

LETTERS TO THE EDITOR

Relationship of Ethnicity and Histologic Type of Breast Carcinoma in a West Indian Population

To the Editor:

Breast cancer and ethnicity have been studied mainly in first-world countries including the United States (1,2) and the United Kingdom (3) as it relates to incidence, prevalence, and survival in mainly white and black races. However, there is a paucity of data from the third world including the West Indies.

Trinidad & Tobago is an island located in the southernmost part of the Caribbean Sea adjacent to the South American coast. It has a very diverse racial mixture of persons of African (43%) and East Indian descent (41%), which accounts for most of the population. These persons are fourth-generation descendants of East Indian and African laborers who were brought here in the late 1800s from the African and Indian continents to work on plantations. Fifteen percent of the populace consists of persons of mixed descent and Caucasians, while Chinese and Arabs account for less than 1%. It is thus an excellent location for studying the relationship of ethnicity and breast cancer.

A 2-year retrospective analysis of breast carcinomas at the General Hospital, Port-of-Spain, Trinidad, West Indies, was conducted. Data were collected from the operating theater books and pathology records focusing on age, ethnicity, and histologic type of breast carcinoma in order to establish the relationship between these parameters.

The results showed Afro-Caribbean women were the most commonly affected group (54% of cases), with Indo-Caribbean women accounting for 35% of cases. Mixed races accounted for 11%. The most common age group affected was those patients 53–59 years of age.

Invasive ductal carcinoma (IDC) was the most commonly occurring histologic type (70% of 299 cases in 2 years), with invasive lobular carcinoma (ILC) accounting for 17%. Afro-Caribbean women were twice as likely to develop IDC and ILC compared to Indo-Caribbean women. Medullary, papillary, and mucinous adenocarcinoma types occurred 4%, 2%, and 3% of the time, respectively, and there were some other rare histologic types accounting for less than 4% of cases. These included squamous, tubular, and comedo carcinomas, sarcoma, mesenchymal

chondrosarcoma, and a very rare case of carcinoma occurring in a phyllodes tumor.

Most of the data from the United States focuses on comparing the similarities and differences in histology, biology, and survival of blacks and whites with breast cancer (1,2) and in the United Kingdom the focus has been mainly on incidence (3). It is well documented that survival after breast cancer diagnosis is significantly worse among African American women and that the age of diagnosis is significantly younger (4,5).

In summary, the data presented is far from complete; however, it still provides information previously unavailable in such a diverse racial mixture in the third-world island population of Trinidad & Tobago. Two points are highlighted from this data: There is clearly a greater chance of Afro-Caribbean women developing breast cancer than other races; and there is an unusually high incidence of ILC (17%) in the Trinidad population compared with global data (<4%).

We propose a more detailed and thorough analysis in relation to this topic, focusing more on genetic studies to determine the cause of this trend.

Shiva Dindyal, BS
Michael J. Ramdass, MBBS, MRCS
Dale Maharaj, FRCS
S. Barrow, MRCPATH
Neville Jankey, MRCPATH
Vijay Naraynsingh, FRCS, FACS

Department of Surgery, University of the West Indies,
General Hospital, Port-of-Spain, Trinidad, West Indies

REFERENCES

1. Zheng T, *et al.* Time trend of female breast carcinoma in situ by race and histology in Connecticut, USA. *Eur J Cancer* 1997;33:96–100.
2. Klonoff-Cohen HS, Schaffroth LB, Edelstein SL, Molgaard C, Saltzstein. Breast cancer histology in Caucasians, African Americans, Hispanics, Asians and Pacific Islanders. *Ethn Health* 1998;3:189–98.
3. Harding S, Rosato M. Cancer incidence among first generation Scottish, Irish, West Indian and Asian migrants living in England and Wales. *Ethn Health* 1999;4:83–92.
4. Joslyn SA, West MM. Racial differences in breast carcinoma survival. *Cancer* 2000;88:114–23.
5. Perkins P, Cooksley CD, Cox JD. Breast cancer. Is ethnicity an independent prognostic factor for survival? *Cancer* 1996;78:1241–47.