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Prevalence and survival of stage IV male breast cancer: A SEER database analysis

P. Miguel-Semedo1, C. Costa Lopes Pinto1, L.A. Marques Da Costa1, A. Ferreira1
1Medical Oncology Dept., Hospital Santa Maria - Centro Hospitalar Universitario de Lisboa Norte E.P.E., Lisbon, Portugal; 2Breast Unit, Champalimaud Clinical Center, Champalimaud Foundation, Lisbon, Portugal

Background: Male breast cancer (BC) is a rare disease, accounting for <1% of all BC cases in the United States. Delay in diagnosis can result from lack of awareness of the existence of BC among men. Since it is often late diagnosed, male BC remains a substantial cause of morbidity and mortality. The goal of this study was to evaluate the proportion of stage IV patients and their survival outcomes over time using SEER (Surveillance, Epidemiology, and End Results) data.

Methods: The data of the study was derived from SEER database. We identified patients who were male, have known age and a diagnosis between 2000-2016. We stratified year of diagnosis in 5-year categories (2001-2005; 2006-2010 and 2011-2016). Primary outcome was stage IV cancer specific survival (CSS) over time.

Results: A total of 7,339 male patients were identified. Proportion of patients with stage I-III was 79.9%, 92.0% and 91.1%, respectively by year of diagnosis category. Stage IV patients accounted for 20.1%, 8.0% and 8.9%, respectively, by year of diagnosis category. The proportion of patients with stage IV at diagnosis decreased over time (p<0.001). Patterns of metastatic spread were stable over time. After a median follow-up of 50.0 months (IQR 20.0-94.0), median CSS for stage IV patients was 28.0 months (95CI 22.3-33.7); 36.0 months (95CI 28.47-43.5) and 33.0 months (95CI 26.1-40.0) for the 3 consecutive time intervals (p=0.561). 5-year CSS was 21.4%, 26.8% and 15.5%, respectively.

Conclusions: Despite the reduction in stage IV diagnosis after 2005, no significant nor consistent improvement in CSS was achieved across the 3 time periods. These results raise awareness towards the need of treatment innovation uptake in the male community of metastatic breast cancer patients.

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Impact of COVID-19 on diagnosis and surgical care of patients with breast cancer

A.K. Lekshmi, D.V. Kumar, P. K, J.P. Dharmarajan, S. Soman, H. Jayamohanan, A. Vinod
Breast Oncology, Amrita Institute of Medical Sciences, Kochi, India

Background: The COVID-19 pandemic took the attention of people in India when the first case was reported on January 30, 2020 and that was from Kerala. On March 21, 2020 lockdown was implemented throughout the country. When the pandemic accelerated, the routine health care system around the state was interrupted. The main aim of our study was to evaluate the effect of the COVID-19 pandemic on diagnosis and surgical care for patients with breast cancer in our institution.

Methods: This single-centre retrospective study was conducted to evaluate the effect of COVID-19 on the diagnosis and surgical care for patients with breast cancer before and after the pandemic. The data was collected from the electronic medical records of the hospital from March 2020- December 2020 and was compared with the data in the pre-pandemic time i.e., from March 2019- December 2019.

Results: Apart from the above-mentioned results 3 patients tested positive for SARS-CoV-2 in the pre-pandemic time i.e., from March 2019- December 2019.

Table: 154P

|                      | 2019       | 2020       | P Value |
|----------------------|------------|------------|---------|
| Mean age             | 54.96+/13.065 | 53.20+/11.944 | 0.261   |
| Total mammograms     | 3689       | 1901       |         |
| Total core biopsy    | 391        | 367        |         |
| New patients         | 614        | 354        |         |
| Total number of surgeries | 318     | 287        |         |
| Total no of bcs      | 127        | 93         | 0.015   |
| Duration of symptoms (weeks) | 20+/56.38 | 15+/24.3   | 0.188   |
| Time taken for treatment (days) | 25.05+/52.12 days | 31.52+/44.44 days | 0.306   |
| Average tumour size  | 2.92+/1.65 cm | 2.91+/1.31 cm | 0.963   |
| Advanced stage       |            |            |         |
| *size > 5 cm         | 23         | 25         | 0.762   |
| *nact                | 24         | 37         |         |
| Duration of hospital stay | 3.84+/1.485 days | 3.97+/1.536 days | 0.306   |
| Total patients with complications | 113     | 83         |         |
| No of patients with post op infection | 39      | 25         | 0.186   |

Profile of pathogenic mutations and evaluation of germline genetic testing criteria in consecutive breast cancer patients treated at a North Indian tertiary care center

A. Mitra1, A. Pramanik1, A. Gogia1, A. Batra1, A. Jha2, L. Kumar1, S. Deso1, S. Bhornal1, K.S. Deb1, E. Dhamija1, V. Ramprasad1, O. Olopade1
1Medical Oncology Department, AIIMS - All India Institute of Medical Sciences, New Delhi, India; 2Surgeon Oncology, AIIMS - All India Institute of Medical Sciences, New Delhi, India; 3Psychiatry, AIIMS - All India Institute of Medical Sciences, New Delhi, India; 4Radiology, AIIMS - All India Institute of Medical Sciences, New Delhi, India; 5Genetics, AIIMS - All India Institute of Medical Sciences, New Delhi, India; 6Center for Clinical Cancer Genetics and Global Health, University of Chicago, Chicago, IL, USA

Background: The burden of hereditary breast cancer in India is not well defined. Moreover, genetic testing criteria (NCCN and MCG PLUS criteria) have never been validated in the Indian population.

Methods: All new female patients with invasive breast cancer attending our OPD from 1st March 2019 to 28th Feb 2020 were screened. Those without previous genetic testing and providing informed consent were recruited. Patients were divided into those qualifying or not qualifying NCCN/MCG PLUS criteria. Hereditary multigene panel testing by next generation sequencing with reflex MLPA from peripheral blood was performed after pre-test counselling. Frequency of P/LP mutations between two groups was compared and sensitivity of testing criteria was computed.

Results: 236 patients were included (median age 45 years). Majority were Hindus (88.5%) and married (95%). 34 (14%) women had a family history suggestive of HBOC. Around 35% (83/236) had TNBC. 44/236 (18.64%) patients had a P/LP mutation with sensitivity of testing criteria was computed.

Conclusions: Frequency of P/LP mutations among breast cancer patients is high in India with significant contribution of non-BRCA genes stressing the importance of multigene testing. Age cut off needs to be relaxed in testing criteria in order to expand access to testing. Uptake of risk-reducing interventions remains low and is an area of unmet need.

Disclosure: All authors have declared no conflicts of interest.

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A.K. Lekshmi, D.V. Kumar, P. K, J.P. Dharmarajan, S. Soman, H. Jayamohanan, A. Vinod
Breast Oncology, Amrita Institute of Medical Sciences, Kochi, India

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