

# A Breast Lesion Imitating Malignancy in Pregnancy

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#### Abstract

Breast cancer is one of the most common cancer in pregnant women reported to be seen in about 1 in 1000-3000 pregnancies. The discovery of a breast mass is a common but disturbing occurrence for many women especially in pregnancy. We discuss how to evaluate the breast lesions in pregnancies by the help of literature in a breast mass at 24 weeks of gestation.

Key words: pregnancy, breast cancer, breast masses

### Özet

#### Gebelikte Maligniteyi Taklit Eden Meme Lezyonu

Gebelikte en sık rastlanan malignitelerden biri 1000 ilâ 3000 gebelikte bir görülen meme kanseridir. Memede bir kitlenin tespit edilmesi, özellikle gebelik döneminde, ortaya konulması gereken önemli bir durumdur. Biz de, 24 haftalık bir gebede klinik olarak maligniteyi taklit eden meme lezyonuna dikkat çekerek literatür ışığında gebelerdeki meme lezyonlarının nasıl değerlendirilmesi gerektiğini tartıştık.

Anahtar sözcükler: gebelik, meme kanseri, meme kitleleri

#### Introduction

The discovery of a breast mass, either by self-detection or identified by a clinician, is a common but disturbing occurrence for many women especially in pregnancy. Breast cancer is one of the most common cancer in pregnant women reported in about 1 in 1,000-3,000 pregnancies (1,2). The concurrent diagnosis of breast cancer in pregnancy is a challenging clinical situation that historically has placed the welfare of the mother in conflict with that of the fetus (3). Although most of the detected breast masses are benign, every woman presenting with a breast mass should be evaluated in order to exclude or establish the diagnosis of cancer. Detection and management of breast abnormalities that develop during pregnancy is difficult for both the clinician and the radiologist. Although breast cancer during pregnancy and lactation is rare, the clinician and the radiologists should include it in the differential diagnosis of a solid breast mass seen during pregnancy or lactation (4). The young age of the patient together with the emotional impact for both the family and the clinicians make therapeutic choices usually very difficult (5). The symptoms and the signs of the breast cancer in pregnancy may be overlooked or mistaken because of the normal physiologic changes of

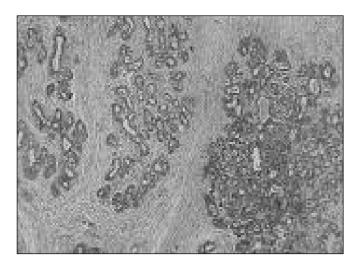
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Phone: +90 372 261 01 69 Fax: +90 372 261 01 55 E-mail: zekiacun@hotmail.com pregnancy, resulting in delays in diagnosis, treatment and potentially reducing survival. Because of this it is compulsory that the clinician should perform attentive physical examination of breast in all pregnant women especially early in gestation as the breast becomes difficult to evaluate later. Any suspicion of malignancy is an indication of open biopsy without delay. Breast cancer in pregnancy is likely to become more common currently since more women have been waiting to bear children until they are in their 40s.

# **Case Report**

A 28-year-old white gravida 2 para 1 pregnant lady presented with a rapidly enlarging, tender, indurated 9x6 cm multilobulated right breast mass at 24 weeks' gestation. Physical examination revealed multiple right axiller lymph nodes the largest of 2 cm in diameter. On ultrasound examination the breast mass showed heterogenous echogenicity and partially cystic lobulated contours thought to be suspicious for carcinoma as suggestive of a malignant phylloides tumour and right axiller masses reported to be in reactive nature. Without fine neddle aspiration incisional biopsy is performed surgically in order to have pathologic diagnosis as soon as possible. No complication occured during and after surgical procedure and the patient discharged the day after the operation. As the mass is considered to be malignant on physical examination and radiologically, it is reported to be adenosis histopathologically. Microscopically there was an increase in the number of acinar units per lobule. The gland lumens were often



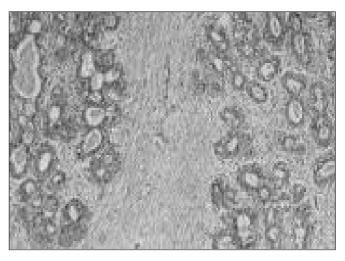


**Figure 1.** There is a prominent proliferation of acinus that compose lobules in fibrous mammary stroma (Hematoxylen and eosin x40).

enlarged but not distorted (Figures 1,2). The breast mass was followed monthly by physical evaluation for enlargement in size and breast abcess due to incisional biobsy. After the delivery of the baby the breast mass reduced in size.

# **Discussion**

Cancer is the leading cause of death in women during their reproductive years, and reported to complicate approximately 0.1% of all pregnancies (6). Breast cancer during pregnancy is generally defined as cancer occurring during pregnancy or within 1 year of delivery during lactation, nevertheless treatment options are the most complicated when the disease is diagnosed during gestation (7). Fertility and gynaecological malignancies have an important relationship. Breast cancer, cervical cancer, Hodgkin's disease, malignant melanoma, and leukemias are reported to be the most frequently diagnosed malignancies during gestation (8). The management of breast cancer associated with pregnancy possesses many diagnostic and therapeutic dilemmas. The various modalities used for screening, diagnosis, and staging of breast cancer are not always applicable during pregnancy and clinicians usually appear to be reluctant to use various breast imaging tecniques resulting a delay in diagnosis. The risk to the unborn child plays a major role in the decision process (9). Diagnostic delays are shorter but remain common. Mammography has a high falsenegative rate during pregnancy. Biopsy or needle aspiration are needed for diagnosis and cannot be postponed until after delivery. Diagnostic procedures like ultrasonography and excisional biopsies are always necessary to reduce the delay of several months or more after discovery of a breast mass and to achieve the histopathologic diagnosis as soon as possible (10). Breast cancer and pregnancy are events that have an enormous



**Figure 2.** The acinus epithelium is typically double layered composed of epithelial and myoepithelial cells. Also some are dilated and contain eosinophilic material (Hematoxylen and eosin x100).

impact on the lives of women. When these events are associated they become a highly emotive issue with possible devastating consequences (11). If a breast malignancy diagnosed in pregnancy the staging procedures are recommended besides there are some risks for fetus. The therapeutic abortion is always a question. Treatment is always simplified with therapeutic abortion early in pregnancy and therapeutic abortion is strongly recommended if the issue is fetal damage from the proposed chemotherapy or radiation treatments. The most recent reports show no survival advantage after therapeutic abortion. In the end, it is the mother who must make as informed a decision as possibble about the pregnancy. General anesthesia is necessary for a mastectomy or axillary dissection and rarely for an adequate wide excision. As compared with the risks of teratogenesis from radiation therapy and chemotherapy, those associated with the general anesthetic drugs are almost non existent. As a result it is a fact that clinician should be very suspicious and careful about the breast masses especially encountered during pregnancy. All of the diagnostic processes should be used in order to acquire the histopathologic diagnosis immediately. In our case the mass is reported to be benign fortunately and no other treatment options are needed after incisional biopsy, but it should always be kept in mind that another pregnant women attended with a breast mass may not be that much lucky.

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