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PLoS ONE

Volume 15, Issue 8 August 2020, August 2020, Article number e0237811

Triple-negative breast cancer in Peru: 2000 patients and 15 years of experience (Review) (Open Access)

De-La-Cruz-Ku, G., Luyo, M., Morante, Z., Enriquez, D., Möller, M.G., Chamberg-Michilot, D., Flores, L., Luque, R., Saavedra, A., Eyzaguirre-Sandoval, M.E., Luján-Peche, M.G., Noel, N., Calderon, H., Razuri, C., Fuentes, H.A., Cotrina, J.M., Neciosup, S.P., Araujo, J., Lema, A., Pinto, J., Gomez, H.L., Valcarcel, B.

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Abstract

Background Epidemiological studies commonly identify the clinical characteristics and survival outcomes of patients with breast cancer at five years. Our study aims to describe the sociodemographic, clinicopathological characteristics and determine the long-term event-free survival (EFS) and overall survival (OS) of a Peruvian population with triple-negative breast cancer. Methods We reviewed the medical records of new cases treated at a single institution in the period 2000–2014. The survival analysis included patients with stages I–IV. Survival estimates at 10 years were calculated with the Kaplan-Meier method and compared with the Log-rank test. We further used multivariate Cox regression analysis to calculate prognostic factors of recurrence and mortality. Results Among the 2007 patients included, the median age at diagnosis was 49 years (19–95 years). Most patients presented histologic grade III (68.7%), tumor stage II (34.2%), and III (51.0%) at diagnosis. Local and distant relapse was present in 31.9 and 51.4% of the patients, respectively. The most frequent sites of metastasis were the lungs (14.5%), followed by bone (9.7%), brain (9.6%), and liver (7.9%). The median follow-up was 153 months. At 3, 5, and 10 years, the EFS of the population was 55%, 49%, and 41%, respectively, while the OS was 64%, 56%, and 47%, respectively. Moreover, an N3 lymph node status was the most important prognostic factor for both disease relapse (HR: 2.54, 95% CI: 2.05–3.15) and mortality (HR: 2.51, 95% CI: 2.01–3.14) at ten years. An older age and higher T staging were associated with a worse OS, while patients who received radiotherapy and adjuvant chemotherapy had better survival rates. Conclusion The sociodemographic features of Peruvian patients with TNBC are similar to those of other populations. However, our population was diagnosed at more advanced clinical stages, and thus, EFS and OS were lower than international reports while prognostic factors were similar to previous studies. © 2020 De-la-Cruz-Ku et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

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Funding details

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The authors received no specific funding for this work. We thank all the healthcare and administrative personnel of the National Institute of Neoplastic Diseases for their support in the development of this manuscript. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

ISSN: 19326203
CODEN: POLNC
Source Type: Journal
Original language: English

DOI: 10.1371/journal.pone.0237811
PubMed ID: 32833983
Document Type: Review
Publisher: Public Library of Science

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