

Study finds genetic link for rare intestinal cancer

April 17 2015



Shown is a section of the small intestine, with the wide distribution of multiple carcinoid tumors identified by sutures; Credit: Gastroenterology 2015

Heredity accounts for up to 35 percent of small intestinal carcinoid, a rare digestive cancer, according to findings from a team at the National Institutes of Health. The researchers examined families with a history of the disease. Because the disease has long been considered randomly occurring rather than inherited, people with a family history are not

typically screened. Results were published recently in *Gastroenterology* .

"Small intestinal carcinoid tumors usually grow slowly without symptoms. It is often too late to reverse the condition once people seek medical attention," said lead author Stephen Wank, M.D., senior investigator at the NIH's National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), which supported the trial. "Our findings suggest that people with a [family history](#) of the [disease](#) should be screened for it. We hope this research empowers thousands of at-risk people with a way to prevent these tumors from becoming a devastating disease."

Conducted at the NIH Clinical Center, the study screened 181 people from 33 families, each with at least two cases of small intestinal carcinoid. The researchers discovered the disease in 23 people who had not yet developed symptoms, and successfully removed all tumors in 21 of those people.

Genetic linkage analysis revealed a target DNA region shared by all affected members of a particularly large family. Genome sequencing narrowed that finding to a gene defect passed from one generation to the next, suggesting that the gene is an inherited risk factor for the disease. "Studying entire families gave us a unique insight into the genetic factors that can increase risk of small intestinal carcinoid," said Wank.

"This innovative study embodies NIH's unmatched leadership in rare disease research," said NIDDK Director Griffin P. Rodgers, M.D. "Our new understanding of small intestinal carcinoid tumors gives scientists and [health care providers](#) a stronger platform to continue to develop proactive approaches in treatment, diagnosis and prevention."

More information: "A Hereditary Form of Small Intestinal Carcinoid Associated with a Germline Mutation in Inositol Polyphosphate

Multikinase." *Gastroenterology*. DOI: [10.1053/j.gastro.2015.04.008](https://doi.org/10.1053/j.gastro.2015.04.008)

Provided by National Institutes of Health

Citation: Study finds genetic link for rare intestinal cancer (2015, April 17) retrieved 27 April 2024 from <https://medicalxpress.com/news/2015-04-genetic-link-rare-intestinal-cancer.html>

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.