

Demographic, Clinical and Mammogram Features of Breast Cancer Patients

W.K.N.R. Chandrasiri*

University of Peradeniya, Peradeniya, 20400, Sri Lanka

**nishadi@ahs.pdn.ac.lk*

Breast cancer is the most commonly diagnosed cancer affecting women worldwide, including Sri Lanka. Over the past few years, the incidence of breast cancer has risen steadily as the second leading cause of cancer death among women. Mammography remains the most commonly used imaging modality, with a high sensitivity and specificity in detecting breast cancers, including invasive ductal and invasive lobular carcinomas. This study aimed to investigate demographic characteristics, clinical presentations, and mammographic features in a cohort of Sri Lankan women with breast cancer. A retrospective study was carried out using a database maintained at the mammography unit, Cooperative Hospital, Kurunegala, Sri Lanka, between 2021 and 2024. A total of 451 breast cancer cases in the database were reviewed and analyzed. The age of the included subjects ranged from 26 to 92 years, with a mean age of 49.25 ± 11.69 years. The majority of them were aged 51–60 years (38.14%). Out of the total study population, most breast cancer women had fatty breast composition (61.20%), and their commonest clinical presentation was a breast lump (41.91%). From the mammogram image findings, 81.15% of cases presented with a mass with spiculated margins. While lymph node enlargement (100%) was seen among all breast cancer cases, architectural distortions (24.17%) and micro-calcifications (22.39%) were other frequently identified features in mammography. The upper outer quadrant was the most frequent breast tumor location (33.92%), and 57.43% of lesions were larger than 2 cm. Most cases were classified as BIRADS 5 (57.43%), indicating a high suspicion of malignancy. In conclusion, breast cancer was most common in women over 50 years, with fatty breast compositions and breast lumps being the most common clinical presentation. Spiculated masses, lymph node enlargement, and upper outer quadrant involvement were frequently observed, highlighting the importance of mammographic screening for early detection among women who are more vulnerable to breast cancer depending on age and clinical symptoms.

Keywords: Breast cancer, mammograms, fatty breasts, breast lumps, BIRADS 5