

Clinical Correlation Of Breast Cancer Among Sudanese Female Patient

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Background: A total of 328 women were selected retrospectively from this group the patients of breast cancer had been analyzed using menarche, history of breast cancer in a first degree relative, body mass index, abortion, parity, lactation, use of medication to suppress lactation. **Objective:** To evaluate the Many risk factor have been identified either genetic factor which include family history of breast cancer, obesity and high fat diet or hormonal factors which include long interval between menarche have resulted in several aetiological hypotheses. **Results:** Patients having menarche at an age more than 12 years are (58%), while Patients with history of cancer is a first degree relative are (9%). Breast cancer patients having no children (nulliparous) are (38%), patients having one to two Childs are (12%) and those having three children or more are (88%). patients who have a history of abortion are (29%), patients having history of lactation are (96%), and Patients having used medication to suppress lactation who are (2%), while patients with body mass index less than 29 kg/m² are (88). **Conclusion:** The study revealed statistically significant difference between breast cancer and age at menarche less than 12 years, history of breast cancer in a first degree relative, parity and body mass index, whereas, history of abortion or miscarriage, lactation, use of medication to suppress lactation.

Keywords: Breast cancer, Risk factors

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Introduction

The International Agency for Research on Cancer (IARC), the specialized cancer agency of the World Health Organization, in its World Cancer Report 2014 observed that as a consequence of growing and ageing populations, developing countries are disproportionately affected by the increasing numbers of cancers. Therefore more commitment to prevention and early detection is desperately needed in order to complement improved treatments and address the alarming rise in cancer burden globally [1].

The incidence of cancer in Sudan has nearly doubled from 2001 to 2007 (Cancer registry record). As opined by several experts a potential surge in cancer cases in Sudan is likely to occur in immediate future [2]. Cancer of the breast is the fifth most common neoplasm in the industrialized countries and in the United States, with an estimated increasing new cases of breast cancer diagnosed in 2010 [3].

Cancer is a disease characterized by abnormal growth and development of normal cells beyond their natural boundaries. Despite of global efforts to limit the incident of this disease, cancer has become the leading cause of death in the last 50 years [4]. The burden of cancer is increasing in economically developing countries as a result of population aging and adoption of cancer-associated lifestyle including smoking and physical inactivity. Based on the most recent report available, GLOBOCAN estimated that about 12.7 million cancer cases and 7.6 million cancer deaths have occurred in 2008; of these, 56% of the cases and 64% of the deaths occurred in the economically developing world [5]. While cancer rates in general are decreasing in the United States and many western countries, they are increasing in less developed and economically transitioning countries [6].

Breast cancer results when cell in the breast begin to grow unregulated and out of control and can then invade near-by tissues or spread throughout the body. Large collections of this out of control dividing tissues are called tumors. However, some tumors are not really cancer because they cannot spread or threaten someone's life. These are called benign tumors. The tumors that can spread throughout the body or invade nearby tissue are considered cancer and are called malignant tumors [7].

In most cases, survival rates for patients with the cancers, especially those detected at an advanced stage, remain discouragingly low. Patients with early detection of cancer have better rate of recovery and survival than patients with more advanced cancer. In most cases, detection of stage 1 cancers is associated with a >90% five-year survival rate [8].

Materials and Methods

This is a descriptive study, conducted in Radiation Isotopes Centre Khartoum (RICK) during the period from January 2012 to August 2014.

328 females, all originating from the Sudanese, were eligible for analysis, derived from the Breast Unit's database of screened patients who had not developed breast cancer after a median follow up period of 40 months (range 12–92 months). The interview followed a structured questionnaire.

The following variables were analyzed for all patients

Age at menarche (≤ 12 and >12 years old), parity (nulliparous, 1 or 2, and >3), lactation (yes/no), use of medications to suppress lactation (yes/no), abortions and miscarriages (yes/no), family history of breast cancer in a first degree relative (yes/no), obesity on the day of the interview ($\text{BMI} \leq 29 \text{ kg/m}^2$ vs. $\text{BMI} > 29 \text{ kg/m}^2$)

Ethical considerations: The aims methods of this study are fully explain to the patients and their consent to participate in this study is obtain. The questionnaire filled in the presence of patient; the results shown and discussed with the patients.

Statistical analysis: Data will be analyzed using SPSS program.

Result

Breast cancer patients in whom menarche started at an age Less than 12 years are 141 patients (42%). Those having menarche at an age more than 12 years are 187 patients (58%).

Patients with no history of cancer in a first degree relative are 298 (91%) while those with history of cancer is a first degree relative are 30 (9%).

Breast cancer patients having no children (nulliparous) are 126 (38%) of the cases,

Patients having one to two Childs are 24 (12%) and chose having three children or more are 178 (88%).

The breast cancer patients not having a history of abortion or miscarriage are 233 (71%), which is more than the breast cancer patients who have a history of abortion or miscarriage giving the number of 95 (29%).

The breast cancer patients not having history of lactation are 8 (4%), which is less than the breast cancer patients having history of lactation which constitutes 194 (96%).

The breast cancer patients not having used medication to suppress lactation are 198 (98%) of the cases, which is more than breast cancer patients having used medication to suppress lactation who are 4 (2%).

The breast cancer patients with body mass index less than 29 kg/m² are 288 (88%) which is more than the breast cancer patients with body mass index more than 29 kg/m² who are 40 (12%).

Discussion

The interview was conducted during the subjects' first visit to the unit and before clinical examination or any other intervention took place. This constitutes an advantage, because there was no chance that the subjects would be influenced by the diagnosis and might therefore falsely inflate the relative risk. Thus, the likelihood of recall bias is not high; improving the comparability of several covariates in group, and the selection bias is lessened since all subjects had taken the same route through the Breast Unit's standard routine procedures.

Since each case group, any selection bias would be expected to have a similar effect on the estimates in the tumor subgroups.

Conclusion

Further innovative studies with larger sample sizes are needed to examine how the status of these potentially modifiable breast cancer risk factors.

Their findings will provide us with greater insight into breast cancer aetiology and will help us identify any association that would help discriminate subgroups of women at higher risk.

Lastly, we recommend further studies in this field with wider scope.

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Reference

1. Accessed on February 4, 2014; http://www.iarc.fr/en/media-center/pr/2014/pdfs/pr224_E.pdf
2. Strategic priorities for advanced medical and health research. Doc .No. 39P0001-PLN-0001-ER01; <http://www.kacst.edu.sa/en/research/Documents/MedicalAndHealth.pdf>. (Retrieved from URL).
3. Jemal A, Siegel R, Xu J, Ward E. Cancer statistics, 2010. CA Cancer Journal for Clinicians. 2010; 60(5):277–300.
4. World Health Organization. Cancer fact sheet. February 2011. Accessed March 30, 2012. <http://www.who.int/mediacentre/factsheets/fs297/en/index.html>.
5. Ferlay J, Shin HR, Bray F, Forman D et al. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. Int J Cancer 2010;15; 127; 2893-917
6. Jemal A, Center MM, DeSantis C, Ward EM. Global patterns of cancer incidence and mortality rates and trends. Cancer Epidemiol Biomarkers Prev. 2010; 19; 1893-907.
7. Souliami R, Tannock I, Hobenberger P, Horiot JC. The Oxford textbook of oncology. Oxford University, 2001.
8. Rossa JS, Fletcher JA, Linette GP, et al. The HER-2/neu Gene and Protein in Breast Cancer 2003: Biomarker and Target of Therapy. The Oncologist 2004;8; 307-325
9. Bancroft, JD, Gamble M. Theory practice of histological techniques, 5th ed. Churchill Livingstone; P. 127, 130, 421 – 423, 453 (2002).

10. Bancroft JD, Gamble M. Theory & Practice of Histological Techniques, 5th Edition Churchill Livingstone; 2002: P 423-424.

11. DAKO A/S, Glostrup DK-2600 Denmark, code # K 5204. 2nd edition.

12. Statement of the American Society of Clinical Oncology on potential misconduct in South African trial - improprieties in breast cancer study of high-dose chemotherapy reported to ASCO [Internet]. Alexandria, Va: American Society of Clinical Oncology, 2000. Available at [Http: //www.asco.org/people/nr/html/genpr/m_0200trialpr.htm](http://www.asco.org/people/nr/html/genpr/m_0200trialpr.htm) Accessed 07/12/01.

