Complete Summary

GUIDELINE TITLE

Role of EUS.

BIBLIOGRAPHIC SOURCE(S)

ASGE Standards of Practice Committee, Gan SI, Rajan E, Adler DG, Baron TH, Anderson MA, Cash BD, Davila RE, Dominitz JA, Harrison ME 3rd, Ikenberry SO, Lichtenstein D, Qureshi W, Shen B, Zuckerman M, Fanelli RD, Lee KK, Van Guilder T. Role of EUS. Gastrointest Endosc 2007 Sep;66(3):425-34. [142 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: American Society for Gastrointestinal Endoscopy. Role of endoscopic ultrasonography. Gastrointest Endosc 2000;52:852-9.

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

- Luminal gastrointestinal (GI) malignancies
- Barrett's esophagus and esophageal cancer
- Gastric cancer and gastric lymphoma
- Rectal cancer
- Subepithelial (submucosal) lesions
- Pancreaticobiliary malignancies

- Benign pancreaticobiliary diseases including chronic and acute pancreatitis, autoimmune pancreatitis, cystic lesions of the pancreas, and choledocholithiasis
- Fecal incontinence and perianal disease

GUIDELINE CATEGORY

Assessment of Therapeutic Effectiveness
Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Colon and Rectal Surgery
Family Practice
Gastroenterology
Internal Medicine
Oncology

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To discuss the use of endoscopic ultrasonography (EUS) for the diagnosis and management of gastrointestinal abnormalities

TARGET POPULATION

Patients with gastrointestinal abnormalities

INTERVENTIONS AND PRACTICES CONSIDERED

1. Endoscopic ultrasonography (EUS)
2. EUS-guided fine-needle aspiration (EUS-FNA) or core biopsy

Note: The routine application of EUS in Barrett's esophagus (BE) with low-grade dysplasia or without dysplasia is not recommended.

MAJOR OUTCOMES CONSIDERED

- Accuracy, reliability, and sensitivity of endoscopic ultrasonography (EUS)
- Cost-effectiveness of EUS

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

In preparing this guideline, MEDLINE and PubMed databases were used to search publications through 2006 related to the role of endoscopic ultrasonography (EUS) by using the keyword(s) "Endoscopic ultrasound" and each of the following: Barrett's esophagus, esophageal cancer, gastric cancer, gastric lymphoma, rectal cancer, submucosal lesions, pancreaticobiliary disease, lymph nodes, mediastinal adenopathy, fecal incontinence and perianal disease, and therapeutic EUS. The search was supplemented by accessing the "related articles" feature of PubMed with articles identified on MEDLINE and PubMed as the references. Pertinent studies published in English were reviewed. Studies or reports that described less than 10 patients were excluded from analysis if multiple series with greater than 10 patients addressing the same issue were available.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Committee)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

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

Guidelines for appropriate utilization of endoscopy are based on a critical review of the available data and expert consensus.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Grades of Recommendation*

Grade of Recommendation	Clarity of Benefit	Methodologic Strength/ Supporting Evidence	Implications
1A	Clear	Randomized trials without important limitations	Strong recommendation; can be applied to most clinical settings
1B	Clear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Strong recommendation; likely to apply to most practice settings
1C+	Clear	Overwhelming evidence from observational studies	Strong recommendation; can apply to most practice settings in most situations
1C	Clear	Observational studies	Intermediate-strength recommendation; may change when stronger evidence is available
2A	Unclear	Randomized trials without important limitations	Intermediate-strength recommendation; best action may differ depending on circumstances or patients' or societal values
2B	Unclear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Weak recommendation; alternative approaches may be better under some circumstances
2C	Unclear	Observational studies	Very weak recommendation; alternative approaches likely

Grade of Recommendation	Clarity of Benefit	Methodologic Strength/ Supporting Evidence	Implications
			to be better under some circumstances
3	Unclear	Expert opinion only	Weak recommendation; likely to change as data become available

*Adapted from Guyatt G, Sinclair J, Cook D, Jaeschke R, Schunemann H, Pauker S. Moving from evidence to action: grading recommendations—a qualitative approach. In: Guyatt G, Rennie D, eds. Users' guides to the medical literature. Chicago: AMA Press; 2002. p. 599-608.

COST ANALYSIS

The guideline developers reviewed published cost analyses.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This document was reviewed and approved by the Governing Board of the American Society for Gastrointestinal Endoscopy.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Recommendations were graded on the strength of the supporting evidence (Grades 1A-3). Definitions of the recommendation grades are presented at the end of the "Major Recommendations" field.

Summary

Barrett's Esophagus (BE)

- The role of endoscopic ultrasonography (EUS) in evaluating patients with BE and high-grade dysplasia (HGD) is to exclude the presence of occult cancer, submucosal invasion, and malignant lymphadenopathy (**1C**).
- The routine application of EUS in BE with low-grade dysplasia or without dysplasia is not recommended (**3**).

Esophageal Cancer

- In esophageal cancer, EUS provides accurate locoregional staging that is superior to computerized tomography (CT) scanning (**1C+**).
- Preoperative EUS staging of esophageal cancer is cost effective and can guide preoperative management (**1C+**).

Gastric Cancer and Lymphoma

- EUS is useful in the locoregional staging of gastric carcinoma and lymphomas (**1C+**).
- EUS may be used to monitor response to therapy with disease regression in gastric lymphoma (**1C**).

Rectal Cancer

- EUS is accurate in the preoperative locoregional staging of rectal cancer (**1C+**).
- Preoperative EUS staging of rectal cancer is cost effective and can guide preoperative management (**1C+**).

Submucosal Lesions

- When a submucosal lesion is identified, EUS should be considered to further characterize the lesion (**1C**).
- EUS-fine-needle aspiration (FNA) or core biopsy can help establish a tissue diagnosis and potentially characterize malignant risk (**1C+**).
- EUS should be performed before consideration of endoscopic removal of SML (**3**).

Pancreatic Cancer

- Pancreatic adenocarcinoma can be accurately identified, staged, and diagnosed by EUS and EUS-FNA (**1C+**).
- Neuroendocrine tumors can be localized and sampled by EUS (**3**).

Chronic and Acute Pancreatitis

- EUS is the most sensitive imaging study for the detection of structural changes of chronic pancreatitis (**1C**).
- EUS has been shown to be useful for identifying the presence of bile duct stones in cases of acute gallstone pancreatitis and in selecting patients for endoscopic retrograde cholangiopancreatography (ERCP) at intermediate risk for choledocholithiasis (**1C**).

Autoimmune Pancreatitis

- EUS, EUS–FNA, and EUS core biopsy can help establish the diagnosis of autoimmune pancreatitis (**3**).

Pancreatic Cystic Lesions

- EUS is useful for the characterization of the morphology of pancreatic cystic lesions (**1C**).
- EUS can be used to guide drainage of benign inflammatory lesions (**3**).

Fecal Incontinence and Perianal Disease

- Internal and external anal sphincter defects can be accurately identified by EUS in the evaluation of fecal incontinence (**1C**).
- EUS may be used for the identification and characterization of abscesses and perianal fistulae (**3**).

Choledocolithiasis

- EUS is highly accurate in the detection of choledocolithiasis and has fewer complications than ERCP (**1C**).

Mediastinal Lymphadenopathy

- EUS-FNA is a safe and accurate method for obtaining a tissue diagnosis in patients with mediastinal adenopathy (**1C+**).

Lymph Nodes

- Use of EUS and EUS-FNA to differentiate benign from malignant lymph nodes should be considered in patients when results would alter treatment (**1C+**).

Therapeutic EUS

- EUS-guided celiac neurolysis can provide significant reduction of pancreatic cancer pain (**1C**).

Definitions:

Grades of Recommendation*

Grade of Recommendation	Clarity of Benefit	Methodologic Strength/ Supporting Evidence	Implications
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CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

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

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate utilization of endoscopic ultrasonography in the evaluation, diagnosis, and treatment of patients with gastrointestinal abnormalities

POTENTIAL HARMS

- The accuracy of endoscopic ultrasonography (EUS) in staging gastric cancer does not approach that of esophageal cancer. Understaging, due to microscopic deposits, and overstaging, particularly of T2 tumors, due to tumor-associated fibrosis or inflammation, can occur.
- EUS can render false-negative results in the setting of chronic pancreatitis, diffusely infiltrating carcinoma, prominent ventral/dorsal anlage, and recent acute pancreatitis.

QUALIFYING STATEMENTS

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Further controlled clinical studies are needed to clarify aspects of this statement, and revision may be necessary as new data appear. Clinical consideration may justify a course of action at variance to these recommendations.

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

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ADAPTATION

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

DATE RELEASED

2000 (revised 2007 Sep)

GUIDELINE DEVELOPER(S)

American Society for Gastrointestinal Endoscopy - Medical Specialty Society

SOURCE(S) OF FUNDING

American Society for Gastrointestinal Endoscopy

GUIDELINE COMMITTEE

Standards of Practice Committee

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

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GUIDELINE AVAILABILITY

Electronic copies: Available from the American Society for Gastrointestinal Endoscopy Web site.

Print copies: Available from the American Society for Gastrointestinal Endoscopy, 1520 Kensington Road, Suite 202, Oak Brook, IL 60523

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on March 3, 2008.

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