SYNCHRONOUS BILATERAL INVASIVE DUCTAL CARCINOMA OF BREAST IN A YOUNG FEMALE: A CASE REPORT

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Abstract
Globally, increasing breast cancer incidence rates, improved prognosis, and growing life expectancy have resulted in an increasing number of women at risk of developing a bilateral primary breast cancer. We are reporting a case of synchronous bilateral invasive ductal carcinoma of breast in a young female. A 28 years old female presented in surgery outdoor department of Indira Gandhi Institute of Medical Science Patna with complaint of lump in her left breast with enlarged left axillary lymph nodes. There was no significant family history of breast carcinoma. The patient was diagnosed with invasive ductal carcinoma of breast on fine needle aspiration cytology and trucut biopsy. At the time of admission, ultrasound of whole abdomen and right breast were normal. After 5 months, patient presented with lump in upper quadrant of right breast and was diagnosed as invasive ductal carcinoma on fine needle aspiration cytology.

Key words: Synchronous breast cancer, metachronous breast cancer, infiltrating ductal carcinoma, modified radical mastectomy.

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Introduction:
Globally, increasing breast cancer incidence rates, improved prognosis, and growing life expectancy have resulted in an increasing number of women at risk of developing a bilateral primary breast cancer. Bilateral breast cancer is defined as synchronous when contralateral cancer is identified within 6 months after the first breast cancer. Contralateral breast cancer, diagnosed with the interval of more than 6 months, is defined as metachronous bilateral breast cancer. Bilateral breast cancer has an overall incidence of 4-20% in patients with primary operable breast cancer¹. A second primary breast cancer in the opposite breast can be either synchronous or metachronous. The majority are metachronous.² Bilateral synchronous breast cancer accounts for 0.2-2% of all breast cancers.³ An increase in the detection of synchronous cancers has been reported following the introduction of bilateral mammography for the investigation of symptomatic breast disease and for population based breast screening. The risk factors associated with bilateral occurrence are: familial or hereditary breast cancer, young age at primary breast cancer diagnosis, lobular invasive carcinoma, multicentricity and radiation exposure.⁴
Our patient diagnosed with bilateral breast carcinoma was consistent with definition of synchronous bilateral breast carcinoma.

**Case report:**
A 28 years old lady presented with swelling in left breast and axilla in surgical outdoor department of Indira Gandhi Institute of Medical Science, Patna. There was no suggestive family history of breast carcinoma. Clinical examination of left breast revealed hard lump of size approximately 6×5 cm, occupying upper and central quadrant with peau d’orange skin. Multiple lymphnodes were felt in left axilla out of which the largest one was approximately 2×2 cms, hard and fixed. On examination the right breast and axilla were normal. She was diagnosed as a case of carcinoma of left breast on the basis of fine needle aspiration cytology and trucut biopsy which revealed infiltrating ductal carcinoma. Receptor study was negative. Ultrasound of whole abdomen and right breast were normal. Other routine hematological and radiological investigations were done and they are within normal limit. She received four cycles of neoadjuvant chemotherapy and after taking proper informed surgical consent modified radical mastectomy with axillary clearance were performed. Her postoperative recovery period was uneventful. Histopathological examination of breast specimen confirmed infiltrating ductal carcinoma grade 2 with metastatic adenocarcinoma in eight lymph nodes. Pathological staging was T4 N1 M0. She was advised for further chemotherapy and external beam radiotherapy, but unfortunately after an interval of five months patient complained of mobile lump in right upper quadrant of right breast of size approximately 3×3 cms with no palpable right axillary lymphnodes (Fig. 1). Fine needle aspiration cytology of lump revealed infiltrating ductal carcinoma for which modified radical mastectomy with axillary clearance were done which was further confirmed on Histopathological examination as infiltrating ductal carcinoma with metastatic adenocarcinoma of lymph node. Consent has been taken from patient and her family for publication of their case.

**Discussion:**
It is well recognized that a previous history of breast cancer increases the risk of subsequent breast cancer in the contra lateral breast, between 0.5 to 0.80 percent per year. Several previous reports showed that the prognosis in bilateral breast was worse than that of unilateral breast cancer. There have also been many debates regarding biological and therapeutic aspects of bilateral breast cancers in the past. Considering these points, it is important to know whether contra lateral breast cancer is a metastatic lesion or the secondary primary cancer. Chaudhary et al proposed a criteria for the diagnosis of second primary breast cancer in 1984 as follows:
- there must be in situ change in the contra lateral tumor.
- the tumor in the second breast must be histologically different from the cancer in the first breast.
- the degree of histological differentiation of the tumor in the second breast must be distinctly greater than that of the lesion in the first breast.
- there must be no evidence of local, regional, or distant metastases from the cancer in the ipsilateral breast.
Because the prognosis of breast cancer is closely related to stage at diagnosis it would seem reasonable to hope that a population screening programme that could detect tumors before they come to patient’s notice might reduce mortality from breast cancer. Indeed, a number of studies have shown that breast screening by mammography in women over the age of 50 years will reduce cause specific mortality by up to 30 percent. Recent attention has been focused on the use of MRI for breast cancer screening in high risk individuals and known BRCA mutation carriers. MRI appears to be more sensitive at detecting breast cancer in younger women with dense breasts. So MRI breast is emerging as an important tool in the detection, diagnosis and staging of breast cancer. It is also useful in assessing the efficacy of chemotherapy and planning the surgical treatment. Most importantly, it enables the detection of carcinomas that are both clinically and mammographically occult. Breast screening leads to early diagnosis of breast cancer, which in turn influences treatment and, hopefully reduces the mortality. The patient must be regularly followed up for the rest of the life for physical examination and annual mammography of the remaining breast.

Conclusion:
The management of the contra lateral breast in patients with newly diagnosed breast cancer as well as in long term cancer survivors is dependent on many factors. It is important to assess each patient’s risk of developing contra lateral breast cancer.

References:

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