Young Breast Cancer in a Specialised Breast Unit in Singapore: Clinical, Radiological and Pathological Factors

Sze Yiun Teo, 1MBBS, FRCR, Esther Chuwa, 2MBBS, FRCS, Suvarna Latha, 1MBBS, FRCR, Yi Ling Lew, 2MBBS, Yah Yuen Tan, 3MBBS, FRCS

Abstract

Introduction: Whilst only 5.5% to 7% of breast cancer occurs in women less than 40 years of age in the West, the incidence has been reported in up to 18% in Asian population. This study seeks to evaluate our unit’s experience in breast cancer in young women.

Materials and Methods: A retrospective review of our database identified women with newly diagnosed breast cancer from January 2006 to February 2011. Patient demographics, clinical presentation, imaging and pathological findings and treatment received were determined. Results: Out of a total of 1160 women with breast cancer, 135 (11.6%) were under 40 years of age and made up our study population. The most common presentation was a self-detected breast lump. Most patients did not have a positive family history. Mammography demonstrated abnormal findings in 78% of patients. Ultrasound was very sensitive in the evaluation of a breast lump and demonstrated abnormal findings in 95%.

Out of 129 women, 40 (31%) underwent breast-conserving surgery of which 5 (12.5%) proceeded to mastectomy due to involved margins. Also, 89 out of 129 women (69%) underwent mastectomy of which 19 (21.3%) had immediate reconstruction. Of a total of 121 primary resections, 94% were invasive ductal carcinoma while 15.5% were pure ductal in-situ carcinomas. The majority (61.2%) showed high grade disease. Conclusion: Most young breast cancer patients present with a self-detected breast lump and do not have a positive family history. A strong clinical index of suspicion and appropriate breast imaging workup are useful for the early and accurate diagnosis of breast cancer in young women.

Key words: Breast carcinoma, Breast imaging, Family history, Symptoms, Young age

1Department of Diagnostic and Interventional Imaging, KK Women's and Children's Hospital, Singapore
2Gleneagles Hospital, Singapore
3Mount Elizabeth Medical Centre, Singapore

Address for Correspondence: Dr Sze Yiun Teo, Department of Diagnostic and Interventional Radiology, KK Women's and Children's Hospital, 100 Bukit Timah Road, Singapore 229899.

Email: Teo.Sze.Yiun@kkh.com.sg