

Screening for Pancreatic Cancer: A Brief Evidence Update for the U.S. Preventive Services Task Force

Methods

The MEDLINE® and the Cochrane Library databases were searched for articles dating from 1994 through December 2001, focusing on systematic reviews, meta-analyses, randomized controlled trials (RCTs), cost-effectiveness analyses, editorials, or commentaries concerning the critical key questions. The National Guideline Clearinghouse™ was also searched for guidelines on this topic.

In the MEDLINE search, pancreatic cancer and mass screening were exploded, combining these searches with RCT terms. A second search used treatment (including chemotherapy and surgery) in place of screening. Studies of test accuracy (sensitivity and specificity) regarding screening for pancreatic cancer were also searched for.

Key Questions and Results

1. Is there new direct evidence that screening provides more benefit than harm?

We examined 44 abstracts but found no RCTs, meta-analyses, or systematic reviews that provided direct evidence about the benefits and harms of screening.

2. Are there new tests (or new evidence about old tests) that substantially improve the accuracy of screening?

We examined 73 abstracts but found no study that provided high quality evidence about the accuracy of screening tests to detect pancreatic cancer early.

3. Are there new treatments (or new evidence about old treatments) that improve outcomes for people with pancreatic cancer?

We examined 25 abstracts and found 2 papers that describe an ongoing randomized trial in Europe evaluating 3 different adjuvant treatments for pancreatic cancer.^{3,4} As of that point in 1997, 348 patients had been recruited into the 3 treatment arms and 1 control arm of the study.

Summary

There is little new evidence and no critical ongoing studies of screening for pancreatic cancer. The literature mentions ongoing research on identifying and screening high-risk groups, especially those with tumor markers. Ongoing research regarding treatment involves studies to determine the effectiveness of new adjuvant chemotherapy, radiation, and surgery protocols. Few of these studies are RCTs.

Systematic Evidence Reviews serve as the basis for U.S. Preventive Services Task Force (USPSTF) recommendations on clinical prevention topics. The USPSTF tailors the scope of these reviews to each topic. The USPSTF determined that a brief, focused evidence review was needed to assist in updating its 1996 recommendations on screening for pancreatic cancer.¹

To assist the USPSTF, Jana Johnson of the Research Triangle Institute-University of North Carolina (RTI-UNC) Evidence-based Practice Center, under contract to the Agency for Healthcare Research and Quality (AHRQ), performed a targeted review of the literature from 1994 to 2001. This brief evidence update and the updated recommendation statement² are available through the AHRQ Web site (www.preventiveservices.ahrq.gov), and in print through subscription to the *Guide to Clinical Preventive Services, Third Edition: Periodic Updates*. The subscription costs \$60 and can be ordered through the AHRQ Publications Clearinghouse (call 1-800-358-9295, or e-mail ahrqpubs@ahrq.gov). The recommendation is also posted on the Web site of the National Guideline Clearinghouse™ (www.guideline.gov).

No statement in this article should be construed as an official position of AHRQ or the U.S. Department of Health and Human Services.

Recommendations of Other Groups

The Canadian Task Force recommendation can be accessed at: <http://www.ctfphc.org>.

The American Academy of Family Physicians' recommendations can be accessed at: <http://www.aafp.org/x24973.xml>.

The American Cancer Society recommendations can be accessed at: www.cancer.org.

References

1. U.S. Preventive Services Task Force. *Guide to Clinical Preventive Services*. 2nd ed. Washington, DC: Office of Disease Prevention and Health Promotion; 1996.
2. U.S. Preventive Services Task Force. Screening for pancreatic cancer: recommendation statement. Rockville, MD: Agency for Healthcare Research and Quality; February 2004. Available at: <http://www.ahrq.gov/clinic/3rduspstf/pancreatic/pancrers.htm>.
3. Neoptolemos JP, Kerr DJ, Beger H, et al. ESPAC-1 trial progress report: the European randomized adjuvant study comparing radiochemotherapy, 6 months chemotherapy and combination therapy versus observation in pancreatic cancer. *Digestion*. 1997;58:570–577.
4. Neoptolemos JP, Baker P, Beger H, et al. Progress report. A randomized multicenter European study comparing adjuvant radiotherapy, 6-mo chemotherapy, and combination therapy vs no-adjuvant treatment in resectable pancreatic cancer (ESPAC-1). *Int J Pancreatol*. 1997;21:97–104.