

# AMERICAN GASTROENTEROLOGICAL ASSOCIATION

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## American Gastroenterological Association Medical Position Statement: Diagnosis and Care of Patients With Anal Fissure

*This document presents the official recommendations of the American Gastroenterological Association (AGA) on Anal Fissures. It was approved by the Clinical Practice Committee on May 19, 2002 and by the AGA Governing Board on July 27, 2002.*

**A**nal fissure is a common condition, and the main symptoms include anal pain and bleeding. The often severe pain typically occurs during and after defecation; chronic fissure patients can have pain lasting many hours after bowel movements. Bleeding from anal fissures tends to be bright red and scanty. Fissure patients usually offer a standard history, and the diagnosis should be suspected based on history alone.

### Diagnosis

The diagnosis of fissure is confirmed on physical examination. A fissure is a split in the squamous epithelium at or just inside the anal verge. Given this location, fissures are best seen by effacing the anal canal with opposing traction on the buttocks. Associated physical findings include a sentinel skin tag just distal to the fissure and a hypertrophied anal papilla at its proximal margin. Fissures cannot be visualized with end-viewing endoscopes. In the setting of marked pain or tenderness, instrumentation of the anal canal is inappropriate; it is traumatic to the patient and only rarely yields diagnostic information. When significant anal pain cannot be diagnosed comfortably, examination under anesthesia is warranted.

The great majority of anal fissures occur in the midline, usually posteriorly. If they occur off the midline, fissures mandate evaluation for an underlying diagnosis, such as Crohn's disease, HIV/AIDS and associated secondary infections, ulcerative colitis, tuberculosis, syphilis, leukemia, or cancer. Signs of chronicity include the sentinel tag, hypertrophied papilla, fibrosis, and visualization of bare internal sphincter muscle at the fissure base.

### Treatment Options

About half of all fissures heal with conservative care, which consists of fiber supplementation, adequate fluid intake, sitz baths, and topical analgesics. Acute fissures are more likely to heal than chronic ones. In most cases, an initial trial of conservative care alone is appro-

priate, particularly for acute fissures. The timing and choice of additional treatment depend on the chronicity of the fissure, the severity of its symptoms, and the rate and completeness of its response to conservative care. The following 3 options are acceptable:

#### 1. Surgery

Most surgeons now favor lateral internal sphincterotomy (LIS) as the procedure of choice for anal fissures that do not resolve with conservative care or that are simply too painful for conservative care. In a minority of patients, LIS is associated with minor, but sometimes permanent, defects in continence. Despite this drawback, the operation can be recommended for its technical simplicity, minimal morbidity, and ability to rapidly ameliorate symptoms, high cure rates, and low relapse rates.

#### 2. Topical Therapy

Topical therapy is directed at reversibly decreasing resting anal pressure, with a goal of allowing fissure healing without permanent sphincter damage. Several preparations have been tested, especially nitroglycerin ointment (glyceryl trinitrate [GTN]). Early enthusiastic trials (healing rates of 70%–80%) have been tempered by more recent studies showing lower (25%–50%) healing rates. Side effects, particularly headache, have been reported in a variable number of patients, but they only infrequently require cessation of therapy. Topical calcium channel blockers appear to be as effective as topical GTN, but have fewer associated side effects. Long-term failure rates with topical therapy may be significant and require further study. Presently, neither appropriate diluted GTN nor topical calcium channel blocker preparations are commercially available in the United States.

#### 3. Botulin Toxin

A relatively small number of studies have shown high cure (75%–95%) and low morbidity rates with

locally injected botulin toxin (BT). The optimal location of injection (internal vs. external sphincter) remains controversial. Long-term studies of relapse rates and careful evaluation of BTs effect on continence, particularly in comparison to sphincterotomy, are needed.

### Choice of Treatment

There is no proven optimal treatment for anal fissure; each of the 3 options discussed has its own unique merits and disadvantages. Standard conservative care is risk-free, but has a relatively low success rate and takes a long time. In contrast, LIS carries a risk of permanent minor sphincter impairment, but works rapidly and effectively. Until recently, the algorithm for fissure treatment was simple: choose standard conservative care for patients with acute fissures, tolerable levels of pain, or compromised sphincter function; choose LIS if pain levels mandate immediate action or if conservative care fails.

Topical therapy and BT injection both represent efforts to achieve prompt but temporary sphincter relaxation, combining the safety of nonoperative treatment with the high cure rate and rapid effect of LIS. Promising results have been published, but a number of uncertainties remain. For topical therapy: Why the broad range of

reported success rates, and what type of success can the practicing clinician expect? What is the best topical agent? What are the long-term relapse rates? For BT: Where exactly should it be injected? Will careful questioning of treated patients uncover subtle alterations in continence similar to those detected after LIS? Will there be relapses over the long term? Most importantly, will the striking results of BT injection hold up, as more centers report on larger series of patients?

Presently, topical therapy and BT injection should be considered acceptable options, even if not entirely proven, for the treatment of anal fissure. Their low morbidity profiles allow them to be used as first-line treatment, not merely as salvage treatment for failed conservative care. However, further experience will be necessary to determine their definitive role in the algorithm of fissure therapy.

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