Medical Xpress

Research suggests women over 65 be offered hereditary cancer genetic testing

July 23 2021

Credit: CC0 Public Domain

A new study by Fergus Couch, Ph.D., of Mayo Clinic Cancer Center, along with collaborators from the CARRIERS consortium, suggests that most women with breast cancer diagnosed over 65 should be offered

hereditary cancer genetic testing. The study was published Thursday, July 22, in the *Journal of Clinical Oncology.*

Dr. Couch says that women over 65 rarely qualify for hereditary cancer genetic testing based on current testing guidelines because they are thought to exhibit low rates of genetic mutations in breast cancer genes.

"Most studies of breast cancer genes have not looked at older women, those who were diagnosed over the age of 65," says Dr. Couch. He says these studies have mainly tested women with a strong family history of breast or ovarian cancer rather than those in the general breast cancer population. By studying older women from the general breast cancer population, the investigators aimed to determine if these women should be routinely offered genetic testing.

"We were not sure what this study of the older breast cancer population would yield, but our results support broader testing, regardless of age or family history," says Dr. Couch.

The researchers evaluated women with breast cancer diagnosed after 65 and matched unaffected women from the large population in the CARRIERS study for age, race, and ethnicity.

"We found that mutations in actionable breast cancer risk genes were present in 3.2% of the women with breast cancer," says Dr. Couch.

When the researchers considered only high-risk breast cancer genes, including BRCA1, BRCA2 and PALB2, they found that 1.35% of women with breast cancer exhibited mutations and that more than 2.5% of women with estrogen receptor-negative breast cancer had high-risk mutations, regardless of their age.

"As 2.5% mutation frequency is often used to trigger genetic testing,

these results suggest that all women with estrogen receptor-negative breast cancer—and perhaps all women with breast cancer, including those diagnosed over age 65—should be offered hereditary breast cancer testing," says Dr. Couch.

Dr. Couch also notes that women over 65 with high-risk mutations may benefit from targeted therapies and improved risk assessment for secondary breast cancers. He adds that family members of these women also may benefit from risk assessment.

More information: Nicholas J. Boddicker et al, Risk of Late-Onset Breast Cancer in Genetically Predisposed Women, *Journal of Clinical Oncology* (2021). DOI: 10.1200/JCO.21.00531

Provided by Mayo Clinic

Citation: Research suggests women over 65 be offered hereditary cancer genetic testing (2021, July 23) retrieved 8 May 2024 from https://medicalxpress.com/news/2021-07-women-hereditary-cancer-genetic.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.