

## Breast Cancer and Pregnancy at Sylvanus Olympio Teaching Hospital of Lome -Togo

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### Abstract

**Introduction:** The association of breast cancer and pregnancy is a rare event. The aim of our study is to take stock of this association at the Sylvanus Olympio Teaching Hospital (CHU SO) in Lome, Togo. **Methodology:** This is a descriptive retrospective study that took place at (CHU SO), Lome, Togo; from January 1, 2014 to December 31, 2018. **Results:** During our study the frequency of breast cancer and pregnancy was 2.1%. The mean age of the patients was 33.3 years. Multiparas represented 69.2% of cases. Breast cancer was found in the second trimester of pregnancy in 45.4%. The invasive ductal carcinoma was found 38.4%. Patients had received palliative treatment in 53.8% of cases. Fifty-three point eight percent (53.8%) of the patients were lost to follow-up. **Conclusion:** Breast cancer associated with pregnancy is difficult. The ideal would be a nationwide subsidy for this disease.

**Keywords :** breast cancer, pregnancy, Togo

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## INTRODUCTION

The association of breast cancer and pregnancy is a rare event defined by the occurrence of breast cancer during pregnancy or during the year following childbirth. The prognosis of these lesions remains unfavorable, if only because of the young age of the patients [1]. Breast cancer is the most common cancer diagnosed during pregnancy and affects about one in 3000 pregnant women [2]. This association makes care difficult. As more and more women choose to postpone childbearing until middle age, the incidence of breast cancer during pregnancy increases and delays in diagnosis and treatment become more common. Therefore, pregnant women with breast cancer are more likely to have larger tumors, positive lymph nodes, metastases and vascular invasion [3]. Symptoms generally appear to be in cancer, overlap, and be masked by physiological changes that occur during pregnancy. So caregivers could easily attribute symptoms of undiagnosed cancer to the pregnancy itself and not conduct further investigation if necessary. In addition, concerns about the exposure of the fetus to the

risks inherent in additional examinations (such as ionizing radiation), contrasts and surgical / anesthetic procedures, may make physicians less inclined to proceed immediately to the investigation of these symptoms. [4, 5]. Unfortunately, in many cases, the diagnosis of cancer during pregnancy is delayed [5]. The aim of our study is to take stock of the association of breast cancer and pregnancy at the Sylvanus Olympio Teaching Hospital (CHU SO) in Lome, Togo.

## METHODOLOGY

This is a descriptive retrospective study that took place at Sylvanus Olympio Teaching Hospital in Lome, Togo; from January 1, 2014 to December 31, 2018; either over a period of 5 years; involving 11 pregnant women with breast cancer and 2 who gave birth up to one year with breast cancer. Women with breast cancer who were not pregnant (n = 585), pregnant women who consulted for breast cancer but had no histological evidence (n = 8), or those with incomplete dossier (n = 4) were not included in our study. Our data were entered, processed and analyzed

by the software World 2010, Excel 2010. The data was collected using a previously established survey sheet on which we noted for each patient: socio-demographic data, history, breast cancer information, and pregnancy monitoring. Data collection authorization N ° 0608/2019 / MSPS / CHU-SO / DIR / DHR / SERV.PERS has been obtained.

## RESULTS

### Hospital frequency

During our study 614 patients had consulted for breast cancer among them 13 had consulted for breast cancer and pregnancy, a frequency of 2.1%.

### Socio-demographic data

The mean age of the patients was 33.3 years with extremes of 20 years and 45 years. The 30-35 age group was the most common (Figure 1).

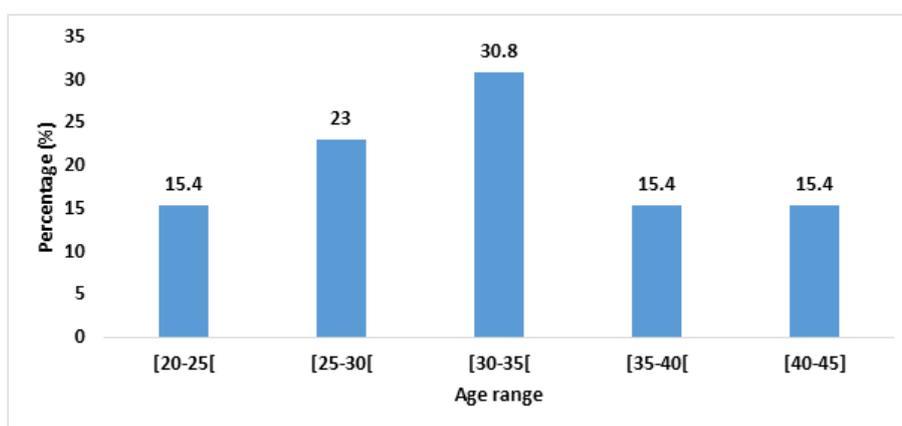


Fig-1: Distribution of patients by age group

In our series, resellers were more represented with a proportion of 30.7% (figure 2)

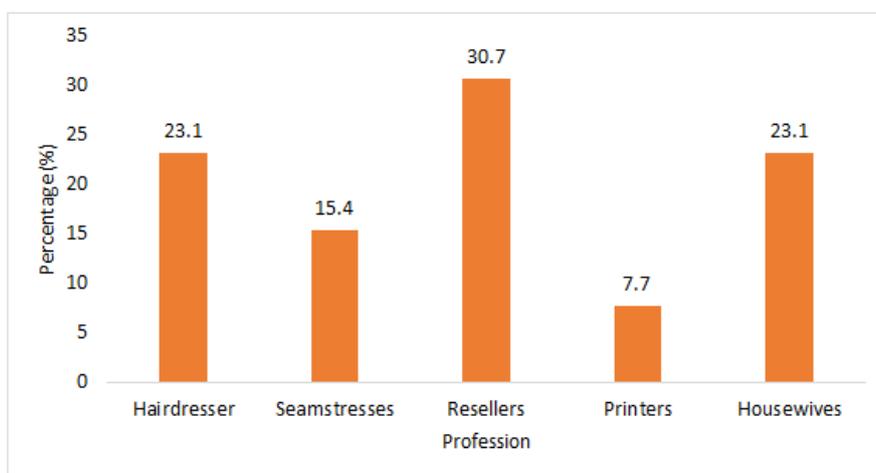


Fig-2: Distribution of patients by profession

### Clinical aspects

The family history was found in 2 patients (15.4%). Multiparas represented 69.2% of cases, followed by first-time and nulliparas, in 15.4% and 15.4% respectively. In 84.6% of cases, cancer was discovered during pregnancy and in 15.4% of cases, the discovery was made after childbirth. Breast cancer was found in the second trimester of pregnancy in a proportion of 45.4%, followed by discovery in the third trimester in 36.4%, and in the first trimester in a proportion of 18.2%. Breast pain was found in a proportion of 15.4%. The tumor was classified T4 in 7 patients (53.8%), followed by T2 in 4 patients (30.8%) and T3 in 02 cases (15.4%).

The patients who consulted for breast tumor represented a proportion of 38.4% (Table I).

Table-I: Breakdown by reason for consultation

	Number	Percentage
Breast tumor	7	53.9
antenatal consultation	4	30.7
Breast ulceration	1	7.7
Orange skin	1	7.7
<b>Total</b>	<b>13</b>	<b>100</b>

**Paraclinical aspects**

The ACR5 and ACR4 stages were found in the same proportion in 04 patients each (30.8%) followed

by ACR 2 stage in 3 patients (23%), then ACR 3 stage in 15.4%. The invasive ductal carcinoma was found 38.4% (Table II).

**Table-II: distribution of patients according to the results of the anatomo-pathology**

	Number	Percentage
Invasive ductal carcinoma	5	38.4
lobular carcinoma in situ	3	23.1
invasive lobular carcinoma	2	15.4
Ductal carcinoma in situ	3	23.1
Total	13	100

**Supported**

The patients had received palliative treatment in 53.8% of cases, followed by chemotherapy in 15.4% of cases and lumpectomy also in 15.4% of cases.

Eighty -one point eight percent (81.8%) gave birth vaginally and in 18.2% pregnant women had a cesarean section.

**Evolution- prognosis**

The patients who had a histo-prognostic grade SBR II represented (61.5%) followed by the histo-prognostic grade SBR III (30.8%) and the grade SBRI in 7.7%.

In 84.6% of cases, the pregnancy was brought to term and in 15.4% of cases, the pregnancy was terminated. The newborns were all normal weight and had a good APGAR score. Fifty-three point eight percent (53.8%) of the patients were lost to follow-up. The remaining 46.2% were under treatment.

**DISCUSSION**

The frequency of breast cancer associated with pregnancy is 2.1%. Our results are similar to those of DIENG et al. in 2018 [6] who found a frequency of 2.9%. In fact, the association of unilateral breast cancer and pregnancy remains a rare event despite the increase in the incidence of this cancer in young women and pregnancies that have become increasingly late [7, 8]. The mean age of the patients was 33.3 years. Anca A. Simionescu et al. in 2020 [9] found an average age of 35 years at the time of diagnosis. Note that 10% of women under 40 with breast cancer are pregnant at the time of diagnosis [10]. Fifteen point four percent (15.4%) of our patients had a family history of breast cancer. Multiparas represented 69.2% of cases. Anca A. Simionescu et al. in 2020 [9] had also found that breast cancer was associated with multiparity and a shorter duration ( $\leq 5$  years) between pregnancies. Breast cancer and pregnancy is generally associated with genetic, environmental, reproductive, and lifestyle factors. Breast cancer was found in the second trimester of pregnancy in a proportion of 45.4%. DIENG et al. [6], found a mean gestational age of 16 weeks with amenorrhea. This discovery of cancer at this stage of pregnancy is due to the fact that women in our

community usually wait until the pregnancy comes to a somewhat late term before consulting, especially if there is no associated pathology.

And it is by chance that the tumor is discovered during the first consultation, from where they are referred for better management.

On clinical examination, the tumor was classified as T4 in 07 patients. Our results are similar to those of Anca A. Simionescu et al. [9] who had locally advanced tumors (T3 - T4 and / or N1) in 7 patients (7/12). This diagnostic delay can be explained by the lack of financial means due to the low socio-economic level of our patients. Most of them are resellers (30.7% of cases). This probably explains the fact that 53.8% of patients are lost to follow-up. The invasive ductal carcinoma was the most common (38.4%). Patients who had a histopronostic grade SBRII accounted for (61.5%). Our results are lower than those of Genin et al. [11] in 2012, where women with breast cancer and pregnancy had invasive ductal carcinoma in 88% of cases. In fact, the histological types are identical to those encountered outside pregnancy; however the histo-prognostic grade SBR is higher [12], and therefore a poor prognosis. Termination of pregnancy does not improve the prognosis. Its continuation would even be correlated with better maternal survival [7]. This is reassuring and good news in the African context where even therapeutic termination of pregnancy would be poorly understood and badly experienced by the patient. In 84.6% of cases, the pregnancy was carried to term. With the application of standard treatment, experts consider that the prognosis of cancer during pregnancy is similar to that of non-pregnant patients [13]. The newborns were all of normal weight. This is because there was no chemotherapy before the birth. The chemotherapy in our study was administered to newborn babies (15.4%). Indeed, during the second or third trimester, adjuvant or neoadjuvant chemotherapy regimens include anthracycline-based treatment, followed by taxanes (paclitaxel and docetaxel) [14-16], and the main known fetal risks include intrauterine growth retardation and a newborn baby small for gestational age [17].

## CONCLUSION

This study shows that the diagnosis of breast cancer associated with pregnancy is difficult. The therapeutic indications are limited by the constraints of the combination. Our results are pejorative because of the large number of lost to follow-up and the low socio-economic level; and not the association of breast cancer with pregnancy, which appears to be an independent factor affecting the prognosis. The ideal would be a nationwide subsidy for this disease, especially for pregnant women, for whom free treatment from pregnancy until childbirth has just been decreed by the Togolese government.

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