BREAST CANCER IN THE PREGNANT-PUERPERAL CYCLE, A SERIES OF CASES

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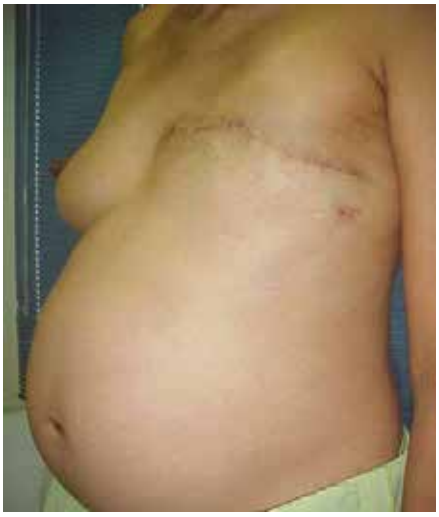
ABSTRACT

Pregnancy-associated breast cancer is defined as those diagnosed in pregnancy or up to 1 year postpartum, pos abortion or while lactation. Invasive ductal carcinoma is the most common histological type followed by lobular carcinoma. Most are with big volume and triple negative, with 30% HER-2 +. At diagnosis, the lymph nodes may already be compromised. We report a series of cases with different prognoses.

KEYWORDS: PREGNANCY-ASSOCIATED BREAST CANCER, DUCTAL CARCINOMA, CHEMOTHERAPY AND RADIOTHERAPY, PROGNOSIS, FAMILY PLANNING, PREGNANCY.

INTRODUCTION

Breast cancer is the second most frequent neoplasm in the world, being the most common among women[1]. Pregnancy-associated breast cancer (PABC) is that diagnosed during pregnancy up to 1 year postpartum, post-abortion or during lactation. Due to physiological changes during this period, the physical examination may be impaired, delaying the diagnosis[2]. This can be performed through symptoms, complementary tests such as mammography and ultrasound, and confirmed by histopathology. Invasive ductal carcinoma is the most common histological type followed by lobular[3]. Most are bulky and triple negative, being 30% HER-2 +. At diagnosis, lymph nodes may already be compromised. Treatment can be local through surgery and radiotherapy, in addition to breast reconstruction or systemic using chemotherapy, hormone therapy and biological therapy[4]. In the group addressed in this work, the risks of teratogenicity of the means of diagnosis and treatment used must be taken into account.



Case 1: 25 years old, 27 weeks of gestational age (GA) at diagnosis. She underwent modified mastectomy followed by adjuvant chemotherapy (CT) during pregnancy. uneventful term delivery (Figure 1).

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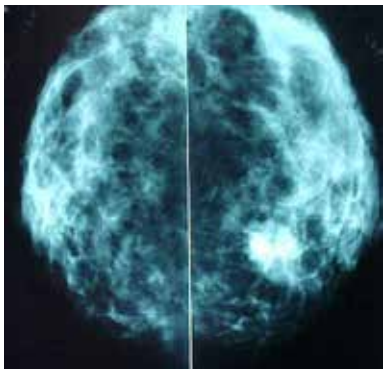
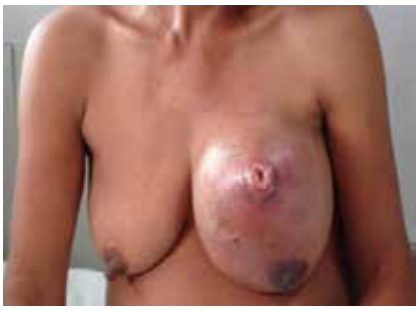
Case 2: 30 years old, 39 weeks of GA with left breast lesion. Cesarean section was performed and she underwent quadrantectomy and lymphadenectomy in the puerperium, adjuvant chemotherapy and radiotherapy (RT) with good evolution (Figures 2 and 3).

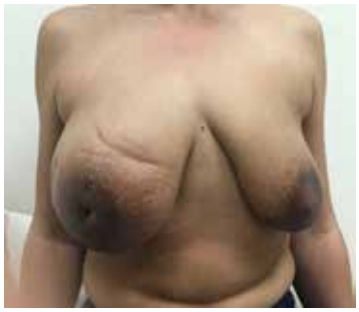


Case 3: 22 years old, 30 days of vaginal delivery, with advanced BC in the left breast. Submitted to neoadjuvant chemotherapy, mastectomy and RT (Figures 4 and 5).



Case 4: New mother diagnosed with Inflammatory BC in the right breast. Submitted to neoadjuvant chemotherapy, mastectomy and RT. Evolved with Guillain Barré Syndrome after Covid-19, followed by death (Figure 6).

Case 5: 27 weeks GA, 2.5 cm tumor in UOQ of the right breast with free armpit. Submitted to quadrantectomy, axillary lymphadenectomy and adjuvant QT. Term delivery and postpartum radiotherapy with good evolution (Figures 7 and 8).



Case 6: 29 weeks GA at BC diagnosis. She underwent mastectomy, QT during pregnancy, and postpartum RT. She became pregnant again after 2 years of treatment without signs of recurrence until then (Figure 9).

DISCUSSION

The treatment is usually surgical, regardless of the protocol for pregnant women or not, depending on the GA at the time of diagnosis and the stage of the disease. Patent blue V dye is not indicated for pregnant women, the radioactive marker technetium-99m being used[5]. When necessary, QT is not recommended in the first trimester due to teratogenicity and should be avoided in the last three weeks before delivery due to the risk of maternal-fetal myelosuppression[6]. The most used therapies are cyclophosphamide, anthracyclines and taxanes (weekly paclitaxel is used). Methotrexate interferes with folic acid metabolism and is not prescribed in pregnancy. Endocrine therapy and anti-HER-2 therapy can cause fetal malformations and oligohydramnios, respectively, and are therefore used only after delivery[7]. Due to the deleterious effects on the fetus and probable late cardiogenic induction, RT is not indicated during pregnancy, but can be used in the puerperium[8,9]. The unaffected breast does not contraindicate breastfeeding and does not increase the risk of recurrence[9]. Family planning after diagnosis should be individualized and generally guided at an interval of at least 2 years[10].

CONCLUSION

Breast cancer (BC) in the pregnancy-puerperal cycle is that diagnosed in pregnancy up to 1 year postpartum, post-abortion or during lactation. The most common histological type is invasive ductal carcinoma followed by lobular carcinoma. Diagnosis can be made by symptomatology, complementary tests such as mammography and ultrasonography, and confirmed by histopathology. The treatment is usually surgical, regardless of the protocol for pregnant women or not, depending on the gestational age at the time of diagnosis and the stage of the disease. Chemotherapy is not recommended in the first trimester of pregnancy due to teratogenic effects and should be avoided in the last three weeks before delivery due to the risk of maternal-fetal myelosuppression. In addition, pregnancy is not an aggravating factor for prognosis and breastfeeding can be maintained as long as the patient is not undergoing adjuvant treatment with chemotherapy or radiotherapy. A future pregnancy can

be discussed after 2 years of treatment. This case series had 6 patients at different gestational ages or in the puerperium, and the chosen approach was specific for each case.

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