CANCER—BREAST

(A Study of 105 Cases with a Report of Two Cases of Lymphosarcoma-Breast)

by

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The incidence of carcinoma of breast appears to vary widely in different geographic locales. It is a common malignant malady in Britain and U.S.A., affecting 36 and 24, per 100,000 of the female populations respectively. In Japan, however, the rate is only a twelfth of that recorded for the British women-Copeland (1963) reported the incidence of carcinoma of breast as nearly twice the rate of malignancy found at any other site, in either male or female. In India, Nath and Grewal (1937, 1939) analysed the cancer statistics of the then undivided country and had reported an incidence of 15.8% in the populations of Bombay and Bengal. A higher incidence was observed in Madras (25.4%) and Rangoon (27.8%). However, a perusal of the literature reveals a striking paucity of recent information on the subject. It was, therefore, considered worthwhile to study and analyse 105 cases of mammary malignancy that were diagnosed in our department during the past seven years (1964 to 1970), and to report the two rare cases of lymphosarcoma of the breast.

Observations

In the present study cancer of the breast constituted 0.56% of total hospital biopsies and 10.7% of all malignancies reported by our department in a span of seven years.

Table I shows the age incidence of breast-cancer as observed in our study.

TABLE I

Age Incidence of Cancer Breast in the Present Study

A-group	No. of cases	Percentage	
Below 25 years	Nil	Nil	
25 to 40 „	43	41.7	79.6%
41 to 50 „	39	37.8	
51 to 60 „	15	14.5	20%
61 onwards	6	5.8	

It is seen that 79% of the cases were distributed between the ages of 25 and 50 years. Only 20% of the cases were seen in women above the age of 50, while not a single case was encountered in women below 25 years of age.

The right breast was involved in 62% of the cases, while the malignancy in the left breast was found in only 38% of the cases.

Table II indicates the relative frequencies of the various pathological types of breast cancer seen in the present study. Adenocarcinoma was found to exceed any other variety accounting for 34.3% of the total cases.

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TABLE II

Incidence of Various Types of Breast Cancer in the Present Study

Type	Total No.	Percentage
1. Medullary carcinoma	22	20.9
2. Schirrous carcinoma	19	18.0
3. Epidermoid carcinoma	7	6.6
4. Infiltrating duct carcinoma	3	2.8
5. Adenocarcinoma	36	34.3 (34.3)
6. Anaplastic carcinoma	16	15.2

Only 2 cases of sarcoma were detected and both these were of lymphosarcoma.

Case Reports

A 35 years old Hindu female had presented with a massive lobulated swelling in the right breast and a small circumscribed mass palpable in the left breast. Axillary lymph nodes were palpable on both the sides, while the lymphadenopathy at any other site was not discernible. Liver and spleen were not palpable. The peripheral blood smear revealed a normal differential leucocyte count. Nothing abnormal could be detected in the chest skiagram. Haemoglobin was 9.8 Gm.% and the bone-marrow examination revealed a normoblastic hyperplasia. All other investigations to detect any extra-mammary malignant focus in the body, were negative.

Clinically, carcinoma and fibroadenoma, were suspected in the right and the left breast respectively. Biopsy tissues revealed bilateral lymphosarcoma.

(II) A 25 years old Mohammadan female was admitted on 27-10-70, with a complaint of a mass in the right breast and multiple nodules in the left breast. The history revealed the presence of a similar swelling in the right breast one year back, which was excised, but had now recurred.

On examination, a nodular, firm freely movable mass (3″ x 3″) was palpable in the right breast, and it was not adherant to the pectoral fascia. Axillary and supraclavicular lymph glands were also palpable. The breast nodularity and the axillary lymphadenopathy were stated to be of six months' duration while the cervical nodes were noted only a week back.

Liver, spleen and other lymphnodes were not palpable. Peripheral blood and bone-marrow smears were within normal limits. Skiagram of the chest and the barium meal studies of the gastrointestinal tract were normal. The detailed history failed to detect any gynaecological complaint and the per vaginam examination was normal.

Biopsies taken from both the breasts, elicited a diagnosis of bilateral lymphosarcoma.

Discussion

Lymphosarcoma, primarily involving the breast, is a pathological curiosity. The first reference to this entity appears to be that of Elseberg (1914). Though a number of cases have been reported thereafter (Thur, 1927; D'Annoy and Wright, 1930; Harrington and Miller, 1940; Hill and Stout, 1942; Adair *et al*, 1945; Kay, 1955; Stringer, 1959; Du Roy and Sawyer, 1959; and Decosse *et al*, 1962) the disease is still considered to be extremely rare (Cutler, 1961). Two cases of lymphosarcoma, primarily involving the breast, therefore, appear to represent an unusually high incidence. Moreover, interest is accentuated on account of the fact that usually, of the sarcomata, only a fraction appears to be derived from either lymphoid or reticulo-connective tissue (Stringer, loc. cit.), whereas in the present series both the cases of sarcoma of breast, proved to be of lymphosarcoma.

It is true that biopsy tissue can scarcely permit a valid differentiation of such a lesion being primary and autopsy studies are essentially warranted. However, a detailed history, a thorough clinical examination and intensive investigations to rule out the presence of any other site being primarily involved, afford an overwhelming evidence of breast being the primary focus in both of our cases.

The probability of a multicentric origin in both the breasts simultaneously, of course, cannot be denied for certain, though on the basis of the history it would appear that perhaps the right breast was the first to be afflicted in each case.

The importance of this condition lies in its similarity to cancer, from which it can be distinguished only by biopsy. In the present series also both the cases were clinically considered to be of carcinoma. Another interesting feature of this condition concerns its prognosis, which, in unilateral nonsystemic lymphosarcoma, is similar to and is probably better than is the case with mammary carcinoma, when radical surgery is employed.

As regards the cases of cancer-breast, the interesting feature in the present series, is an apparently lower age incidence, 40% of the cases having been encountered in the age-group 25 to 40 years. It is generally reported (Anderson, 1966) that most cancers of breast are discovered shortly before during or just after the menopause. The present report appears to represent a distinct divergence from such an assumption. The fact that not a single case was seen in women below 25 years, is consistent with the observations made by Evans (1966) that mammary cancer arises extremely rarely in children and adolescents and seldom develops in females below 25 years of age. Nath and Grewal (1937), however, reported 6 cases in the age group 16 to 25.

An incidence of 10.7% among the total malignancies represents the maximal involvement of the breast as site for malignant neoplastic lesions. This is in confirmity with the observation made by Copeland (loc. cit.). A more frequent involvement of the right breast, and the maximum incidence of adenocarcinoma are features in the present series, that appear to be interesting but the precise significance of which remains to be assessed.

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