Despite Higher Positive Rates why are Men Missing Cancer Tests

A study published found that fewer men undergo genetic testing for hereditary cancer syndromes compared to women, but are more likely to test positive. This may indicate a potential gap in cancer risk surveillance and prediction.

Study

The researchers conducted a retrospective study of laboratory cancer testing data from adults collected between June 2020 and August 2023. This compared testing in men and women.

The study included assessment of demographic details, personal and family history of cancer, gene panel size, test results, and the proportion of tests that identified variants for which clinical actions such as surveillance or intervention have been recommended.

Gene panel size was stratified as small (<20 genes), medium (20–53 genes), and large (>53 genes).

Findings

The study analyzed data from 224,041 individuals, of whom only 5 % were men, highlighting a gender imbalance in genetic testing uptake. Men were also older at the time of testing, with an average age of 54 years compared to 43 years in women. Among participants with available ethnicity data, 47 % were White, while Hispanic and Black individuals accounted for 14 % and 13 %, respectively.

Clear differences emerged in how and why men and women underwent testing. Men were more likely to be of Ashkenazi Jewish ancestry and were seven times more likely than women to be tested through cascade testing after a pathogenic variant had been identified in a relative. At the same time, men were significantly more likely to have a personal history of cancer (27 % vs 13 %), but less likely to report a family history of cancer, with missing family history data also more common among men.

Referral pathways also differed by sex. Men were typically referred through primary care or general specialty clinics, such as internal or family medicine, whereas women were more often referred through women's health services. In addition, men were more likely to receive larger or custom gene panels, at rates three to four times higher than those seen in women.

Despite being tested less often, men were more likely to receive clinically significant results. The positivity rate for pathogenic or likely pathogenic variants was 14 % in men, compared to 8 % in women, which is notably higher than the approximately 5 % rate reported in unselected populations. Among individuals with such variants and available clinical data, 35.1 % of men and 19.3 % of women reported a personal history of cancer.

The types of cancers observed in men also showed distinct patterns. Among those with a personal cancer history, prostate, colorectal, and pancreatic cancers were the most commonly reported. However, pathogenic variants were most strongly associated with lung, stomach, colorectal, and multiple cancers in men.

Men were also more likely to carry actionable variants, particularly in BRCA1/2 genes, which were identified three times more frequently in men than in women. Together, these findings suggest that men may be undergoing testing later in the disease course, potentially after cancer has already developed, rather than as part of preventive risk assessment.

The authors suggest four courses of action: Improving research to better document and understand family cancer history among men, optimizing male-focused hereditary cancer risk prediction tools, identifying and addressing the reasons for low uptake of genetic counseling and preventive care, and integrating hereditary cancer screening more fully into routine healthcare for men, particularly in primary care settings.

Conclusion

While men were less likely to undergo genetic testing for hereditary cancers, compared to women, they were more likely to test positive when tested. Future research should establish the barriers to testing in men. In addition, healthcare professionals should be made aware of the need for such screening to ensure better cancer outcomes for these patients and their families.

Source:

https://www.news-medical.net/news/20260318/Why-are-men-missing-cancer-tests-despite-higher-positive-rates.aspx