Complete Summary

GUIDELINE TITLE

Surgical repair of groin hernias.

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Surgical repair of groin hernias. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2003. 3 p.

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates the previously issued version: Society for Surgery of the Alimentary Tract. Surgical repair of groin hernias. Manchester (MA): Society for Surgery of the Alimentary Tract; 2000. 3 p.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Groin hernias, including inguinal and femoral hernias

GUIDELINE CATEGORY

Diagnosis
Treatment

CLINICAL SPECIALTY

Family Practice
Gastroenterology
Internal Medicine
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

Adult patients with symptomatic or asymptomatic groin hernias

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Physical examination
2. Ultrasound and x-rays (not recommended)
3. Referral to surgeon for operative repair

Treatment

Surgical Repair of Groin Hernias

1. Elective or emergent repair
2. Open repair (traditional)
3. Open tension-free repair (use of mesh)
4. Laparoscopic repair

MAJOR OUTCOMES CONSIDERED

Return to normal activities of daily living

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

Symptoms and Diagnosis

Patients with inguinal hernias typically present with vague groin pain. Inguinal hernias may be asymptomatic, discovered incidentally during physical examination or present as a bulge discovered by the patient. Since most hernias should be repaired, the patient should be referred to a surgeon for evaluation and operative treatment. Sophisticated tests are not required, since the diagnosis can usually be made on physical examination, which is best performed with the patient standing and straining against a held breath (Valsalva maneuver). Ultrasound and diagnostic x-rays are also not usually necessary.

More difficult to diagnose is the occasional patient with groin pain but no history of groin bulge and without physical findings of a hernia by the primary physician or surgeon. Such a patient may not have a hernia, but rather a groin muscle strain. In contrast, if a hernia is not found on physical examination, but the patient describes a groin bulge, a hernia is likely present. Femoral hernias often present as pain below the groin crease, rather than a bulge, and are particularly difficult to diagnose in the elderly or obese female with sudden groin pain but no physical findings of groin hernia of any type.

The majority of groin hernias are readily reducible, have minimal or no tenderness, and can be electively referred to a surgeon within a period of weeks. However, if the hernia is tender and not reducible, the patient should be referred immediately due to the risk of strangulated bowel or other viscera. Aggressive attempts to reduce a groin hernia with sedation, ice packs, or sustained weight or pressure should not be pursued. Symptoms such as nausea and vomiting suggest bowel obstruction, which mandates immediate referral to a surgeon.

Treatment

Because patients with groin hernias are usually offered and receive elective repair, the incidence of emergent incarcerated (non-reducible) hernias is relatively low. Urgent repair is required for a sudden, non-reducible hernia or a chronically incarcerated hernia that becomes acutely painful or tender, as this indicates impending strangulation. While severe morbidity as well as mortality can be

avoided by prompt diagnosis, this clinical emergency causes the death of more than 2,000 patients per year in North America.

Most inguinal hernias that should be repaired are symptomatic or are enlarged over time. Hernia belts should be discouraged and should be limited to patients who are not candidates for elective operation. Their use can lead to a more difficult repair and higher risk of complications or recurrence. Femoral hernias should always be repaired because of the high incidence of bowel strangulation. Patients with groin hernias should undergo surgical evaluation within a month after detection. Urgent repair is required for all painful, non-reducible hernias, while asymptomatic hernias can be repaired electively. Elderly patients with minor comorbid conditions will easily tolerate an outpatient elective hernia repair, thus avoiding emergent repair of chronically incarcerated hernias, which occur primarily in the elderly. The timing of repair is determined by the symptoms.

The objective of any inguinal or femoral hernia operation is to repair the defect in the abdominal wall. The three basic approaches are: (1) open repair (the traditional repair, utilizing the patient's own tissue); (2) open tension-free repair (in which mesh is used to bridge or cover the defect); and (3) laparoscopic repair, a tension-free repair also utilizing mesh. Open techniques of hernia repair can be performed under local, regional, or general anesthesia, while laparoscopic hernia repair requires general anesthesia.

Qualifications for Performing Inguinal and Femoral Hernia Repairs

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 both elective and emergent inguinal hernia repair. These surgeons have successfully completed at least five years of surgical training after medical school graduation and are qualified to perform open inguinal hernia repair, with and without tension-free techniques. Advanced laparoscopic training is required for laparoscopic groin hernia repair. The qualifications of the surgeon should be based on training (education), experience, and outcomes.

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

Short-term outcome studies suggest that a quick return to normal activities can be achieved following both open and laparoscopic hernia repair. Due to the presently higher cost of laparoscopic repair, open repair is more frequently performed. Usual daily activities can be resumed within a few days after surgery, depending on the patient's comfort level. Oral pain medications are needed for only a few days.

POTENTIAL HARMS

As with any operation, the risk of infection or a significant hematoma is approximately 1%. Recurrence of hernias occurs in 5 to 10% of patients and requires another repair.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

These guidelines have been written by the Patient Care Committee of the Society for Surgery of the Alimentary Tract (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 judgment 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

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Surgical repair of groin hernias. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2003. 3 p.

ADAPTATION

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

DATE RELEASED

1996 (revised 2003 Feb 1)

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

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

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This guideline updates the previously issued version: Society for Surgery of the Alimentary Tract. Surgical repair of groin hernias. Manchester (MA): Society for Surgery of the Alimentary Tract; 2000. 3 p.

GUIDELINE AVAILABILITY

Electronic copies: 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-U, Beverly, MA 01915; Telephone: (978) 927-8330; Fax: (978) 524-0461.

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. This summary was updated by ECRI on September 9, 2004.

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