Practice Guidelines

Management of Anal Fissures: Guidelines From the American Society of Colon and Rectal Surgeons

Key Points for Practice

- Conservative therapy with bulking supplements and sitz baths leads to resolution of acute anal fissures in approximately one-half of patients.
- Although topical calcium channel blockers and nitroglycerin lead to resolution of approximately one-half of chronic anal fissures, topical calcium channel blockers have fewer adverse effects, such as headache.
- Botulinum toxin injections are as effective as topical therapies but can lead to transient fecal incontinence in 5% of treated patients.

From the *AFP* Editors

Anal fissures are linear tears that often extend from the dentate line toward the anal verge and are most often caused by trauma from constipation or diarrhea. Fissures present with tearing anal pain that is triggered by defecation and can last for hours. Bright red blood on toilet tissue may be present. Fissures occur in the anterior midline in 73% of cases, whereas lateral or multiple fissures are atypical and may suggest Crohn disease, HIV infection, hematologic malignancies, syphilis, or tuberculosis. The American Society of Colon and Rectal Surgeons has released guidelines for the treatment of anal fissures.

Conservative Treatment

First-line treatment for anal fissures is conservative, including sitz baths and bulking agents, such as psyllium fiber. These options resolve symptoms in nearly one-half of patients with acute anal fissures that have been present for less than six weeks. Healing rates are higher early in the symptom course and decrease over time.

Medical Therapy

Topical nitroglycerin is effective for anal fissures and leads to healing in approximately one-half of patients with chronic anal fissures. Headache affects at least 30% of patients who use topical nitroglycerin, and it causes up to 1 in 5 patients to stop therapy. Lower concentrations of topical nitroglycerin can lead to fewer severe headaches and have similar healing rates. Topical calcium channel blockers appear to be as effective as nitroglycerin and have lower risks of adverse effects.

G-TRUST GUIDELINE SCORECARD

Score	Criteria
Yes	Focus on patient-oriented outcomes
Yes	Clear and actionable recommendations
Yes	Relevant patient populations and conditions
Yes	Based on systematic review
Yes	Evidence graded by quality
No	Separate evidence review or analyst in guideline team
Yes	Chair and majority free of conflicts of interest
No	Development group includes most relevant specialties, patients, and payers (only surgeons, no primary care, payers, or patients)
	Overall—useful

Note: See related editorial, Where Clinical Practice Guidelines Go Wrong, at https://www.aafp.org/afp/gtrust.html.

G-TRUST = guideline trustworthiness, relevance, and utility scoring tool.

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This series is coordinated by Michael J. Arnold, MD, assistant medical editor.

A collection of Practice Guidelines published in *AFP* is available at https://www.aafp.org/afp/practguide.

CME This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 111.

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Oral calcium channel blockers have more adverse effects and may be less effective.

Botulinum toxin injections have similar effectiveness as topical therapies, although they can cause transient fecal incontinence in 5% of cases. Lower doses of botulinum toxin have similar effectiveness as higher doses and less fecal incontinence. Combining topical nitrates and botulinum toxin appears to increase healing, and using botulinum toxin injections after unsuccessful treatment with topical nitroglycerin may improve symptoms and help avoid surgical treatment.

Surgery

Lateral internal sphincterotomy is more effective than medical therapy, with healing rates of at least 88% for up to six years. Fecal incontinence can affect up to 30% of patients after surgery. Sphincterotomy should be avoided in patients with inflammatory bowel disease, previous anorectal surgeries, or a sphincter injury (e.g., from obstetric delivery). Limiting the surgery to the apex of the fissure appears to have similar effectiveness as conventional sphincterotomy with less fecal incontinence. For patients at high risk of incontinence, an anocutaneous flap is an alternative surgical approach and can be added to sphincterotomy or botulinum toxin injection.

The views expressed are those of the author and do not necessarily reflect the official policy or position of the Naval Undersea Medical Institute, Uniformed Services University of the Health Sciences, U.S. Navy, U.S. Department of Defense, or U.S. government.

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