

Staging of Pancreatic Ductal Adenocarcinoma

Pancreatic ductal adenocarcinoma, cancer of the pancreas (<https://www.radiologyinfo.org/en/info/pancreatic-cancer>) , usually causes only vague symptoms until the pancreatic duct is blocked. Surgery with complete removal of the tumor is curative. Thus, it is important to find out if the tumor has spread outside of the pancreas or whether it remains confined to the pancreas and can be completely resected (surgically removed).

Multidetector CT (<https://www.radiologyinfo.org/en/info/bodyct>) (MDCT) with contrast and MRI (<https://www.radiologyinfo.org/en/info/bodymr>) with and without contrast are both appropriate methods for detecting and staging of pancreatic cancer. MDCT is usually preferred. Pancreatic cancer can spread (metastasize) locally to the adjacent organs like the stomach and peritoneal lining (abdominal membrane surrounding the pancreas and other organs) or distantly via the blood or lymph system to the lymph nodes, liver, lungs, and bones.

An endoscopic ultrasound done with fine-needle aspiration may be appropriate to biopsy suspicious lesions, both in the pancreas and lymph nodes. PET (<https://www.radiologyinfo.org/en/info/pet>) using fluorine-18-2-fluoro-2-deoxy-D-glucose imaging/CT may also be an appropriate follow-up to see if the cancer has spread.

Depending on stage, pancreatic cancer can either be operated on right away or can require treatment to shrink the tumor in order to allow surgery. If, however, there is metastasis elsewhere, then it can render the patient inoperable.

There are limited data on the appropriate imaging follow-up after the initial treatment to shrink the tumor(s) before curative surgery, but MDCT with contrast and MRI with and without contrast are appropriate in re-evaluating the cancer before the patient undergoes surgery.

See the Pancreatic Cancer Treatment page (<https://www.radiologyinfo.org/en/info/pancreatic-cancer-treatment>) for more information.

— By Frank J. Rybicki Jr. and Tasneem Lalani, MD. This information originally appeared in the *Journal of the American College of Radiology*.

Disclaimer

This information is copied from the RadiologyInfo Web site (<http://www.radiologyinfo.org>) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at <http://www.radiologyinfo.org> to view or download the latest information.

Note: Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or

the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

Copyright ® 2026 Radiological Society of North America, Inc.