EPIDEMIOLOGICAL PATTERN OF BREAST CANCER IN THE UAE

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Introduction: Universally, breast cancer is the most common cancer in women with over half a million women in the world dying from it annually. In the Arab World, the impression is that breast cancer occurs in women younger than those from Western countries. Statistical data to support this impression is difficult to source as most Arab countries do not have publicly-available national cancer registers and if they do, the data may not be reliable. Due to the scarcity of published data on breast cancer in the UAE, we conducted a retrospective epidemiological study to look at the basic pattern of the disease in the UAE and to determine if there are any statistical associations to a few of the known risk factors.

Method: Files of 1,000 female cases of invasive breast cancer, seen by one breast specialist, between June 2000 and June 2017, were reviewed and the following risk factors were tabulated for each patient: Age at diagnosis, age at menarche, age at first child (full term) and breast-feeding history (at least one child for at least 2 weeks). Descriptive statistical analyses were performed separately for each risk factor and inferential statistical analyses (Anova and t-tests) were generated using Wizard, statistical software for Mac, looking for associations between the various risk factors.

Results: Overall, 64.9% of the women in the study were aged younger than 50 years at diagnosis. The mean age at diagnosis was 46.8 with a SD of 10.7 years. The age at menarche ranged from 9 to 19 years with an overall mean of 13.0 and a SD of 1.5 years. Anova test showed no correlation between the means for age at diagnosis and age at menarche (p value of 0.227). There were 236 (23.6%) women without children. Of the rest, the age at 1st child ranged from 13 to 56 years with an overall mean of 26.8 and a SD of 5.8 years. Anova testing showed that there was a significant correlation between mean age at diagnosis and mean age at 1st child ($p<0.001$). For the 764 women who had children, 89.3% of them breast-fed however t-test showed no significant relation between age of diagnosis and breast-feeding (p value of 0.669).

Discussion: Results on age at diagnosis of breast cancer for women in the UAE (mean of 47 years) is consistent with other studies from the MENA region of 48 years[2]. In the West, breast cancer is a disease of older women with only 20% of cases occurring under the age of 50. Our data showed that almost 65% of cases occurred under the age of 50. The concern here is not just why this is the case, but how can we successfully screen such young women for breast cancer. Interestingly, almost a quarter of the women in our sample did not have any children, itself a known risk factor. Breast-feeding is thought to be a protective factor and most women in the UAE do breastfeed (89.3%) but still get breast cancer young. The only significant correlation we found in our study was between age of diagnosis and age at first child. Women who had their first child aged 21 years or younger developed breast cancer at an older age - in fact, over the age of 50. Our data showed the age of diagnosis to decrease as the age at 1st child increased over the age of 21.

Conclusion: Until we find a good screening tool for breast cancer in young women, raising breast cancer

awareness in the UAE should be a primary goal for the government, which should be directed at women at least 10 years younger than the mean age of diagnosis.

References:

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