# **Complete Summary**

#### **GUIDELINE TITLE**

Practice parameters for the management of anal fissures (revised).

## **BIBLIOGRAPHIC SOURCE(S)**

Orsay C, Rakinic J, Perry WB, Hyman N, Buie D, Cataldo P, Newstead G, Dunn G, Rafferty J, Ellis CN, Shellito P, Gregorcyk S, Ternent C, Kilkenny J 3rd, Tjandra J, Ko C, Whiteford M, Nelson R. Practice parameters for the management of anal fissures (revised). Dis Colon Rectum 2004 Dec;47(12):2003-7. [50 references] PubMed

#### **GUIDELINE STATUS**

This is the current release of the guideline.

This guideline updates a previous version: American Society of Colon and Rectal Surgeons. Practice parameters for the management of anal fissure. Arlington Heights (IL): American Society of Colon and Rectal Surgeons; 1998-1999. 4 p.

## **COMPLETE SUMMARY CONTENT**

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IDENTIFYING INFORMATION AND AVAILABILITY

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# **SCOPE**

## DISEASE/CONDITION(S)

Chronic anal fissures

## **GUIDELINE CATEGORY**

Management Treatment

## **CLINICAL SPECIALTY**

Colon and Rectal Surgery Family Practice Internal Medicine

## **INTENDED USERS**

Advanced Practice Nurses Health Plans Managed Care Organizations Patients Physician Assistants Physicians

## **GUIDELINE OBJECTIVE(S)**

- To provide information about the management of chronic anal fissures to all practitioners, health care workers, and patients based on the best available evidence
- To outline principles that should provide a rational basis for objective evaluations of patients by physicians and third-party payors

## **TARGET POPULATION**

Patients with chronic anal fissures

## INTERVENTIONS AND PRACTICES CONSIDERED

## **Conservative Therapy**

- 1. Increased fiber and fluid ingestion
- 2. Sitz baths
- 3. Stool softeners (docusate sodium or docusate calcium)
- 4. Topical anesthetics

# **Pharmaceutical Therapy**

- 1. Topical nitroglycerin (nitric oxide)
- 2. Topical calcium channel blockers
- 3. Oral calcium channel blockers (not recommended)
- 4. Botulinum toxin injections

## **Surgical Techniques**

- 1. Lateral internal sphincterotomy (LIS) (recommended surgical management)
- 2. Anal advancement flap (alternative to LIS)
- 3. Fissurectomy (not recommended)
- 4. Anal dilation (not recommended)
- 5. Posterior midline sphincterotomy (not recommended)

## **MAJOR OUTCOMES CONSIDERED**

- Rates of fissure recurrence
- Healing rates
- Incontinence rates
- Relief of symptoms from chronic anal fissures, such as bleeding and pain
- Safety and incidence of adverse effects of treatment

## **METHODOLOGY**

## METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

## DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The literature search was performed by searching Medline for "anal fissure" and "fissure" from 1980 to 2003. Evidence collected included data from published articles including controlled trials in refereed journals, textbooks, collective experience in practice, and opinions of the Standards Committee.

#### **Exclusion**

Articles that did not specify chronicity of the fissure were not included in the evaluation.

## NUMBER OF SOURCE DOCUMENTS

Not stated

# METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

## RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

## **Levels of Evidence (Class)**

- I. Meta-analysis of multiple well-designed, controlled studies; randomized trials with low false-positive and low false-negative errors (high power)
- II. At least one well-designed experimental study; randomized trials with high false-positive or high false-negative errors or both (low power)
- III. Well-designed, quasi-experimental studies, such as nonrandomized, controlled, single-group, preoperative-postoperative comparison, cohort, time, or matched case-control series
- IV. Well-designed, nonexperimental studies, such as comparative and correlational descriptive and case studies

## V. Case reports and clinical examples

## METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses Systematic Review

#### **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Not stated

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

**Expert Consensus** 

# DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

## **Grades of Recommendations**

- A. Evidence of Type I or consistent findings from multiple studies of Type II, III, or IV
- B. Evidence of Type II, III, or IV and generally consistent findings
- C. Evidence of Type II, III, or IV but inconsistent findings
- D. Little or no systematic empirical evidence

#### **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

## **METHOD OF GUIDELINE VALIDATION**

Internal Peer Review

## **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

The guideline was reviewed by the Standards Task Force and the Executive Council of the American Society of Colon and Rectal Surgeons.

## **RECOMMENDATIONS**

## **MAJOR RECOMMENDATIONS**

The levels of evidence (classes I-V) and the grades of recommendations (A-D) are defined at the end of the "Major Recommendations" field.

## **Treatment Recommendations**

- 1. Conservative therapy is safe, has few side effects, and should usually be the first step in therapy. **Level of evidence: Class II; Grade of recommendation: B**.
- Anal fissures may be appropriately treated with topical nitrates because they
  can relieve pain; however, nitrates are only marginally associated with a
  healing rate superior to placebo. Level of evidence: Class I; Grade of
  recommendation: A.
- Anal fissures may be appropriately treated with topical calcium channel blockers, which seem to have a lower incidence of adverse effects than nitrates. There is insufficient data to conclude whether they are superior to placebo in healing fissures. Level of evidence: Class I; Grade of recommendation: A.
- 4. Botulinum toxin injections may be used for anal fissures that fail to respond to conservative measures and have been associated with a healing rate superior to placebo. There is inadequate consensus on dosage, precise site of administration, number of injections, or efficacy. **Level of evidence: Class II; Grade of recommendation: B.**
- 5. Lateral internal sphincterotomy (LIS) is the surgical treatment of choice for refractory anal fissures. **Level of evidence: Class I; Grade of recommendation: A**.
- 6. Open and closed techniques for LIS seem to yield similar results. **Level of evidence: Class I; Grade of recommendation: A**.
- 7. Anal advancement flap is an alternative to LIS; further study is required. **Level of evidence: Class II; Grade of recommendation: D**.
- 8. Surgery may be appropriately offered without a trial of pharmacologic treatment after failure of conservative therapy; patient should be informed about the potential complications of surgery. **Level of evidence: Class I; Grade of recommendation: A.**

## **Definitions**:

## **Levels of Evidence (Class)**

- I. Meta-analysis of multiple well-designed, controlled studies; randomized trials with low false-positive and low false-negative errors (high power)
- II. At least one well-designed experimental study; randomized trials with high false-positive or high false-negative errors or both (low power)
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- IV. Well-designed, nonexperimental studies, such as comparative and correlational descriptive and case studies
- V. Case reports and clinical examples

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- D. Little or no systematic empirical evidence

## **CLINICAL ALGORITHM(S)**

None provided

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

## TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations" field).

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### **POTENTIAL BENEFITS**

Appropriate and effective treatment and management of chronic anal fissures

## **POTENTIAL HARMS**

Topical treatments have problems with compliance, a lower rate of healing, and a higher recurrence rate than surgical treatment.

## **Treatment Specific Side Effects**

- Topical nitroglycerin: headache
- Topical calcium channel blockers: headache, flushing, and less commonly symptomatic hypotension
- Botulinum toxin: transient incontinence of flatus and stool
- Lateral internal sphincterotomy (LIS): fecal incontinence
- Surgery: risk of minor fecal incontinence

## **QUALIFYING STATEMENTS**

# **QUALIFYING STATEMENTS**

• These guidelines are inclusive, and not prescriptive. Their purpose is to provide information on which decisions can be made, rather than dictate a specific form of treatment. It should be recognized that these guidelines should not be deemed inclusive of all proper methods of care or exclusive of methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific procedure must be made by the physician in light of all of the circumstances presented by the individual patient.

• The practice parameters have been developed from sources believed to be reliable. The American Society of Colon and Rectal Surgeons makes no warranty, guaranty, or representation whatsoever as to the absolute validity or sufficiency of any parameter, and the Society assumes no responsibility for the use or misuse of the material.

## **IMPLEMENTATION OF THE GUIDELINE**

## **DESCRIPTION OF IMPLEMENTATION STRATEGY**

An implementation strategy was not provided.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

#### **IOM CARE NEED**

Living with Illness

#### **IOM DOMAIN**

Effectiveness

## **IDENTIFYING INFORMATION AND AVAILABILITY**

## **BIBLIOGRAPHIC SOURCE(S)**

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## **ADAPTATION**

Not applicable: Guideline was not adapted from another source.

## **DATE RELEASED**

1992 (revised 2004 Dec)

# **GUIDELINE DEVELOPER(S)**

American Society of Colon and Rectal Surgeons - Medical Specialty Society

## **SOURCE(S) OF FUNDING**

Not stated

## **GUIDELINE COMMITTEE**

Standards Task Force of the American Society of Colon and Rectal Surgeons

#### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Task Force Members: Charles Orsay, MD; Jan Rakinic, MD; W. Brian Perry, MD; Neil Hyman, MD; Donald Buie, MD; Peter Cataldo, MD; Graham Newstead, MD; Gary Dunn, MD; Janice Rafferty, MD; C. Neal Ellis, MD; Paul Shellito, MD; Sharon Gregorcyk, MD; Charles Ternent, MD; John Kilkenny III, MD; Joe Tjandra, MD; Clifford Ko, MD; Mark Whiteford, MD; Richard Nelson, MD

## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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#### **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the American Society of Colon and Rectal Surgeons Web site.

Print copies: Available from the American Society of Colon and Rectal Surgeons 85 W. Algonquin Rd., Suite 550, Arlington Heights, IL 60005

## **AVAILABILITY OF COMPANION DOCUMENTS**

None available

#### **PATIENT RESOURCES**

None available

## **NGC STATUS**

This summary was completed by ECRI on February 15, 2000. The information was verified by the guideline developer as November 7, 2000. This NGC summary was updated by ECRI on March 3, 2005.

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