

Is increased fish intake related with breast cancer risk - A matched case control study among women in Karachi, Pakistan

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Background: Diet could be a major modifiable risk factor for BC prevention. The predictive or protective effects of different food items have been investigated in several epidemiologic studies and are of interest to breast cancer researchers. However, in Pakistan, there are no studies that have evaluated the impact of dietary factors on breast cancer risk.

Objective: The objective was to assess the association between different food items and breast cancer risk in a hospital-based matched case-control study in two tertiary care hospitals of Karachi, Pakistan.

Methods: Between Jan 2008 and Dec 2009, 297 cases of histologically confirmed breast cancer and 584 controls matched according to ± 5 years age and hospital were interviewed. A detailed quantitative food-frequency questionnaire was used to assess the usual intake of 36 food items 1 year prior to the disease and over 90% of commonly used foods in Karachi.

Results: We estimated mean daily intake of food items among both cases and controls. Food items that are considered to be predictive (meat, fried foods, and sweets) or protective (raw vegetables, fruits, green tea, and nuts) were categorized into tertiles. We conducted conditional logistic regression analysis to assess the association between tertiles of intake of each food item and BC, adjusting for age at menopause, family history of breast cancer and parity. Consumption of sweet food item of halwapiuri was positively associated with breast cancer risk [adjusted odds ratio (OR) comparing the highest to the lowest tertile: 1.6, 95% confidence interval [(CI): 1.21-2.12]. We also observed significant positive and graded association between the intake of each of the following food items and BC; fish (OR=1.72, CI: 1.13, 2.63), potatoes (OR=1.74, 1.16, 2.62) and butter (OR=1.9; 95% CI: 1.20-3.11). Conversely, we observed an inverse and weak association between BC and the intake of green tea with higher levels being protective (OR in the highest as compared to lowest tertile= 0.71, CI 0.49-1.02). Milk dessert (OR= 0.54; CI 0.35, and 0.840. No relationship was found between beef, mutton, chicken, fruits, dry fruits, regular tea use and breast cancer risk. Similarly, eggs or bread did not increase the BC risk.

Conclusion: Our study indicates that frequent consumption of sweet foods like halwapiuri may be associated with an increased risk of breast cancer. These results are consistent with other studies that implicate insulin-related factors in breast carcinogenesis. Similarly, fatty foods like butter and fried potatoes were associated with increased BC risk. The unexpected association of breast cancer risk with use of fish needs further exploration in our setting.

Key words: Breast cancer, diet, and case control study

Age related quality of life among selected breast cancer patients in Aden, Yemen

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Background: Evaluation of the quality of life (QOL) among breast cancer patients, after their exposure to the disease stress and therapeutic traumas is not performed in Aden.

Objective: To assess the QOL of Yemeni patients with early stage breast cancer in Aden according to their age.

Patients and Methods: This was a cross-sectional study conducted in Aden by using the FACT-B scoring system version 4. The study enrolled 58 female patients who attended for follow-up investigations in the Central Public Health Laboratories - Aden branch, for the period from July to September 2010.

Results: The overall QOL score ranges from 40 to 134, with a mean of 77.6 (median 74). The mean score for various subscales were: (GP; 21.3 \pm 3.2), (GS; 17.2 \pm 6.3), (GE; 18.2 \pm 2.1), (GF; 7.8 \pm 2.7). The mean scores for breast cancer specific subscale (B) was 21.2 \pm 5.4. Younger patients were having worse QOL in breast cancer specific concerns, except in B4 item (related to sexuality) when compared to older patients.

Conclusion: This study concluded that Yemeni patients with early breast cancer are having lower QOL after treatment, this QOL was deteriorated among younger patients when compared to older patients.