



## Complete Summary

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### GUIDELINE TITLE

Achalasia.

### BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract. Achalasia. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 1996-2000. 4 p. [6 references]

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Achalasia

### GUIDELINE CATEGORY

Diagnosis  
Risk Assessment  
Treatment

### CLINICAL SPECIALTY

Gastroenterology  
Surgery

### INTENDED USERS

Physicians

### GUIDELINE OBJECTIVE(S)

To guide primary care physicians to the appropriate utilization of surgical procedures on the alimentary tract or related organs.

#### TARGET POPULATION

Patients with symptomatic achalasia.

#### INTERVENTIONS AND PRACTICES CONSIDERED

Treatment of achalasia:

1. Medication, such as calcium channel blockers or nitrate based compounds
2. Balloon dilatation of the esophagus
3. Esophageal myotomy, with or without a partial fundoplication, using an open (laparotomy or thoracotomy) or minimally invasive (laparoscopic or thoracoscopic) approach
4. Endoscopic injection of botulinum toxin into the distal esophageal wall

#### MAJOR OUTCOMES CONSIDERED

- Symptom relief
- Symptom recurrence, gastroesophageal reflux following interventions
- Mortality rates associated with esophageal myotomy

## METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

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

Not stated

#### NUMBER OF SOURCE DOCUMENTS

Not stated

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

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

#### METHODS USED TO ANALYZE THE EVIDENCE

Review

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

Not applicable

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

#### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The Society for Surgery of the Alimentary Tract (SSAT) guidelines are based on statements and recommendations that were overwhelmingly supported by clinical evidence. Each represents a consensus of opinion and is considered a reasonable plan for a specific clinical condition.

(See companion document Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.)

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

Not applicable

#### 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 guidelines were reviewed by several committee members and then by the entire committee on several occasions. Each guideline was then sent back to the original author for final comment and reviewed again by the committee. Each guideline was approved by the Board of Trustees of the Society for Surgery of the Alimentary Tract and final comments were reviewed by the committee.

(See companion document Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.)

## RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

Please note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary. The recommendations that follow are based on the previous version of the guideline.

## Treatment

Treatment is directed at lowering the resistance to flow through the lower esophageal sphincter (LES), either by medication, balloon dilatation, or surgery. Calcium channel blockers or nitrate-based compounds are ineffective in the majority of patients, but may occasionally relieve spastic chest pain. Recent experience with endoscopic injection of botulinum toxin into the distal esophageal wall suggests that symptoms of dysphagia can be relieved in nearly two-thirds of patients, particularly the elderly. However, the effect is temporary, lasting from 3-9 months, and the use of botulinum toxin may render subsequent myotomy more technically difficult and less efficacious.

Balloon dilatation of the esophagus is effective in more than two-thirds of patients, but usually requires multiple sessions and may result in esophageal perforation in 40% of cases. In addition, when dysphagia is alleviated, more than 50% of patients develop gastroesophageal reflux. As with botulinum toxin injection, the effects of balloon dilation may also be temporary, with recurrence of symptoms within 2-5 years.

Esophageal myotomy should be considered in patients at good risk. The procedure is performed using an open (laparotomy or thoracotomy) or minimally invasive (laparoscopic or thoracoscopic) approach. A 5-6 cm myotomy that crosses the cardioesophageal junction and divides the muscularis of the lower esophagus and upper stomach is effective in relieving dysphagia in 95% of patients. If the procedure is carried out through the abdomen, a partial fundoplication can be added to prevent reflux and subsequently recurrent dysphagia and strictures. Thus, the ability to swallow can be restored while avoiding the problems associated with reflux.

## Qualifications for Performing Operation for Achalasia

At a minimum, surgeons who are certified or eligible for certification by the American Board of Surgery, the Royal College of Physicians and Surgeons of Canada, or their equivalent should perform operations for achalasia. The qualifications of a surgeon performing any operative procedure should be based on training (education), experience, and outcomes. If a laparoscopic or thoracoscopic approach is used, the surgeon should have advanced training in video-endoscopic techniques.

## CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

## TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

Endoscopic injection of botulinum toxin. Symptoms of dysphagia can be relieved in nearly two-thirds of patients.

Balloon dilatation: Balloon dilatation of the esophagus is effective in more than two-thirds of patients.

Esophageal myotomy. Approximately 90% of patients have long-term relief of symptoms following esophageal myotomy.

### POTENTIAL HARMS

Endoscopic injection of botulinum toxin. The effect is temporary, lasting from 3-9 months, and the use of botulinum toxin may render subsequent myotomy more technically difficult and less efficacious.

Balloon dilatation. Balloon dilatation of the esophagus usually requires multiple sessions and may result in esophageal perforation in 40% of cases. In addition, when dysphagia is alleviated, more than 50% of patients develop gastroesophageal reflux. The effects of balloon dilatation may also be temporary, with recurrence of symptoms within 2-5 years.

Esophageal myotomy. The mortality rate is less than 1% in patients undergoing elective esophageal myotomy. In patients with classical manometric findings, the risk of recurrent dysphagia is approximately 5-10%, while in patients with atypical manometric findings (such as vigorous achalasia), the risk of recurrence is higher. Laceration of the mucosa is the principal operative complication, but this is usually easily recognized and repaired with sutures. Reflux normally occurs in 50% of patients, but is rare if an anti-reflux procedure is added.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

These guidelines have been written by the Patient Care Committee of the SSAT. Their goal is to guide PRIMARY CARE physicians to the appropriate utilization of surgical procedures on the alimentary tract or related organs and they are based on critical review of the literature and expert opinion. Both of the latter sources of information result in a consensus that is recorded in the form of these Guidelines. The consensus addresses the range of acceptable clinical practice and should not be construed as a standard of care. These Guidelines require periodic revision to ensure that clinicians utilize procedures appropriately but the reader must realize that clinical judgement may justify a course of action outside of the recommendations contained herein.

## 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

Getting Better  
Living with Illness

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract. Achalasia. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 1996-2000. 4 p. [6 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

1996 (revised 2000)

### GUIDELINE DEVELOPER(S)

Society for Surgery of the Alimentary Tract, Inc - Medical Specialty Society

### SOURCE(S) OF FUNDING

Society of Surgery of the Alimentary Tract, Inc.

### GUIDELINE COMMITTEE

Patient Care Committee

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Names of Committee Members: Thomas R Gadacz, MD (Chairman); L William Traverso, MD; Gerald M Fried, MD; Bruce Stabile, MD; Barry A Levine, MD.

#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

#### GUIDELINE STATUS

Please note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

#### GUIDELINE AVAILABILITY

Electronic copies of the updated guideline: Available from the [Society for Surgery of the Alimentary Tract, Inc. Web site](#).

Print copies: Available from the Society for Surgery of the Alimentary Tract, Inc., 900 Cummings Center, Suite 221-0, Beverly, MA 01915; Telephone: (978) 927-8330; Fax: (978) 524-8890.

#### AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.

Electronic copies: Not available at this time.

Print copies: Available from the Society for Surgery of the Alimentary Tract, Inc., 900 Cummings Center, Suite 221-0, Beverly, MA 01915; Telephone: (978) 927-8330; Fax: (978) 524-8890.

#### PATIENT RESOURCES

None available

#### NGC STATUS

This summary was completed by ECRI on March 28, 2000. The information was verified by the guideline developer as of May 30, 2000.

#### COPYRIGHT STATEMENT

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