Thank You . . .

In this new Research Update, we are pleased to share recent findings from our Pancreatic Cancer Research Group. Also, a new research study is open for eligible subjects that will shed light about earlier detection of pancreatic cancer. We are very thankful for your interest in our studies. Your involvement has taught us much. Many people will benefit from this research.

Gloria M. Petersen, Ph.D.
Principal Investigator

A Gene That Causes Melanoma Has a Role in Pancreatic Cancer

Research has shown that some familial melanoma kindreds may have members with pancreatic cancer. On the other hand, some familial pancreatic cancer kindreds may have members with melanoma. An inherited gene mutation in the gene, CDKN2A (also known as p16) explains some families with these patterns. Led by Dr. Robert McWilliams, our team looked at 1,537 pancreatic cancer patients, without regard to their family history, to determine how many have altered CDKN2A. We found that 9 of the 1,537 patients (0.6 percent) carried inherited mutations in CDKN2A. Thus, inherited mutations in CDKN2A among pancreatic cancer patients are generally rare.

Some of these mutations had not been previously known. The team found that those who carried CDKN2A mutations were more likely to have a family history of pancreatic cancer or melanoma, or a personal history of melanoma. Among patients who ever smoked cigarettes, the risk for pancreatic cancer was higher for those who carried a change in CDKN2A when compared with those who did not. But this was not the case among nonsmokers. If a person carries a mutation, they are more likely to develop pancreatic cancer, and more so among cigarette smokers.

This work suggests that pancreatic cancer patients who have had melanoma or a family history of melanoma should consider genetic counseling and genetic testing. All patients and persons at risk in their families should be counseled to avoid tobacco use. They should also take measures to decrease melanoma risk, such as avoiding excess sun exposure and regularly using sunblock.

Reference:
Aspirin and Reduced Risk of Developing Pancreatic Cancer

The role of aspirin and non-steroidal anti-inflammatory drugs (NSAIDs) and pancreatic cancer risk was not clear. We led a study on the use of aspirin, NSAIDs, and acetaminophen in our Mayo Clinic patients. We asked about use in the two decades prior to cancer diagnosis. We studied 904 patients with pancreatic cancer and 1,224 healthy controls.

Among patients who regularly took aspirin, there was a decreased risk of pancreatic cancer (odds ratio = 0.74, 95 percent confidence interval: 0.60, 0.91), when compared to patients who never or very rarely used aspirin. This was the case even at as low a dose of 81 mg daily (the dosage prescribed to prevent heart problems). On the other hand, we found that use of NSAIDs and acetaminophen did not affect pancreatic cancer risk.

This means that regular aspirin use for prevention of heart disease also helps protect against pancreatic cancer. However, because some side effects exist, patients should talk with their doctor before starting regular use of aspirin.

Reference:

Fruits, Vegetables, Fiber, and Grain Can Help Prevent Pancreatic Cancer

Much research has shown the benefit of eating fruits, vegetables, fiber, and grain in preventing different cancers. However, this has not been consistent for pancreatic cancer. Our research group studied whether diets with more of these foods affected risk of pancreatic cancer. We compared diets of 384 patients and 983 healthy controls. We accounted for people who changed their diet, their age, sex, smoking and drinking habits, and weight. We found that eating fruits including citrus, melon, and berries, vegetables including dark green vegetables, deep yellow vegetables, tomato, beans and peas, insoluble fiber, soluble fiber, whole grains, and orange/grapefruit juice, showed reduced risk. Conversely, people who ate higher amounts of non-whole grains, were at increased risk of pancreatic cancer. This study provides ways in which cancer prevention strategies can be used. Future work remains to look at other factors in diets, and these studies are in progress.

Reference:

Frequently Asked Question: Will I find out my results from the research?

When we study the samples and medical information that you have provided for our pancreas disease research registry, it often takes us many years to find results. You should not expect to get your results from taking part in our research. However, there is a small chance that we could discover something that might have important health implications for you. If this happens, we will contact you to see if you want to learn more. If you don’t want to find out the results, you can say no. Because this is research, we would not give your results to your doctor or put them in your medical record.

Who’s Doing Pancreatic Cancer Research?

The Pancreatic Cancer Research Map
http://www.cancermap.org/pancreatic/index.jsp

ClinicalTrials.gov
http://www.clinicaltrials.gov/

Clinical Trials at Mayo Clinic
http://clinicaltrials.mayo.edu/
New Research Opportunity

**EXPAND – A New Pancreatic Cancer Screening Study**

Examination of the Pancreas in New Diabetics (EXPAND) is a newly opened study. It is led by Dr. Suresh Chari at Mayo Clinic. The study aims to find the best way to screen for pancreatic cancer in people over age 50 with diabetes that was recently diagnosed.

The study includes a physician visit, blood tests (fasting blood sugar, CA 19-9), CT scan, and an endoscopic ultrasound (EUS). There will be no charge to the subject, as these costs will be covered by the study. The cost of travel to Mayo Clinic in Rochester, Minnesota, will not be covered.

People who are interested in taking part in the EXPAND study must meet all of the following criteria:

- Be at least 50 years of age or older
- Have no previous diagnosis of diabetes mellitus
- Are not on drugs to treat diabetes
- Have elevated blood sugar (>126 mg/dl) in the past month
- Have blood sugar values <126 mg/dl in the previous 2 years
- Have blood sugar values <110 mg/dl beyond 2 years ago. Patients with blood sugar < 110 mg/dl in the past two years do not need documentation of prior blood sugars
- Eligible subjects must have these serial blood sugar values in their medical record
- Have weight loss of 5 pounds or more in last year, or elevated blood CA 19-9 levels

Enrollment for the study at Mayo Clinic is open now.

For more information about the EXPAND study at Mayo Clinic, please contact:
Jodie Cogswell, Study Coordinator
1-800-914-7962, extension 1
cogswell.jodie@mayo.edu

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Glossary

**Computerized tomography (CT) scan:** A procedure using X-rays to produce detailed cross-sectional images of organs in the body.

**Endoscopic ultrasound (EUS):** A procedure using ultrasound waves to produce detailed images of organs in the body. An ultrasound probe is attached to an endoscope, which is a fiber optic tube used to look inside the intestinal tract.

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**PACGENE Consortium**

The Pancreatic Cancer Genetic Epidemiology (PACGENE) Consortium includes seven medical centers in the U.S. and Canada that are gathering information and blood samples from families with a history of pancreatic cancer. Individuals who wish to join the family registry must be 18 years of age or older and meet one of the following criteria:

- At least two family members who ever had pancreatic cancer
- At least one family member who ever had pancreatic cancer and at least one family member who ever had melanoma.

If you or someone you know might be interested in taking part, please contact the Pancreas Research Team at 1-800-914-7962, extension 1.

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November is pancreatic cancer awareness month
Message from the Study Coordinators

We have all enjoyed working with you and your families on this important cancer research. Thank you for the time and dedication you put into taking part and providing us with information and blood or tissue samples. Without your help, our research would not be possible. If you learn of any relevant updates to your personal or family medical history in the future, we would be grateful if you let us know by mail or by calling us at 1-800-914-7962. These updates may include new diagnoses of cancers, pancreatic conditions, or genetic testing results.

Bridget Eversman, Mary Karaus, Jodie Cogswell, Mary Rahman

Research Local Outreach

Our study team and Mayo Clinic’s mobile research vehicle were present at the 2011 Purple Ride and Purple Stride events held in Maple Grove, MN and Rochester, MN. Research updates were shared with many people, and they were given the opportunity to take part in ongoing and new research studies.

Representing Advocacy for Pancreas Patients with Outreach and Research Teams (RAPPORT-MN)

RAPPORT-MN is a group of patient advocates in Minnesota that was established in October 2008 as an affiliate of the Pancreatic Cancer SPORE at Mayo Clinic. Their group consists of pancreatic cancer survivors, caregivers and other stakeholders, and their current mission is to determine the critical issues facing those affected by pancreatic cancer and to serve as a resource to both the pancreas research community and outreach efforts within Minnesota.

To help their mission, please provide your input by filling out their survey at: www.rapport-pancreas.org. Please look for more information about this group in future volumes of this newsletter or contact them by email at rapport.mn@gmail.com

Past Newsletters...

For more information about PACGENE and family registries, please refer to previous volumes of this newsletter, which may be requested by contacting the Pancreas Research Team and also can be found online at:

http://www.mayo.edu/pmts/mc1100-mc1199/mc1185-0209.pdf
http://www.mayo.edu/pmts/mc1100-mc1199/mc1185-1009.pdf
http://mayoweb.mayo.edu/sp-forms/mc1100-mc1199/mc1185-1010.pdf

Resources

Pancreatic Cancer Action Network, Inc. (PanCAN)
http://www.pancan.org
National advocacy and patient support organization for pancreatic cancer.

The Lustgarten Foundation for Pancreatic Cancer Research
http://www.lustgarten.org
Non-profit organization for supporting pancreatic cancer research and education.

How to Contact Us

Pancreas Research Project
Charlton 6, Mayo Clinic, Rochester, MN 55905
Phone: 1-800-914-7962
E-mail: pancreas@mayo.edu
Website: http://mayoresearch.mayo.edu/mayo/research/petersen_lab
Study Coordinators: Jodie Cogswell, Bridget Eversman, Mary Karaus, Mary Rahman