

Breast cancer in very young women (≤ 35 years)

A descriptive analysis from an internationally accredited breast unit in South Africa
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Background

Young women constitute a special subpopulation of breast cancer patients. The European School of Oncology and the European Society of Medical Oncology (ESMO) define 'young women' as women less than 40 years of age at the time of breast cancer diagnosis. The consensus guidelines also distinguish young women from 'very young women', with the latter group comprising women of age ≤ 35 at diagnosis. It is well documented that breast cancer in young women have unique clinical and biological features that are not seen in older women. Literature dictates that young women present with more advanced disease, breast tumour biology is more aggressive and is associated with an unfavourable prognosis. However, there is a scarcity of published data of breast cancer in *very young* women in our setting.

Aim

To conduct a retrospective review of the incidence of breast cancer in very young women (≤ 35 years of age). To describe their clinical stage at presentation, imaging modalities used, tumour biology and surgical management.

Materials and Methods

A single centre, retrospective seven year descriptive cohort study was undertaken at the Breast Care Centre of Excellence, an internationally accredited breast unit based at Netcare Milpark Hospital, Johannesburg, South Africa. Data was collected from the BCCE MIDAS accreditation database. All female patients ≤ 35 years old diagnosed with invasive and in situ breast cancer were included. Patients with incomplete medical records were excluded. Descriptive statistics were used to describe the patient population and the commonest stage of presentation, imaging modalities used, tumour biology and surgical management. Ethics clearance was obtained from Pharma- Ethics (No170416525).

Results

3392 patients were diagnosed with breast cancer over a period of 7 years. Only 5.3% comprised of breast cancer in very young women. The median age was 28.5 years (Inter Quartile Range 22-35 years) with the youngest patient being 22 years. All patients were offered genetic testing, but only 5 patients (2.9%) proceeded to have the test done. Majority of patients (70.1%) presented with early breast cancer, 17.8% presented with locally advanced cancer and no patient presented with de novo metastatic disease. 12 patients (6.9%) presented after having already had an excision biopsy. 69.5% of patients had an MRI in conjunction with an ultrasound and limited mammogram. The commonest histological subtype of breast cancer was invasive mammary carcinoma NST (90.8%) grade 3 (51.1%). 37.6% of patients were Luminal B followed by triple negative breast cancer (28.5%). 78.7% of patients diagnosed with early breast cancer received primary systemic therapy. 59.1% of all patients had oncoplastic breast conserving surgery. All patients had access to intraoperative pathology and radiology resulting in a 100% negative margin rate.

Conclusion

Breast cancer in very young women is uncommon. Despite a lack of breast screening programs in this age group, majority of patients in our population presented with early breast cancer. This highlights the importance of patient education, awareness and access to health care so that any breast lump can be investigated appropriately and promptly. The impact of being diagnosed with cancer at a very young age is profound. These patients should thus be managed using the expertise of a multidisciplinary team with special emphasis on issues of fertility, addressing psychosocial stressors and providing adequate lifestyle (survivorship) support.