Complete Summary

GUIDELINE TITLE

Surgical treatment of pancreatic cancer.

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Surgical treatment of pancreatic cancer. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2004. 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 treatment of pancreatic cancer. Manchester (MA): Society for Surgery of the Alimentary Tract; 2000. 3 p.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Pancreatic cancer

GUIDELINE CATEGORY

Diagnosis
Evaluation
Treatment

CLINICAL SPECIALTY

Family Practice
Gastroenterology
Internal Medicine
Oncology
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 pancreatic cancer

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis and Staging

1. Assessment of symptoms (pain, jaundice, weight loss, acute onset pancreatitis or diabetes)
2. Computed tomography (CT) scan
3. Endoscopic ultrasound
4. Endoscopic retrograde pancreatography (ERCP)
5. Preoperative staging with multidetector or multislice CT scanning and intravenous contrast
6. Laparoscopic staging

Treatment

Surgical Treatment of Pancreatic Cancer

1. Pancreaticoduodenectomy
2. Distal pancreatectomy with splenectomy

Palliative Therapy for Unresectable Tumors

1. Biliary and/or gastric bypass, endoscopic stent
2. Celiac plexus block with 50% alcohol
3. Gemcitabine (alone or in combination)
4. Chemoradiation (capecitabine-based chemoradiation)

MAJOR OUTCOMES CONSIDERED

- Length of hospital stay
- 5-year survival rate

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

More than 90% of patients with pancreatic cancer present with pain, jaundice, and/or weight loss. Acute pancreatitis or recent onset of diabetes mellitus may occasionally be the initial presentation. Vague upper abdominal symptoms may precede the onset of jaundice or overt pain by months and illustrate the difficulty of early diagnosis in this disease. Whenever pancreatic cancer is suspected, a computed tomography (CT) scan of the upper abdomen should be obtained. If a mass is not seen, but clinical suspicion remains high, endoscopic ultrasound or endoscopic retrograde pancreatography (ERCP) may be indicated. It should be noted that a normal endoscopic ultrasound does not rule out the presence of a tumor. A normal pancreatic ductogram will exclude a carcinoma in the main duct but may miss small branch duct neoplasms. Most importantly, routine ERCP for diagnostic purposes may be associated with unnecessary morbidity.

Staging

Preoperative staging in pancreatic cancer is used to determine if a patient has a resectable tumor, a localized but unresectable tumor, or metastatic disease. Contemporary staging utilizes multidetector or multislice CT scanning with intravenous contrast to determine the presence or absence of metastatic disease, vascular invasion (often precluding resection), and variations in arterial anatomy. Endoscopic ultrasonography may be helpful in assessing vascular involvement,

local nodal metastasis, or extrapancreatic tumor extension, and adds the dimension of transduodenal fine-needle aspiration to confirm the diagnosis cytologically, which is important if resection is not feasible and chemotherapy or chemoradiation is planned. Laparoscopy may be useful in identifying small metastatic hepatic and/or peritoneal implants, in which case further surgery may be avoided. Surgeons with experience in pancreatic surgery should evaluate all patients with pancreatic carcinoma to ascertain their candidacy for resection unless they clearly have distant metastatic disease.

Treatment

In North America, less than one in five patients will have resectable tumors. Tumors in the head of the pancreas are treated by pancreaticoduodenectomy, with or without preservation of the pylorus. Preoperative or intraoperative histologic evidence of malignancy is not required to carry out resection in experienced hands. While a distal pancreatectomy with splenectomy is the procedure of choice for tumors of the body or tail of the pancreas, it is only possible in about 1 in 20 patients. Adjuvant therapy should be considered in all patients following surgery for pancreatic adenocarcinoma. We encourage all physicians to support available clinical trials and encourage all eligible patients to consider protocol-based therapy.

For the majority of patients with unresectable tumors, treatment is primarily one of palliation. In patients with jaundice and gastric outlet obstruction, biliary and/or gastric bypass is indicated. At the time of surgery, a celiac plexus block with 50% alcohol may prevent or relieve pain. In the presence of jaundice alone, treatment is determined by the availability of resources. An endoscopic stent is as effective as surgical bypass, with slightly less morbidity and expense. Patients with locally advanced or metastatic disease and acceptable performance status should be considered for protocol-based therapy. In the absence of an available clinical trial, gemcitabine (alone or in combination) is the evolving standard treatment. Patients with locally advanced disease, especially those with pain as a major symptom, may benefit from chemoradiation (capecitabine-based chemoradiation).

Qualifications

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 pancreatic cancer. These surgeons have successfully completed at least 5 years of surgical training after medical school graduation and are qualified to perform operations on the pancreas. Pancreatic surgery should preferably be performed by surgeons with special knowledge, training, and experience in the management of pancreatic disease. The level of training in advanced laparoscopic techniques necessary to conduct minimally invasive surgery of the pancreas is important to assess. The qualifications of a surgeon performing any operative procedure 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

Recent data suggest that patients have a 5-year survival rate of 15 to 25% following resection, depending upon the histology and completeness of resection. With current chemotherapy or chemoradiotherapy the median survival for patients with locally advanced disease is 10 to 12 months. Patients with metastatic disease have a median survival of only 3 to 6 months.

POTENTIAL HARMS

- Routine endoscopic retrograde pancreatography (ERCP) for diagnostic purposes may be associated with unnecessary morbidity.
- The mortality rate following pancreaticoduodenectomy or distal pancreatectomy is currently less than 5% (in several large series). Significant complications following pancreatic resection occur in 25 to 30% of patients and include pancreatic fistula, intra-abdominal abscess, or delayed gastric emptying. Intra-abdominal or gastrointestinal bleeding, once frequent, is now uncommon, and reoperation for this complication is seldom necessary. Complication and mortality rates are similar in younger patients and in patients 70 years or older.

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 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

End of Life Care
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Surgical treatment of pancreatic cancer. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2004. 3 p.

ADAPTATION

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

DATE RELEASED

1996 (revised 2004 May 15)

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 treatment of pancreatic cancer. 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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