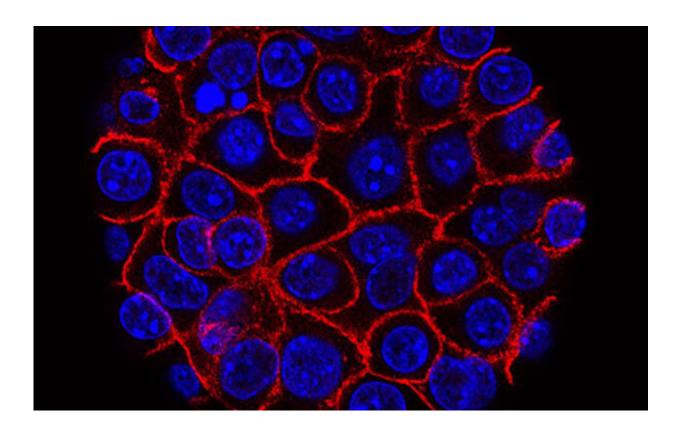


New symptoms identified that could help doctors diagnose pancreatic cancer

November 8 2021



Pancreatic cancer cells (blue) growing as a sphere encased in membranes (red). Credit: National Cancer Institute

Researchers have identified a series of symptoms associated with pancreatic cancer, including two previously unrecognised symptoms—feeling thirsty and having dark urine—in a study presented



today at the NCRI Festival.

The study has confirmed a further 21 signs of <u>pancreatic cancer</u> and shown that <u>patients</u> often have some symptoms of the disease up to a year before their cancers are diagnosed, and other alarming symptoms three months before diagnosis.

The researchers hope their findings could improve survival by helping GPs diagnose the disease earlier, especially when patients present with several seemingly non-specific symptoms.

Pancreatic cancer has the lowest survival among all common cancers, with five-year survival around 7% in the UK. Unfortunately, most people with pancreatic cancer are diagnosed at a late stage.

Researchers want to better understand the early signs of pancreatic cancer because if patients and GPs are more aware of symptoms, they could be diagnosed earlier when their chance of survival is better.

The research is presented by Dr. Weiqi Liao, a data scientist at the University of Oxford, UK. He and his colleagues looked at data from 24,236 patients who were diagnosed with pancreatic cancer in England between 2000 and 2017 using a large electronic database (QResearch). The researchers looked at patients' symptoms at different time points before they were diagnosed with cancer and compared them to other patients' symptoms who were not diagnosed with pancreatic cancer.

Yellowing of the skin (jaundice) and bleeding in the stomach or intestine were the two serious symptoms most associated with being diagnosed with pancreatic ductal adenocarcinoma (PDAC), the most common type of pancreatic cancer, and in pancreatic neuroendocrine neoplasms (PNEN), a rarer form of pancreatic cancer. In addition, researchers identified thirst and dark urine as previously unknown symptoms for



PDAC.

Dr. Liao said: "When pancreatic cancer is diagnosed earlier, patients have a higher chance of survival. It is possible to diagnose patients when they visit their GP, but both patients and GPs need to be aware of the symptoms associated with pancreatic cancer."

The research, which is the largest study of its kind, found 23 symptoms linked with the diagnosis of PDAC (yellowing of the skin, bleeding in the stomach or intestine, problems swallowing, diarrhoea, change in bowel habits, vomiting, indigestion, abdominal mass, <u>abdominal pain</u>, <u>weight loss</u>, constipation, fat in stool, abdominal swelling, nausea, flatulence, heartburn, fever, tiredness, appetite loss, itching, back pain, thirst, and dark urine). Nine symptoms were linked with PNEN (yellowing of the skin, blood in stool, diarrhoea, change in bowel habits, vomiting, indigestion, abdominal mass, abdominal pain, and weight loss).

While most symptoms were not specific to pancreatic cancer and could be due to other benign conditions, the researchers found patients diagnosed with pancreatic cancer had a higher chance of experiencing some of these non-specific symptoms one year before diagnosis.

Dr. Liao said: "These new findings enable us to conduct further work on understanding symptoms that could suggest pancreatic cancer. This will help GPs to make decisions about who to refer for urgent tests, especially when patients have several seemingly non-specific symptoms."

Although this study is one of the largest of its kind, the oldest data did not include what stage the patients' cancer was when they were diagnosed, meaning the researchers were not able to explore which symptoms were associated with early-stage disease and which with latestage disease. In addition, as PNEN is a rarer cancer, there is only a



small amount of data available in the study period, meaning it is harder for researchers to detect other potential symptoms.

Dr. Liao is also working with other researchers to compare these findings with <u>symptom</u> data from other groups of patients.

Dr. Pippa Corrie is chair of the pancreatic workstream of the NCRI Upper Gastrointestinal Group and Consultant Medical Oncologist at Addenbrooke's Hospital, Cambridge, UK, and was not involved with the research. She said: "Being aware of the early symptoms of pancreatic cancer is crucial if we are to diagnose patients earlier and improve pancreatic cancer survival. This research could help GPs and their patients know more about the signs of pancreatic cancer. It's vital that people speak to their GP if they notice these symptoms.

"Future research could help us develop tools for GPs to help them make referrals, especially when patients present with several non-specific symptoms."

Professor Julia Hippisley-Cox, who led the study and is based at the University of Oxford, said: "We thank the many hundreds of GPs using EMIS—an electronic patient record system widely used in the UK—who contribute anonymised data to the QResearch database, without whom this novel research in such a rare but important condition, would not have been possible."

These results could now be used to update QCancer, a risk prediction model that has been created from the QResearch database to help GPs identify high-risk patients for further tests to diagnose cancer.

Dr. Chris Macdonald, Head of Research at Pancreatic Cancer UK, which funded the research, said: "This new analysis, and the QCancer tool itself, is filling a gaping hole in the way that pancreatic cancer is



diagnosed. It could give GPs a much-needed way of identifying patients who are at risk of the disease so that they can be referred for diagnostic tests earlier and, ultimately, get treatment before it's too late.

"This research is an important component of our Early Diagnosis Research Alliance, which has brought together leading researchers across the UK to make earlier diagnosis a reality for the deadliest common cancer. Their efforts mean a new diagnostic test for pancreatic <u>cancer</u> is now on the horizon. However, we also need vital risk assessment tools like QCancer optimised and in the hands of GPs, if we're to ensure that anyone who might have this devastating disease has the very best chance of survival."

More information: Weiqi Liao et al, Identifying symptoms associated with diagnosis of pancreatic exocrine and neuroendocrine neoplasms: a nested case-control study of the UK primary care population, *British Journal of General Practice* (2021). DOI: 10.3399/BJGP.2021.0153

Provided by National Cancer Research Institute

Citation: New symptoms identified that could help doctors diagnose pancreatic cancer (2021, November 8) retrieved 23 April 2024 from <u>https://medicalxpress.com/news/2021-11-symptoms-doctors-pancreatic-cancer.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.