Title: Pancreatic cancer screening: information for high-risk patients

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Abstract: Although risk stratification of patients with a family history of pancreatic cancer is difficult, screening by endoscopic ultrasound (EUS) is cost effective and increases life expectancy in those people at high risk.

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Pancreatic Cancer Screening: Information for High-Risk Patients

Background
Pancreatic cancer is the fourth leading cause of cancer deaths in the United States in both men and women. About 30,000 new cases are diagnosed each year. Pancreatic cancer is a highly lethal disease, with most patients surviving less than 5 years from the time of diagnosis. Due to the vague and unpredictable symptoms of this cancer, it is often diagnosed at a late stage, when cure is less likely.

Who is at risk?
Risk factors for pancreatic cancer include:
- Smoking
- Diabetes type 1 and 2
- Chronic pancreatitis
- Alcohol abuse
- Obesity

An estimated 10% of pancreatic cancers are due to genetic predisposition. The exact genes associated with this increased risk are often unknown. Although rare, there are some genetic conditions that confer an especially high risk, including:
- Familial adenomatous polyposis
- Hereditary nonpolyposis colorectal cancer
- Cystic fibrosis
- Hereditary pancreatitis
- Peutz-Jeghers syndrome
- Hereditary breast-ovarian syndrome

The risk of pancreatic cancer can approach 50% in some families.

How is it diagnosed?
Pancreatic cancer is suspected based on the patient’s signs and symptoms, yet these symptoms are often vague and not specific for pancreatic cancer. The most common signs and symptoms are:
- Jaundice
- Abdominal pain
- Loss of appetite
- Weakness
- Diabetes
- Enlarged gallbladder
- Fluid buildup in the abdomen

The diagnosis is made using a number of imaging methods, such as abdominal computed tomography (CT), endoscopic retrograde cholangiopancreatography (ERCP), and transabdominal and endoscopic ultrasound (EUS). There are no good laboratory tests for diagnosing pancreatic cancer. Currently, the most promising test for early detection is EUS.

What is the treatment?
The only choice of treatment for cure is surgical removal of the tumor or of the entire pancreas (pancreatectomy). This surgery is followed by chemoradiotherapy. Some people at very high risk may choose to undergo prophylactic pancreatectomy, that is surgical removal of the pancreas before cancer develops. This surgery has many risks and complications and is only considered for those people at extremely high risk of cancer.

Who should have screening?
- Not everyone with a family history of pancreatic cancer should get screened.
- Even people with a first degree relative with pancreatic cancer are usually at very low risk.
- If you have multiple family members with pancreatic cancer, or a family history of one of the hereditary syndromes listed above, talk to your doctor about the need for further testing and possible screening.
- Early screening is recommended for certain high-risk patients.

For more information
National Cancer Institute: http://www.cancer.gov/
American Gastroenterological Association: http://www.gastro.org/wmspage.cfm?parm1=2
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