

Lifestyle Modifications and Dietary Factors versus Surgery in Benign Anorectal Conditions; Hemorrhoids, Fissures, and Fistulas

Benign anorectal diseases are a spectrum of conditions that involve the anus and rectum. Hemorrhoids, anal fissures, and fistulas are three of the most prevalent benign anorectal disorders that can have a detrimental impact on a patient's quality of life.¹ A poor lifestyle, such as improper toilet training during childhood, a poor diet (low fluids intake), and bad toilet habits including prolonged sitting and straining during defecation, are the main causes of these disorders.

The management of these risk factors, including obesity, constipation, and smoking might have preventive effects.²⁻⁴ The literature suggested that various lifestyle and nutritional modifications could help prevent or relieve symptoms, minimize complications, and enhance anorectal functions in patients with anorectal disorders. This paper provides a brief overview of possible strategies for potentially preventing or alleviating symptoms.

Hemorrhoids are abnormal displacement and hypertrophy of the anal cushions. The most common indicator of hemorrhoids is rectal hemorrhage related to defecation.⁵ Anal fissures are linear ulcers that extend from the pectinate line to the anal margin, disturbing the anoderm and covering the lower half of the internal anal sphincter. Fissures that manifest with severe pain during bowel movements are typically caused by severe constipation.⁶ The typical symptom of an anal fistula is discharge from a perianal orifice, which is most prevalent in young men. Inadequate treatment can lead to fecal incontinence and, thus, compromise the quality of life.⁷

High-fiber diets that are rich in fruits, vegetables, legumes, and whole grains, as well as adequate water, might increase the frequency of bowel movement and soften stool consistency. This, in turn, can reduce straining during defecation, and also reduce pressure on anal tissues, thus, decreasing the risk of hemorrhoids, anal fissures, and fistulas, as well as mitigating their symptoms and complications.⁸ To prevent and stop the progression of hemorrhoids, adhering to the "TONE" strategy (T: Three minutes at defecation; O: Once-daily defecation; N: No excessive straining during passing motions or compulsive defecation; E: Enough fiber) is recommended.⁹ Fiber supplementation also has been proven to reduce the incidence of bleeding and persisting symptoms in hemorrhoid patients by around 50%.¹⁰ Therefore, it is recommended by the American Society of Colon and Rectal Surgeons (ASCRS) practice guidelines. Furthermore, individuals who are at higher risk for the aforementioned benign anorectal disorders or who are already suffering from such conditions may benefit from regular physical activity, good sleep hygiene, smoking cessation, and stress management strategies.^{11, 12}

The warm sitz bath is frequently recommended as a non-surgical treatment option for anorectal disorders, since it increases blood flow through the anal tissues and relieves discomfort in this region. However, there is no strong evidence that it reduces pain or accelerates fissures or wound healing.¹³

Other dietary components might also be advantageous for treating anorectal diseases. Flavonoids were suggested to recover hemorrhoids by reducing the risk of bleeding, pain, itching, and recurrence of symptoms.¹⁴ Flavonoids also alleviated pain and bleeding in patients with anal fissures.¹⁴


Surgical procedures mainly disrupt normal anatomic structures, such as the removal of the hemorrhoidal cushion, which is responsible for differentiating the passing material as gas or solid; when it is removed completely, it causes some incontinence. Therefore, the patients should go to the bathroom for every gas passing. The other causes of sphincter damage are the surgical management of a fistula or fissure. Thus, a well-trained surgeon should do this surgical management in special and necessary cases.

In this paper, we highlighted the available evidence on lifestyle modifications and dietary factors that might be associated with the prevention, improvement, or exacerbation of hemorrhoids, anal fissures,

and anal fistulae. Many patients seek modifiable strategies to prevent or relieve symptoms, however, the available data are limited and of mixed quality. Eventually, in cases of non-response to conservative treatment, clinicians consider surgical intervention.

Keywords • Hemorrhoids • Rectal fistula • Life style • Constipation

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Seyed Vahid Hosseini, MD 

Colorectal Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

Email: hoseiniv@sums.ac.ir

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