Hormone receptor–positive breast cancer has a worse prognosis in male than in female patients

Xiaoxian Li
Emory University, USA

Background: Male breast carcinoma (MBC) is treated similarly to female breast carcinoma (FBC), and similar survival rates for both have been assumed. We analyzed prognostic and clinico-pathologic features of MBC to determine whether MBC subtypes differ from FBC subtypes.

Methods: We reviewed data for 172,847 FBC and 1,442 MBC patients from 2010 to 2012 from the National Cancer Institute Surveillance, Epidemiology, and End Results database. Carcinomas were subtyped by hormone receptor (HR) and human epidermal growth factor-2 (HER2) status as HR+/HER2–, HR+/HER2+, HR–/HER2+, and HR–/HER2–.

Results: The overall incidence of MBC in all breast carcinoma cases was 0.8%. MBC was more frequently HR+/HER2– than FBC was (78.3% vs. 67.4%) and less frequently HR–/HER2– (2.1% vs. 10.9%). More MBC was staged as III or IV (24.9% vs. 17.2%). MBC had significantly worse overall survival (OS) than FBC (P<0.0001). After adjustment for age, ethnicity, and tumor grade, stage I and II MBC had significantly worse OS time than stage-matched FBC had (P=0.0011 for stage I, P=0.0229 for stage II). When stage- and subtype-matched patients were compared, MBC had significantly worse OS than FBC for stage I overall, for sub-stages IA and IIB HR+/HER2– carcinoma, and for stage III HR+/HER2+ carcinoma. Furthermore, MBC patients with HR+/HER2– T1aN0 carcinomas had worse OS than FBC patients had.

Conclusions: Patients with MBC have worse survival than patients with FBC, especially for early-stage HR+ breast cancers. More studies are needed optimize treatment for MBC.

Biography
Xiaoxian Li finished his breast pathology fellowship at the MD Anderson Cancer Center. He is an Assistant Professor in the Department of Pathology and the Associate Director of the Glenn Family Breast Center, Winship Cancer Institute at Emory University, Atlanta. He has published more than 25 peer reviewed articles in breast diseases.

xli40@emory.edu

Notes: