Lump in a Lactating Breast

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Introduction

The occurrence of a lump in a lactating breast is due to lactational galactoceles or a mammary fistula discharging into a chronic subareolar abscess. The occurrence of a lump in an infertile, nulliparous lady on antipsychotic drugs with milky discharge from the nipple and raised serum prolactin is rare. The histopathological report of infiltrating ductal carcinoma suggests that carcinoma should be considered in the differential diagnosis of a lump in a lactating breast. Hyperprolactinemia can result from the administration of certain antipsychotic (viz. chlorpromazine, haloperidol) and it may accompany other endocrine disorders such as hypothyroidism [1].

Case Report

34 year old lady was admitted on 01 Sept 03 with complaints of milky discharge from the left nipple and a lump in the left breast for the last five months. There was no history of any pain in the left breast nor any reduction in weight. She had been taking treatment for schizophrenia for the last ten years. She was married twelve years ago but never conceived. Her last menstrual period was on 25 Aug 2003. She had been on antipsychotic drugs viz. chlorpromazine, haloperidol and risperidone for the last ten years. On examination she was averagely built and nourished.

There was a 3 cm long and 2 cm wide lump seen and felt in the lower inner quadrant of left breast, with a 0.5 cm diameter nodule at the summit of the lump involving skin. The surface and margins of the lump were smooth, consistency firm, fluctuation was absent and transillumination test-negative. The lump was partly fixed to pectoralis fascia and muscle. The nipple-areola were normal. Other quadrants of the breast were normal. A single mobile lymph node was felt in the left axilla involving the anterior group of lymph nodes. There was no cervical lymphadenopathy. Her routine investigations were normal. Thyroid function tests were normal.

Serum prolactin was raised to 137.17ng/ml (normal 02-20ng/ml). Radiograph of skull and chest were normal. Fine needle

aspiration cytology (FNAC) revealed lactational adenoma. Lumpectomy and left axillary dissection was performed under general anaesthesia. The tumour was excised through an elliptical incision one cm away from the tumour margin. Left axillary dissection was done through a separate incision and a chain of three lymph nodes were removed. Her post operative period was uneventful. The histopathological examination revealed infiltrating ductal carcinoma, overlying skin and surgical margins were free from tumour cells (Fig 1).

The remaining breast tissue showed features of fibrocystic disease. There was Grade II metastases in axillary lymph nodes. She was subsequently followed up at an oncology centre with chemotherapy and radiotherapy.

Discussion

There are 1,82,000 new cases of breast cancer in USA every year as per the 2000 census. One out of every eight women will develop breast cancer and 42,000 will die from it. It is the leading cause of death in women aged 40-44 years. Only 1-2% breast cancers occur during pregnancy and lactation [2]. In India 75,000 new cases of breast cancer occur in women each year [3]. Milky discharge from the nipple occurs during lactation, from a galactocoele or a mammary fistula discharging into a chronic subareolar abscess. It can also occur as a result of hyper-prolactinemia following the administration of certain drugs eg. chlorpromazine, phenothiazine derivatives, and may accompany other endocrine disorders such as hypothyroidism [1]. Certain prolactin secreting micro adenomas can cause milky discharge from the nipple.

Nulliparous women and those with first pregnancy after age 35 years have a slightly higher risk of breast cancer than multiparous women. Infertility and nulliparity are associated with a higher probability (30-70%) of developing breast cancer in comparison with the probability for parous women [4]. Breast is sensitive to oestrogen stimulation and this is the single most important factor in causing breast cancer. Other aetiological

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Fig 1 : Excised lesion

factors are obesity, increased intake of fat, exposure to ionising radiation, hereditary, increased association with BRCA1, BRCA 2 genes and blood group 'O'. A prior breast cancer in the same patient and a strong family history of breast cancer are important risk factors.

More than two biopsies in the same breast for benign breast disease is also an indicator of high risk for breast cancer. The differential diagnosis includes chronic cystic mastitis in which carcinoma occurs 3-5% more commonly, than in the general population. The stage of cancer in this patient was $T_2N_1M_0$. Although FNAC was suggestive of a benign lesion, mammography was not offered as she was less than 35 years of age. The current guidelines of the American Cancer Society recommends that all women initiate breast self examination at the age of 20 and that a "baseline" mammographic examination be obtained at 35 years of age, thereafter under her physician's supervision between 40-50 year's of age and then annually [4].

At what age should mammographic screening begin remains a dilemma [5]. A decision was taken for breast conserving surgery in the form of lumpectomy and axillary dissection, in view the risk factors present in this patient. She was followed up at an oncology centre

and treated with chemotherapy and radiotherapy. The occurrence of carcinoma of the breast in a schizophrenia patient on antipsychotic drug treatment with milky discharge from the nipple is rare. Although, administration of phenothiazine derivatives over a long period does produce hyperprolactinemia leading to galactorrhoea there is no proven evidence that it leads to carcinoma. Recent overviews of randomised controlled trials comparing mastectomy and breast conserving treatment have shown an equivalence of mortality, besides the later provides better cosmesis. This has promoted surgeons to look at breast conserving treatment more aggressively [6,7].

Conflicts of Interest

None identified

References

1. Ross J. Baldessarini and Frank J. Tarazi. Drugs and treatment of Psychiatric disorders. Psychosis and mania. In: Joel E. Hardman, Lee E. Limbird, editors. Locys S. Goodman and Alferd Gilman's: The Pharmacological basis of therapeutics. 10th ed. New York : Mc Graw Hill 2001; 496-7.
2. Armando E. Giuliano. Breast: incidence and risk factors. In : Lawrence W. Way, Gerard M. Doherty, editors. Current surgical diagnosis and treatment. 11th ed. New York : Mc Graw Hill, 2003; 320-1.
3. Notani PN. Epidemiology of Breast Cancer : The Indian scenario. In : Chinoy RF, editors. Guidelines for breast pathology reporting. Mumbai : The Tata Memorial Hospital; 1997; 1-4.
4. Kirby I. Bland, Michel P. Vezendis, and Edward M. Copeland 111. Breast : Carcinoma of the breast. In : Seymour I. Schwartz, editor. Principles of surgery 7th ed. New York : Mc Graw Hill; 1999; 543-56.
5. Forrest AP, Alexander FE. A question that will not go away : at what age should mammographic screening begin? J Natl Cancer Inst. 1995; 87 : 1195-7.
6. Fisher B, Anderson S, et al. Conservative surgery for the management of invasive and non-invasive carcinoma of the breast. NSABP trials. World J Surg 1994; 18 : 63-5.
7. Fisher B, Anderson S, et al. Analysis and results after 12 years follow up of randomised clinical trials comparing total mastectomy with lumpectomy with or without irradiation in the treatment of breast cancer. N Eng J Med 1995; 333 : 1456-8.