INDUCED ABORTION AND RISK FOR BREAST CANCER: OBSERVED RELATIONSHIP IN BENIN CITY, NIGERIA.

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SUMMARY

Background: The incidence of breast cancer worldwide is increasing. The established risk factors for breast cancer are being used to counsel and enlighten the public to prevent the disease but the incidence is still on the rise.

Aims of Study: To search for new risk factors for breast cancer, specifically to determine the relationship of induced abortions and breast cancer.

Patients and Methods: Biodata, risk factors, parity and abortion profile of all 145 female breast cancer patients seen in over a three year period were entered into a data sheet and analyzed by simple proportions and percentages.

Results: Breast cancer patients who had procured induced abortion were diagnosed with the disease nearly a decade and half earlier than in breast cancer patients who never had induced abortion.

Conclusion: Induced abortion, in the presence of same risk factors for breast cancer, caused the disease to be induced at a much earlier age than in the patients who did not procure abortion. We, therefore, advocate that induced abortion be discouraged. Women who must have an abortion should be counseled on increased risk of breast cancer as part of the informed consent for termination of pregnancy.

(Key words: Induced abortion, Risk, Breast Cancer)

INTRODUCTION

The incidence of breast cancer is increasing worldwide. The global number of cases rose from 572,000 in 1980 to 1,050,000 in 2000. The reasons for these increases are currently unexplained and possible hypotheses relate to abortion of pregnancies and environmental factors. The mortality from breast cancer is however on the decline in the United States of America and the developed countries on account of widespread screening programs that detect breast cancers at early treatable stages. In Nigeria, 80% of the patient still present with late or advanced disease. Increasing incidence and late presentation with advanced disease are a heavy burden on the health care delivery system.

The increasing incidence world wide and near epidemic incidence of breast cancer in some countries, has led to the search for new risk factors. The decades of increasing incidence of breast cancer correspond to the period from the 1970s that induced abortion was legalized in all of the United States and some European countries. In Nigeria, even though induced abortion is illegal, studies show that it is very widely practiced. In Benin City, Murray et al found that 41% of all pregnancies reported by young women were terminated, and they estimated the age specific abortion rate for 15-19-year-olds in Edo State at 49 abortions per 1000 women. The issue thus is, whether the increased practice of induced abortion has any relationship to the increasing incidence of breast cancer worldwide.

Results of studies on whether induced abortion is a risk factor for breast cancer have been very controversial. Proponents and opponents of a positive association between induced abortion and breast cancer are pitched against each other. Joel Brind et al in their 1996 “comprehensive review and meta-analysis” of 21 extant studies on induced abortion and breast cancer reported an overall statistically significant odds ratio (OR) of 1.3, thus establishing a strong causal association between breast cancer and induced abortion. This position was supported by several other studies that induced abortions increases the risk of breast cancer. However the Harvard Nurses Study II, other researchers, public health authorities and the United States' National Cancer Institute (NCI) described this association as inconsistent and/or inconclusive. The NCI, less than seven years later in 2003, in a workshop analyzed the data from 10 prospective studies, and concluded...
that it is well established that induced abortion is not associated with an increase in breast cancer risk. Results of several other prospective studies also support this null association between breast cancer risk and induced abortion.

Criticisms have trailed both groups of studies. The 1996 review by Brind et al, being retrospective studies, was accused of recall bias. On the other hand the prospective studies have been flawed by a short follow-up period of less than 10 years, as the induction of breast cancer typically takes several years.

In Nigeria, induced abortion is not only illegal, it is condemned by the major religious faiths of Christianity and Islam. A ministerial committee of inquiry reported an estimated 500,000 cases of abortion in 1980. It is procured in secrecy and only patients with major morbidity will volunteer information on it.

In this study, we therefore used data from our patients with breast cancer who readily volunteered information when they were being clerked in the surgical out-patient clinics.

**PATIENTS AND METHOD**

This study was designed to find the age at diagnosis of breast cancer patients who had procured induced abortion. Data on all 145 female breast cancer patients seen over a 3 year period between January 1999 and December 2001 at the Surgery services of the University of Benin Teaching Hospital (UBTH) was entered into a Microsoft Excel data sheet. In addition to biodata and the known risk factors for breast cancer, data was entered for parity, spontaneous and induced abortions. Data was analyzed by the same software.

**RESULTS**

There were 145 female breast cancer patients in the study from January 1999 and December 2001. Range of age of patients at diagnosis of breast cancer was 26-86 years with a median age of 45 years for all the 145 patients (see Figure I). Eleven (7.58%) of them had spontaneous abortion with age range of 30-84 years with a median of 47 years. Thirty six (24.83%) patients procured 68 abortions and they were age ranged 26-86 with a median of 33 years (see Figure II).

The 98(67.59%) non-abortion patients had age range of 26-86 years with a median of 47 years (see Figure III).

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**Figure 1:** Showing age distribution of all 145 female breast cancer patients.

**Figure 2:** Shows the age distribution of the 98 breast cancer patients who did not have any abortion.

**Figure 3:** shows the age distribution of the 36 breast cancer patients who had induced abortions.
Induced Abortion and Risk for Breast Cancer: Observed Relationship in Benin City, Nigeria.

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Nigeria is a very religious and conservative society where procurement of induced abortion is not only illegal, it is abhorred and condemned by Christianity and Islam the two dominant faiths of its people. Talk of abortion in the open is an anathema. It will therefore be impracticable to conduct cohort studies similar to those conducted in liberal countries where induced abortion is legal. As in case-control studies in developed countries where abortion is legal, studies with healthy women as controls, will also be flawed by re-call bias of under-reporting of abortion as it is illegal and an anathema. The data from this study can be relied on because all the patients have breast cancer and most probably reported accurately the procurement or not of induced abortion. The study compares the ages at diagnosis of breast cancer patients who had induced abortion, with those who did not have induced abortion.

The observation is that induced abortion is associated with breast cancer occurring a decade and more earlier in those who had induced abortion than in those who did not procure an abortion. It can therefore be speculated that induced abortion is a risk factor for breast cancer in Benin. Cohort and case-control studies on induced abortion as done in the United States and developed countries are impracticable here. The studies by public health institutions as the United States’ National Cancer Institute (NCI), the World Health Organization (WHO) and its agencies who want to control World population are held with great suspicion. This is because these public health institutions promote all forms of birth control measures including the procurement of abortion.

While more studies are being designed and carried out, it is recommended that induced abortion be added to the list of risk factors for breast cancer. It is also advocated that women be told of the probable contribution of induced abortion to the increased risk for breast cancer as part of the informed consent process for induced abortion.

REFERENCES
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