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BREAST CANCER IN PREGNANCY - CASE REPORT

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ABSTRACT

Breast cancer in pregnancy (BCP) is relatively rare with an incidence of 1:3000 to 1:10 000 births. Breast cancer in pregnancy is second most frequent among malignancies in pregnancy, right behind cervical cancer. The diagnosis of BCP is made if the condition appears during the pregnancy, or during the first year after delivery, with some variations in the duration of the postpartal period that is taken into consideration, varying from 6 months to 2 years. Most of the tumors are adenocarcinomas, scirus, colloid or anaplastic. As in all cases of breast cancer outside pregnancy, biopsy is a "gold standard" in the diagnosis of this condition during pregnancy. Imaging diagnostic techniques have limited application either because of the increased false positive rate or lower sensitivity. Pregnancy termination does not represent an efficient therapeutic alternative. Surgical treatment is a supreme therapeutic procedure in the treatment of BCP. In patients that have been diagnosed during the late second trimester, optimal treatment comprises of dissection of the tumor mass and axillar lymph nodes, followed by delivery and radiation therapy.

We are presenting a case of 34 years old patient with poorly differentiated invasive breast carcinoma, Stage IIIC, during the late second trimester. After the surgery the delivery was postponed until the 37th week. Through presentation of this case we've tried to show, that there is an open possibility to postpone the delivery in patients in which the diagnosis was made in the late second trimester for until the late third trimester or even until the EDD, and yet not to compromise overall prognosis for the patient.

Key words: Breast cancer, pregnancy, biopsy, delivery, radiation therapy.

INTRODUCTION

Diagnosis of breast cancer in pregnancy (BCP) is relatively rare. The incidence of this entity ranges within the limits of 1:3000 to 1:10 000 births (1), with an increasing rate, which can be explained by the fact that increasing number of women by choice or by circumstance are becoming pregnant later during their reproductive period. According to the statistical data, breast cancer in pregnancy is second most frequent among malignancies in pregnancy, right behind cervical cancer (2,3,24).

In most of the cases, breast cancer in pregnancy is presented as a painless palpable mass in the gland tissue, associated with nipple discharge that emerges from time to time. However, one should have in mind that in almost 80 % of the cases, manifested changes are of benign nature (4).

Most of the authors think that the diagnosis of BCP is made if the condition appears during the pregnancy, or during the first year after delivery, with some variations in the duration of the postpartal period that is taken into

consideration, varying from 6 months to 2 years (5,6).

If you consider the histological changes in the breast tissue that appear during pregnancy by the influence of the pregnancy hormones, and if we take into account that the overall mass of the breasts is doubled, then it becomes very clear that making a diagnosis in these patients is quite difficult. Hence, the diagnosis is delayed for 1-2 months comparing to the non pregnant women. On the other hand, breast cancer can grow rapidly during pregnancy, and metastases in the regional lymph nodes can appear very early. It is yet not clear, whether it is a consequence of the delaying the diagnosis, increased vascularisation, hormonal influence or immunosuppression activated during pregnancy. According to the results of some studies, possibility for presence of distant metastases by the time the diagnosis is made, is 2.5 times higher. In 56-83% of these women by not by the time the diagnosis is made, affected lymph nodes can be found. (2,6-11)

Most of the tumors are adenocarcinomas, scirus, colloid or anaplastic (75-90% are ductal carcinomas). In the

differential diagnosis galactorela, cystic disease, lobular hyperplasia, lipomas, hamartomas and fibrocystic disease can be considered. Lymphomas, sarcomas and neurinomas are rarely seen, but should not be discarded, and the same goes for the tuberculosis of the breast (9,10).

MAKING THE DIAGNOSIS

Different imaging techniques can be used in order to diagnose BCP, but attention should be paid to their sensitivity in pregnant women. Negative influence to the fetus should also be considered when using these techniques.

Mammography during pregnancy is associated with increased rate of false positive findings due to the changes, increased density of the gland tissue. This means that there is a limitation of the use of this method in pregnant women. However, mammography is considered safe during pregnancy, since the maximal exposure of the fetus in standard two directional mammography is 0.4 mrad (0.004 Gy) (12,15,14).

Ultrasound is cheap and can be used as a first line diagnostic procedure. It provides possibility for differentiation between solid and cystic masses in up to 97% of cases (15).

MRI in non pregnant women is highly sensitive but with limited specificity. During pregnancy, the use of MRI is considered to be related with two possible risks to the fetus: cavitations and thermal effects. It should be kept in mind that Gadolinium crosses placental barrier and can be associated with fetal anomalies which puts it in the C class (substances and medications which can be used only if the benefit outweighed the potential risks). (14,16,17) The use of MRI outweighs the use of ultrasound in detecting liver metastases, and the same goes for other imaging techniques in detecting brain metastases (14).

Radiography of the lungs, in two standard directions, lateral and antero-posterior, is considered to be safe, since the maximal exposure of the fetus is 0-0.001 rad (0-0.0001 Gy) (14,18).

As in all cases of breast cancer outside pregnancy, biopsy is a "gold standard" in the diagnosis of this condition during pregnancy. So called "core needle" biopsy is a method of choice, but fine-needle aspiration biopsy can also be used. In order to prevent complications such as formation of haematomas, it is recommended that the procedure should be performed after previous of the breast, especially in lactating women. When sending the material for histology, it is mandatory to note that the tissue sample comes from a pregnant or lactating woman,

so that the pathologist can take into consideration the appearing physiological hyper proliferation (19-23).

TREATMENT

Pregnancy termination does not represent an efficient therapeutic alternative. Up until now experience and data from studies have shown that overall prognosis doesn't improve with termination of pregnancy and by applying standard therapeutic protocols. Even in cases with advanced disease, terminating pregnancy and performing bilateral oophorectomy for reduction of hormonal stimulation of the malignant tissue, didn't produced expected improvement in the survival rate (25,26,27).

Surgical treatment is a supreme therapeutic procedure in the treatment of BCP. Risks associated with this therapeutic modality include possibility for miscarriage and preterm delivery. Approximately 0.5-2% of all pregnant women are submitted to invasive procedures during pregnancy, starting with biopsy ending with major surgical procedures (28).

Breast surgery is considered to be relatively safe during pregnancy. Mastectomy in combination with armpit lymph nodes dissection is an optimal surgical solution in patients with stage I and II of the disease, as well as in patients with advanced stage disease (Stage III) that want to continue their pregnancy. Mastectomy eliminates the necessity for radiation treatment in early stage disease, considering the existing risk to the fetus. On the other hand, dissection of the axillar lymph nodes, provides a possibility for determination of the nodal status which is very important in making decision for the postoperative chemotherapeutic protocol (14,29).

In patients that have been diagnosed during the late second trimester, optima treatment comprises of dissection of the tumor mass and axillar lymph nodes, followed by delivery and radiation therapy. If the diagnose is made early in pregnancy it is optional to perform so called breast-conserving surgery, and than, after the first trimester is over to apply chemotherapy, followed by radiotherapy in the postpartal period (30,31,34).

According to the individual approach, it is possible to deliver the baby by elective C-Section, when appropriate fetal maturation, mostly referring to fetal lungs maturation, is achieved.

Radiation therapy, by default, is not applied during pregnancy since it represents a significant risk to the fetus: first, because of the possible teratogenic effect, including

the possibility for development of fetal malignant tumors and blood malignancies in the newborn, and than because of the toxic effect of the radiation which depends on the stage of fetal development, applied dose, intensity and distribution of the radiation.

Possibility for fetal loss is at its highest point during the preimplantation period (0-9 days after conception), and radiation induced malformation appear if the exposure takes place during the period of organogenesis (15-50 days after conception). Intrauterine growth restriction, mental disability and radiation induced carcinogenesis appear in correlation with radiation exposure during the first trimester.

If standard radiation therapy protocols of 5 000 rad (50 Gy) are applied, the dose of fetal exposure goes from 3,9 - 15 rad (0.039-0.15 Gy) during the first trimester, up to 200 rad (2 Gy) by the end of the pregnancy, when the growing uterus gets closer to the diaphragm. In any case these doses of fetal exposition are higher than those considered to be safe (0.05 Gy) (32,33,35).

As far as chemotherapy is concerned, all of the chemotherapeutic agents are classified as Class D, according to the US FDA regulations for safe medications in pregnancy, which practically means that they belong to a group of drugs that are considered to be dangerous and with teratogenic effect. Still, if the period of organogenesis is passed over, large number of studies, up until now, have show rather high safety profile if used during pregnancy (36-40). Most frequent complications associated with the use of chemotherapeutic agents during pregnancy are: preterm delivery, intrauterine growth restriction, low birth weight, transitory apnea and transitory leukemia of the newborn. Long term effects of the chemotherapeutic agents to the offspring are not well defined yet (37,40-42). Standard therapeutic protocols for treatment of BCP include Doxorubicin, Cyclophosphamide and Fluorouracil. Defining the dose of the agents during pregnancy is additionally complicated by the increase of the plasma volumen, kidney-liver function, decrease of the plasma concentration of the albumen fraction and reduction of the gastric secretion, as well as with the possible influence of the amniotic space as an additional compartment (36,44).

PROGNOSIS

Prognosis of the BCP has changed radically compared with the early beginnings and first published cases. Today,

it is considered that the final outcome is as same as in the non pregnant population, modified according to age and stage of the disease. The rate of five year survival is 57-82% in pregnant women compared to 56-82% in non pregnant women. Minimal differences appear when lymph nodes status is discussed (47% of pregnant women and 59% of non pregnant women are found to have positive lymph nodes) (2,9-11,15,45-47). The question of pregnancy following previous pregnancy complicated by BCP stays still unanswered, because there are no data from relevant studies that can put some light on the subject. Data from limited number of cases which were published up until now, suggest that the pause between the pregnancy complicated by BC and following pregnancy should not be shorter than 2 years. Some oncologists recommend that the pause should be at least 5 years in patients who have had stage III disease, and do not recommend getting pregnant ever in patients with stage IV disease. (6,48-50)

Anyway, decision should be based on the possible worst case scenario in case of reappearance of the disease during or after the following pregnancy.

CASE REPORT

Our patient is a 34 years old G3 P2 Ab0.

During the eighth month of her pregnancy (28-32 w.g) she has noticed a presence of a lump in her right breast, and after consulting her family physician, she was referred to a radiologist. Ultrasound of the breast was done, and the finding was as follows: In the lower lateral quadrant of the breast, large heterogenous formation with irregular shape is present, 4x2.5 cm in diameter. No changes in the ipsilateral axilla were detected. The contralateral, left breast appeared normal on US. Because of the actual pregnancy, mammography was not performed.

After the ultrasound examination, fine needle aspiration biopsy was performed. Hystopathological analysis of the tissue sample confirmed the suspicion of malignancy. Large number of single cells and cell groups were seen in the tissue sample with distinguished characteristics of malignancy (Cytology group V).

After the histology verification, patient was admitted at the university clinic for obstetrics and gynecology in Skopje, with primary intention for the pregnancy to be terminated by giving birth, so that surgery on the primary process can be performed, by recommendation of the surgeon. The patient was in her 34th week of pregnancy. Detailed evaluation of the pregnancy was done. Since there

was no obstetrical indication for delivery, consultation with cardio-thoracic surgeon was made, the decision for delivery was postponed and the patient was referred to the university clinic for cardio-thoracic surgery in Skopje. The idea was to make a mastectomy with axillar lymph node dissection, and after the surgery to evaluate the condition of the pregnancy and to postpone the delivery for as far as possible to the estimated date of delivery. Additional oncological treatment of the carcinoma was planned for after the delivery.

Following adequate preoperative preparation operative intervention was performed. Radical mastectomy, Madden modification has been performed at the University clinic for thoraco-vascular surgery in Skopje. No intraoperative nor postoperative complications were registered. Patient was released at the third postoperative day with good general condition. Tissue material that was extirpated during operation comprised of mammary tissue of the right breast with overlying skin, 13x7 cm in diameter, fibrous and fatty tissue 4 cm high and muscle tissue with dimensions 10 x 6 x 2.5 cm attached to it. Tissue sample from the right armpit comprised of fatty tissue with dimensions 9 x 4 x 3.5 cm, containing 14 lymph nodes, 2 x 0.4 cm. Dissection of the mammary glandular tissue showed a presence of a gray tumor mass in the lateral quadrants 4.5 x 4.5 x 3 cm. With microscopical analysis, this tumor tissue presented as a poorly differentiated invasive breast carcinoma, whereas the microscopical evaluation of the lymphoglandular tissue of the right axilla showed a presence of metastases in all of the 14 lymph nodes one of which had a penetration through the capsule. According to this finding the disease was in Stage IIIC, and the definitive postoperative classification was declared as it follows: pTNM = pT2 pN3 pMx G3 C4, Stage IIIC.

Following the operation the patient was admitted at the University clinic for obstetrics and gynecology in Skopje. According to the data on last menstrual period (LMP) the pregnancy was in its 36th week of gestation. Ultrasound examination was performed. A singleton pregnancy was confirmed. Fetal biometry results were as follows: BPD=101 mm, AC=326 mm, FL=73 mm, HL = 62 mm, placenta lying on the posterior uterine wall. The fetus was in vertex presentation. After 7 days spontaneous contractions were established and the patient gave birth to a healthy baby boy weighing 3450 gr and 50 cm in length. Apgar score, 8 following 1' and 9 in 5'. 48 hours after the delivery, the mother and the child were released from

the hospital. The mother was advised to take ab lactation therapy (Bromocriptine 1.25 mg / 12h).

Two weeks after the delivery ultrasound of the abdomen and radiography of the chest and the spine were performed. No evidence of metastatic deposition in the liver, lung or spine were found.

By the period when this report was finished, the patient was in good general condition with no signs of recurrence of the primary illness.

DISCUSSION

As mentioned earlier in this paper, supreme therapeutical option for BCP is surgery, consisting of radical mastectomy with lymphadenectomy in the ipsilateral axilla. (14,28,29) Most of the authors recommend postponing the delivery after the surgery until fetal lung maturation is achieved, especially in patients in which the diagnosis is made in the late second trimester. However, there is no general standing on the appropriate gestational age for delivery once maturity is reached. Never the less, in most of the cases delivery is accomplished right after maturation in order to provide conditions for beginning of the radiotherapy and chemotherapy as soon as possible.

Through presentation of this case we've tried to show, that there is an open possibility to postpone the delivery in patients in which the diagnosis was made in the late second trimester for until the late third trimester or even until the EDD, and yet not to compromise overall prognosis for the patient. Whether there is a possibility for postponing the delivery until spontaneous onset of contractions, as in our patient, or actions of induction of labour should be undertaken EDD is approaching, is still to be debated. However, in our opinion, this possibility should not be dismissed, especially when the patient is a multiparous.

REFERENCE:

1. Donegan WL: Breast carcinoma and pregnancy, in Donegan WL, Sprett JS (eds): Cancer of the breast (ed 4). Philadelphia, PA, Saunders, 1995, pp 732-741
2. Nugent P., O'Connell T. Breast cancer and pregnancy. Arch Surg. 1985; 120: 1221-1224
3. Markel D. Pregnancy and breast cancer. Semin Surg Oncol. 1996; 12:370-375
4. Byrd BJ, Bayer D, Robertson J. Treatment of breast tumors associated with pregnancy and lactation. Ann. Surg. 1962; 155:940-947

5. Pennti M, Rissanen, Carcinoma of the breast during pregnancy and lactation
6. King R., Welch J., Martin JJ., Coulam C. Carcinoma of the breast associated with pregnancy. *Surg Gynecol Obstet.* 1985; 160: 228-232
7. tduring pregnancy: quantifying the risk of treatment delay. *Obstet Gynecol.* 1996; 87: 414-418
8. Appelwhite R., Smith L., DiVincenti F. Carcinoma of the breast associaten with pregnancy and lactation. *Am Surg.* 1973; 39: 101-104
9. Bonnier P., Romain S., Dilhuydy J., et al. Influence of pregnancy on the outcome of breast cancer: case-control study. *Int j Cancer.* 1997; 72:720-727
10. Petrek J., Dukoff R., Rogatko A. Prognosis of pregnancy-associated breast cancer. *Cancer.* 1991;67:869-872
11. Guinee VF, Olsson H, Moller T, et al. Effect of pregnancy on prognosis for young women with breast cancer. *Lancet.*1994; 343:1587-1589
12. Max M., Klamer T. Pregnancy and breast cancer. *South Med J.* 1983; 76:1088-1090
13. Liberman L., Giess C., Dershaw D., Deutch B., Petrek J. Imaging of pregnancy-associated breast cancer. *Radiology.* 1994; 191: 245-248
14. Niklas A., Baker M. Imaging strategies in pregnant cancer patients. *Semin Oncol.* 2000; 27: 623-6321
15. Ishida T., Yokoe F. et al. Clinicopathological characteristics and prognosis of breast cancer patients associated with pregnancy and lactation: analysis of case-control study in Japan. *Jpn J Cancer Res.* 1992; 83: 1143-1149
16. Gareil C., Brisse H., Sebag G., Elmaleh M., Oury J., Hassan M. Magnetic resonance imaging of the fetus. *Pediatr Radiol.* 1998; 28: 201-2011
17. Pelsang R. Diagnostic imaging modalities during pregnancy. *Obstet Gynecol Clin North Am.* 1998; 25:287-300
18. Diethelm L, Xu H. Diagnostic imaging of the lung during pregnancy. *Clin Obstet Gynecol.* 1996;3936- 55
19. Westenend PJ, Sever AR, Beekman-De Volder HJ, Liem SJ. A comparison of aspiration cytology and core needle biopsy in the evaluation of breast lesions. *Cancer.* 2001;93146- 150
20. Shannon J, Douglas-Jones AG, Dallimore NS. Conversion to core biopsy in preoperative diagnosis of breast lesions: is it justified by results? *J Clin Pathol.* 2001;54762- 765
21. Brenner RJ, Bassett LW, Fajardo LL, et al. Stereotactic core-needle breast biopsy: a multi-institutional prospective trial. *Radiology.* 2001;218866- 872
22. Novotny D, Maygarden S, Shermer R., Frable W. Fine needle aspiration of benign and malignant breast masses associated with pregnancy. *Acta Cytol.* 1991;35676- 686
23. Mitre B., Kanbour A., Mauser N. Fine needle aspiration biopsy of breast carcinoma in pregnancy and lactation. *Acta Cytol.* 1997;411121- 1130
24. White TT. Prognosis for breast cancer for pregnant and nursing women: Analysis of 1413 cases. *Surg Gynecol Obstet* 100:661-666, 1955
25. Bush H., McCredie JA. Carcinoma of the breast during pregnancy and lactation, in Allen HH, Nisker JA (eds): *Cancer in Pregnancy: Therapeutic Guidelines.* Mount Kisco, NY, Futura, 1986, pp 91-101
26. Holleb AL, Farrow JH. The relation of carcinoma of the breast and pregnancy in 283 patients. *Surg Gynecol Obstet* 115:65-71, 1962
27. Bunker ML, Peters MV. Breast cancer associated with pregnancy or lactation. *Am J Obstet Gynecol* 85:312-321, 1963
28. Duncan P, Pope W, Cohen M, Greer N. Fetal risk of anesthesia and surgery during pregnancy. *Anesthesiology.* 1986;64790- 794
29. Petrek J. Breast cancer during pregnancy. *Cancer.* 1994;74 (suppl 1) 518- 527
30. Gwyn K, Theriault R. Breast cancer during pregnancy. *Oncology (Huntingt).* 2001;1539- 46
31. Kuerer HM, Cunningham JD, Brower ST, Tarter PI. Breast carcinoma associated with pregnancy and lactation. *Surg Oncol.* 1997;693- 98
32. Antypas C, Sandilos P, Kouvaris J, et al. Fetal dose evaluation during breast cancer radiotherapy. *Int J Radiat Oncol Biol Phys.* 1998;40995- 999
33. Fenig E, Mishaeli M, Kalish Y, Lishner M. Pregnancy and radiation. *Cancer Treat Rev.* 2001;271- 7
34. Mazze RI, Kallen B. Reproductive outcome after anesthesia and operation during pregnancy: A registry study of 5405 cases. *Am J Obstet Gynecol* 161:1178-1185, 1989
35. Brent RL. *Ionizing radiation.* *Contemp Ob/Gyn* 30:20- 29, 1987
36. Berry D, Theriault R, Holmes F, et al. Management of breast cancer during pregnancy using a standardized protocol. *J Clin Oncol.* 1999;17855- 861
37. Zemlickis D, Lishner M, Degendorfer P, Panzarella T, Sutcliffe S, Koren G. Fetal outcome after in utero exposure to cancer chemotherapy. *Arch Intern Med.* 1992;152573- 576

38. Murray C., Reichert J., Anderson J., Twigg L. Multimodal chemotherapy for breast cancer in the first trimester of pregnancy: a case report. *JAMA*. 1984;252:2607-2608
39. Williams S., Schilsky R. Antineoplastic drugs administered during pregnancy. *Semin Oncol*. 2000;27:618-622
40. Ebert U., Loffler H., Kirch W. Cytotoxic therapy and pregnancy. *Pharmacol Ther*. 1997;74:207-220
41. Nicholson HO. Cytotoxic drugs in pregnancy: review of reported cases. *J Obstet Gynaecol Br Commonw*. 1968;75:307-312
42. Giacalone P-L., Laffargue F., Benos P. Chemotherapy for breast carcinoma in pregnancy: a French national survey. *Cancer*. 1999;86:2266-2272
43. Gwyn K., Theriault R., Sahin A., et al. Treatment of breast cancer during pregnancy using standard protocol: Update of the M.D Anderson experience. *Proc Am Soc Clin Oncol*, 20:18b, 2001 (abstr 1821)
44. Anderson B., Petrek J., Byrd D., Senie R., Borgen P. Pregnancy influences breast cancer stage at diagnosis in women 30 years of age and younger. *Ann Surg Oncol*. 1996;3:204-211
45. Albrektsen G., Heuch I., Kvale G. The short-term and long-term effect of a pregnancy on breast cancer risk: a prospective study of 802,457 parous Norwegian women. *Br J Cancer*. 1995;72:480-484
46. Lambe M., Hsieh C-C., Trichopoulos D., Ekblom A., Pavia M., Adami H. Transient increase in the risk of breast cancer after giving birth. *N Engl J Med*. 1994;33:15-9
47. Bunker M., Peters M. Breast cancer associated with pregnancy or lactation. *Am J Obstet Gynecol*. 1963;85:312-321
48. Rosemond G. Carcinoma of the breast during pregnancy. *Clin Obstet Gynecol*. 1963;6:994-1001
49. Averette H., Mirhashemi R., Moffat F. Pregnancy after breast carcinoma: the ultimate medical challenge [editorial]. *Cancer*. 1999;85:2301-2304

КАРЦИНОМ НА ДОЈКА ВО ТЕК НА БРЕМЕНОСТ - ПРИКАЗ НА СЛУЧАЈ

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АБСТРАКТ

Карциномот на дојка во тек на бременост е релативно редок, со инциденца од 1:3000 до 1: 10 000 породувања. По својата фреквенција се наоѓа на второто место помеѓу малигните заболувања во текот на бременоста, веднаш зад цервикалниот карцином. Дијагнозата на заболувањето се поставува доколку истото се манифестира во текот на бременоста или во текот на првата година по породувањето, со варијации кои се однесуваат на постпарталниот период во интервал од 6 месеци до 2 години. Најголемиот број од карциномите се аденокарциноми, скирозни, колоидни или анапластични. Како и во случаите на мамарен карцином кај небремените жени, така и овде, „златен стандард“ во дијагнозата претставува тенко иглената биопсија. Визуелизациските дијагностички методи имаат ограничена апликативна вредност како заради ниската сензитивност, така и заради зголемувањето на стапката на лажно позитивни резултати. Прекилот на бременоста не представува ефикасна терапевска алтернатива. Хируршкиот третман представува императив во лекувањето. Кај пациентките, кај кои дијагнозата е поставена во текот на доцниот втор триместар од бременоста, оптималниот терапевски пристап го сочинуваат дисекција на туморската маса и аксиларните лимфни јазли, на што ќе се надоврзе породување и радиотерапија.

Овој приказ на случај опишува 34 годишна пациентка со лошо диференциран инвазивен мамарен карцином, Стадиум IIIС, дијагностициран во доцниот втор триместар. По спроведената хируршка интервенција, породувањето беше одложено до 37-та гестациска недела. Со презентацијата на овој случај, се обидовме да покажеме дека постои отворена можност за одложување на породувањето кај оваа група на пациенти до доцниот трет триместар па дури и до веројатниот термин за породување, без при тоа да се загрози прогнозата и позитивниот исход кај пациентката.

Клучни зборови: Карциномот на дојка, бременост, тенко иглената биопсија, породување, радиотерапија.