



Complete Summary

GUIDELINE TITLE

Guidelines for the clinical application of laparoscopic bariatric surgery.

BIBLIOGRAPHIC SOURCE(S)

Society of American Gastrointestinal Endoscopic Surgeons (SAGES). Guidelines for the clinical application of laparoscopic bariatric surgery. Los Angeles (CA): Society of American Gastrointestinal Endoscopic Surgeons (SAGES); 2003 Jul. 5 p. [25 references]

GUIDELINE STATUS

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

COMPLETE SUMMARY CONTENT

SCOPE
METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Clinically severe obesity and/or morbid obesity

GUIDELINE CATEGORY

Evaluation
Management
Treatment

CLINICAL SPECIALTY

Surgery

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To provide clinical guidelines and indications for the surgical management of severe and/or morbid obesity

TARGET POPULATION

Individuals who:

- have a body mass index (BMI) equal to or greater than 40 kg/m²

OR

- have a BMI equal to or greater than 35 kg/m² and significant comorbidities

AND

- can show that dietary attempts at weight control have been ineffective

INTERVENTIONS AND PRACTICES CONSIDERED

1. Indications for surgery
 - Body Mass Index (BMI)
 - Medical history
2. Preoperative evaluation and patient preparation using a multi-disciplinary approach
3. Bariatric procedures
 - Gastric restriction procedures
 - Intestinal malabsorptive procedures
4. Postoperative management including lifelong follow-up with nutritional counseling and biochemical surveillance

MAJOR OUTCOMES CONSIDERED

Safety and efficacy of laparoscopic bariatric surgery

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 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

Not applicable

COST ANALYSIS

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

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This statement was reviewed and approved by the Boards of Governors of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES) July, 2003. It was prepared jointly by members of SAGES and the American Society of Bariatric Surgeons (ASBS).

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

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.

Indications for Surgery

Surgical therapy should be considered for individuals who:

- have a body mass index (BMI) equal to or greater than 40 kg/m² OR
- have a BMI equal to or greater than 35 kg/m² and significant comorbidities
AND
- can show that dietary attempts at weight control have been ineffective

Perioperative and Long Term Management Considerations

The overall care of patients undergoing operatively induced weight loss (bariatric surgery) requires programs that address both perioperative care and long-term management. Careful preoperative evaluation and patient preparation are critical to success. Patients should have a clear understanding of expected benefits, risks, and long-term consequences of surgical treatment. Surgeons must know how to diagnose and manage complications specific to bariatric surgery. Patients require lifelong follow-up with nutritional counseling and biochemical surveillance. Surgeons also must understand the requirements of severely obese patients in terms of facilities, supplies, equipment, and staff necessary to meet these needs, and should ensure that the specialized staff and/or multi-disciplinary referral system is included in treatment of these patients. This multi-disciplinary approach includes medical management of comorbidities, dietary instruction, exercise training, specialized nursing care, and psychological assistance as needed on an individual basis. Postoperative management of comorbidities should be directed by a practitioner familiar with relevant bariatric operations.

Surgical Techniques

Bariatric procedures rely on two primary mechanisms to promote weight loss: gastric restriction and intestinal malabsorption. Purely restrictive operations include various gastric banding procedures and the vertical banded gastroplasty. In the adjustable gastric band the amount of restriction can be adjusted, while in the vertical banded gastroplasty it remains fixed. The gastric bypass and biliopancreatic diversion procedures also cause gastric restriction but rely on varying amounts of intestinal malabsorption as an additional weight loss mechanism. Increasingly, hormonal changes are being recognized as an important mechanism of postsurgical weight loss; recent studies have demonstrated that gastric bypass results in altered release of hunger-causing hormones, such as ghrelin (Cummings et al., 2002).

The National Institute of Health (NIH) conference of 1991 recognized the vertical banded gastroplasty and gastric bypass as acceptable procedures based on

available outcome data ("Gastrointestinal surgery for severe obesity," 1992). Regardless of whether restrictive or combined restrictive-malabsorptive procedures are utilized, follow-up is imperative to monitor for potential serious sequelae and operative failure. These operations should only be performed within the setting of an obesity treatment program committed to maintaining long-term follow-up for evaluation of outcomes (Cummings et al., 2002).

Minimally invasive approaches have been used in bariatric surgery since 1993 (Kuzmak, 1991; Wittgrove & Clark, 2000). The benefits of a laparoscopic approach appear to be similar to those realized with laparoscopic cholecystectomy, including but not limited to a shorter recovery with an earlier return to normal activity. In addition, wound complications such as infection, abdominal wall hernia, seroma, and hematoma (Nguyen et al., 2000) are significantly reduced. Overall outcome following laparoscopic weight loss surgery appears to be comparable to that following equivalent open procedures (Schauer et al., 2000).

The indications for laparoscopic treatment of obesity are the same as for open surgery and have been outlined earlier in this document. Not all patients are suitable for laparoscopic weight reduction surgery, and conversion to an open bariatric procedure is sometimes necessary. Surgeons performing bariatric procedures laparoscopically must have the skills, experience, and equipment necessary to convert to and perform open bariatric operations.

Virtually all bariatric operations can be performed with laparoscopic techniques (Kuzmak, 1991; Wittgrove & Clark, 2000; Nguyen et al., 2000; Schauer et al., 2000; Belachew et al., 1998; Chua & Mendiola, 1995; Lonroth et al., 1996; Catona, La Manna, & Forsell, 2000). For safe and effective laparoscopic treatment of obesity, advanced laparoscopic skills are required. Therefore, appropriate training in advanced laparoscopic techniques is mandatory. These skills are most appropriately acquired through a residency or fellowship or in courses that teach the indications for surgically inducing weight loss, the various surgical approaches (both open and laparoscopic), and the advanced technical skills necessary to perform these operations. Additionally, the long-term care of these patients needs to be understood. Prior to performing laparoscopic bariatric operations, surgeons must meet all local credentialing requirements for the performance of open bariatric procedures and advanced laparoscopic operations (Society of American Gastrointestinal Endoscopic Surgeons [SAGES], 1994). Credentialing guidelines for both open and laparoscopic bariatric procedures have been made available by several national surgical organizations (American Society of Bariatric Surgeons [ASBS], 2003). Finally, these procedures require a well-trained operating team familiar with the equipment, instruments, and techniques of weight loss surgery.

Summary

Morbid obesity is a significant health concern. Medical management usually fails to achieve sustained weight loss, and medical management of obesity-related morbidities remains expensive and largely ineffective. Currently, bariatric surgical procedures are the most effective means to achieve significant, sustained weight loss, and thereby provide effective and durable treatment of the obesity-associated morbidities. Laparoscopic approaches, based on their "open" counterparts, are available. When performed by appropriately trained surgeons,

laparoscopic approaches appear to speed the patient's recovery and return to normal function. Experience and training in weight loss surgery, advanced laparoscopic surgery skills, and a commitment to long-term patient care are required for successful treatment of these patients.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

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

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Currently, bariatric surgical procedures are the most effective means to achieve significant, sustained weight loss, and thereby provide effective and durable treatment of the obesity-associated morbidities. Laparoscopic approaches, based on their "open" counterparts, are available. When performed by appropriately trained surgeons, laparoscopic approaches appear to speed the patient's recovery and return to normal function.

POTENTIAL HARMS

Not stated

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)

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ADAPTATION

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

DATE RELEASED

2003 Jul

GUIDELINE DEVELOPER(S)

Society of American Gastrointestinal and Endoscopic Surgeons - Medical Specialty Society

SOURCE(S) OF FUNDING

Society of American Gastrointestinal Endoscopic Surgeons (SAGES)

GUIDELINE COMMITTEE

Committee on Standards of Practice

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

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 of American Gastrointestinal Endoscopic Surgeons \(SAGES\) Web site](#).

Print copies: Available from the Society of American Gastrointestinal Endoscopic Surgeons (SAGES), 11300 W. Olympic Blvd., Suite 600, Los Angeles, CA 90064; Web site: www.sages.org.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on March 22, 2004. The information was verified by the guideline developer on April 27, 2004.

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