Internal Hemorrhoids

The exact cause of hemorrhoids is unclear, but they are generally thought to result from increased pressure in the rectal and anal veins, causing them to swell and enlarge. Contributing factors include:

- Chronic Constipation or Diarrhea: Straining during bowel movements places additional pressure on rectal veins, increasing the risk of hemorrhoid formation.
- **Prolonged Sitting or Standing:** Remaining in the same position for long periods, particularly sitting, can impede blood flow and lead to hemorrhoidal swelling.
- **Pregnancy:** Increased abdominal pressure and hormonal changes during pregnancy often lead to hemorrhoids.
- **Obesity:** Excess body weight, particularly abdominal weight, puts pressure on the pelvic and rectal veins.
- **Low-Fiber Diet:** Diets low in fiber can lead to constipation, increasing the likelihood of straining and the risk of developing hemorrhoids.
- **Aging:** As people age, the tissues supporting veins in the rectum may weaken, making hemorrhoids more common among older adults.
- Heavy Lifting: Frequent lifting of heavy objects can increase intra-abdominal pressure, contributing to the formation of hemorrhoids.

Symptoms of Internal Hemorrhoids

Internal hemorrhoids often remain asymptomatic but can cause several symptoms if they become enlarged or irritated:

Rectal Bleeding: Bright red blood on toilet paper or in the toilet bowl after a bowel
movement is a common sign. Bleeding is usually painless and may appear on the stool's
surface.

- Prolapse: In more advanced cases, internal hemorrhoids can protrude outside the anus, especially during bowel movements. Prolapsed hemorrhoids may retract on their own or require manual pushing.
- **Mucous Discharge:** Some individuals may notice mucus discharge, which can cause irritation around the anus.
- **Itching or Irritation:** Prolapsed hemorrhoids can irritate the surrounding skin, leading to itching or discomfort.
- Feeling of Incomplete Evacuation: Larger internal hemorrhoids may give a sensation of fullness or the feeling that the bowel movement was incomplete.

Grading of Internal Hemorrhoids

Internal hemorrhoids are graded based on the degree of prolapse:

- 1. **Grade I:** No prolapse; hemorrhoids remain within the rectum and are often asymptomatic.
- 2. **Grade II:** Prolapse during bowel movements but spontaneously retracts afterward.
- 3. **Grade III:** Prolapse occurs and can be manually pushed back into place.
- 4. **Grade IV:** Permanent prolapse that cannot be pushed back and may lead to complications such as strangulation or thrombosis.

Diagnosis of Internal Hemorrhoids

Diagnosis of internal hemorrhoids typically involves a review of medical history, physical examination, and occasionally diagnostic procedures:

- **Digital Rectal Examination:** The doctor may perform a digital exam to feel for abnormalities within the rectum.
- **Anoscopy:** This procedure involves inserting a small, lighted tube called an anoscope into the rectum, allowing direct visualization of internal hemorrhoids.
- Sigmoidoscopy or Colonoscopy: In cases with significant bleeding or suspicion of other conditions (e.g., colorectal cancer or inflammatory bowel disease), these more comprehensive scopes may be recommended to examine the entire colon and rule out other causes.

Treatment of Internal Hemorrhoids

Treatment for internal hemorrhoids depends on the severity of symptoms and the hemorrhoid grade. Mild cases often respond well to lifestyle changes and conservative therapies, while advanced cases may require medical procedures.

1. Lifestyle Modifications and Home Remedies

For mild internal hemorrhoids, lifestyle changes can help reduce symptoms and prevent worsening:

- **High-Fiber Diet:** Eating more fiber-rich foods (e.g., fruits, vegetables, whole grains) and drinking plenty of water can soften stools and reduce straining.
- **Preventing Constipation:** Over-the-counter stool softeners can make stools easier to pass, reducing irritation. Miralax, a powder taken once a day, is quite effective.
- Warm Sitz Baths: Soaking the anal area in warm water for 10-15 minutes several times a day can help relieve discomfort and reduce swelling.
- Avoiding Straining: Avoid excessive pushing during bowel movements, as this can aggravate hemorrhoids.
- **Hydration:** Drinking at least 6-8 glasses of water a day helps keep water in the colon

2. Medications and Topical Treatments

For symptom relief, several over-the-counter and prescription medications can help reduce pain, swelling, and irritation:

- **Topical Creams and Ointments:** Hydrocortisone creams and suppositories can relieve inflammation and itching. Witch hazel pads may help reduce irritation.
- **Oral Pain Relievers:** Non-prescription pain medications, such as acetaminophen or ibuprofen, may relieve hemorrhoid pain.

3. Minimally Invasive Procedures

For persistent or symptomatic internal hemorrhoids (Grades II and III), minimally invasive treatments may be recommended to shrink or remove hemorrhoids:

- Rubber Band Ligation: In this procedure, a rubber band is placed around the base of the hemorrhoid, cutting off its blood supply. The hemorrhoid will shrink and fall off within a few days. This is often effective for Grade II and III hemorrhoids.
- **Sclerotherapy:** A chemical solution is injected into the hemorrhoid, causing it to shrink and harden. Sclerotherapy is generally used for more minor hemorrhoids and may require several treatments.
- Infrared Coagulation (IRC): This method uses infrared light to heat and coagulate the blood vessels within the hemorrhoid, causing it to shrink. IRC is minimally invasive and suitable for small to moderate hemorrhoids.
- **Electrocoagulation:** An electric current is applied to the hemorrhoid, causing it to shrink. This procedure is generally adequate for smaller internal hemorrhoids.

4. Surgical Treatment: Hemorrhoidectomy

In severe cases (Grade IV or recurrent Grade III), surgery may be necessary. Hemorrhoidectomy, the surgical removal of hemorrhoids, is the most effective treatment for

severe internal hemorrhoids. Surgery is performed under anesthesia and is generally recommended for patients who do not respond to other treatments or who have large, prolapsed, or thrombosed hemorrhoids.

- Traditional Hemorrhoidectomy: The hemorrhoid tissue is surgically removed. While highly effective, recovery can be painful, and patients may experience postoperative discomfort.
- **Stapled Hemorrhoidopexy:** In this procedure, a circular stapler repositions prolapsed hemorrhoidal tissue and reduces blood flow, leading to shrinkage. It generally causes less pain and has a shorter recovery time than traditional hemorrhoidectomy, though it may have a higher recurrence rate.

Prevention of Internal Hemorrhoids

Preventive measures can help reduce the risk of developing internal hemorrhoids or prevent symptoms from worsening:

- **Increase Dietary Fiber Intake:** A high-fiber diet promotes regular, soft stools, reducing the need for straining.
- Stay Hydrated: Drinking at least 6-8 glasses of water daily
- **Exercise Regularly:** Physical activity helps maintain healthy bowel function and reduces constipation.
- **Limit Time on the Toilet:** Spending prolonged periods on the toilet can put extra pressure on rectal veins.
- Avoid Heavy Lifting: Repeated heavy lifting increases intra-abdominal pressure, contributing to hemorrhoid development.

Conclusion

Internal hemorrhoids are a common condition that can cause bleeding, prolapse, and discomfort. For mild cases, lifestyle changes, dietary adjustments, and home remedies are often sufficient for symptom relief. More advanced hemorrhoids may require medical procedures or, in severe cases, surgical removal. Preventive measures, including a high-fiber diet, regular exercise, and avoiding straining, can help minimize the risk of internal hemorrhoids and maintain overall digestive health. With appropriate treatment and lifestyle modifications, most people can effectively manage and reduce the impact of internal hemorrhoids.