

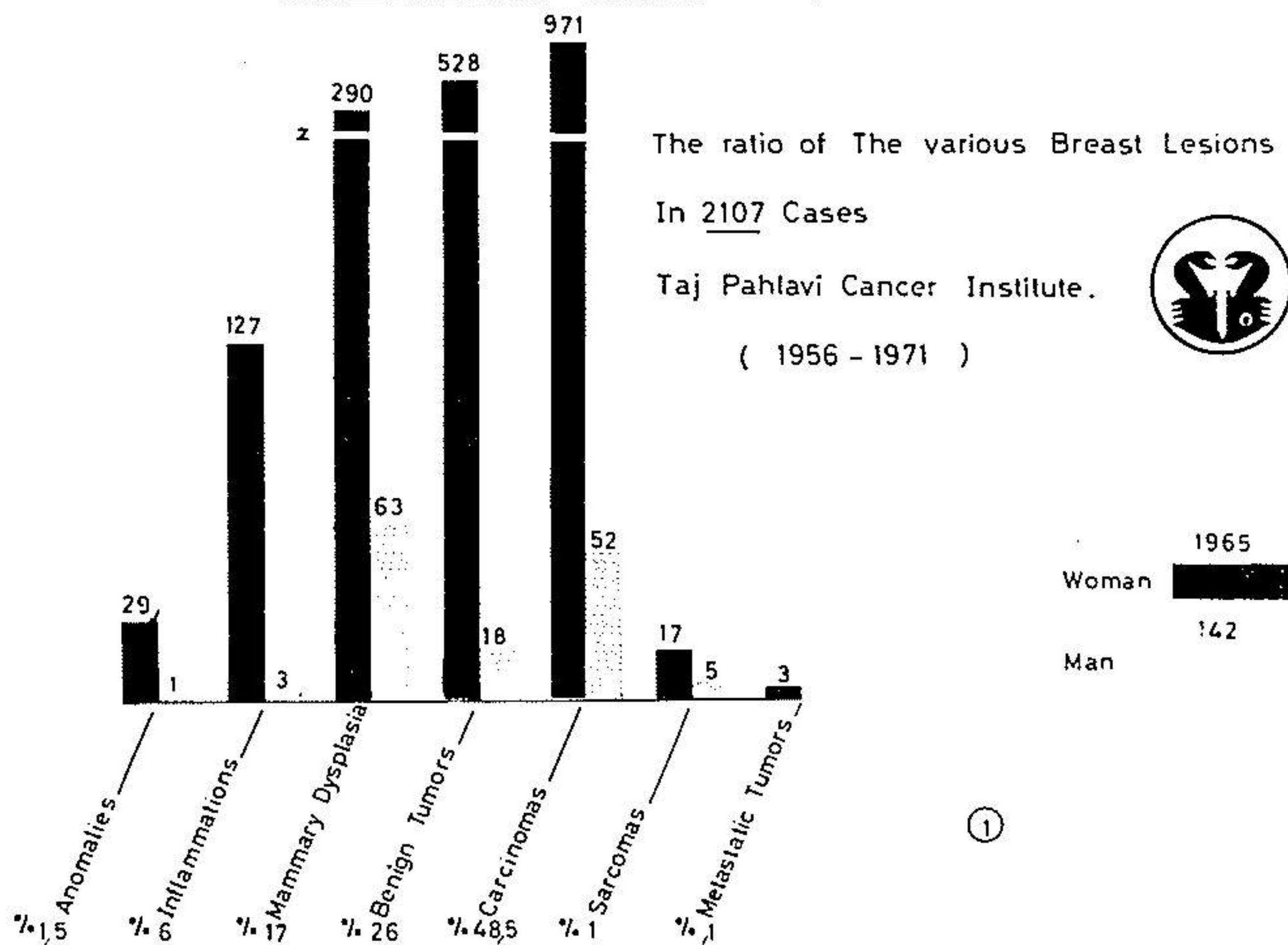
Some Information on
Malignant Tumors of Breast
by
Taj Pahlavi Cancer Institute
Between the Years 1956-1971.

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Since the first definitive study of epidemiology of breast cancer made by Stern in 1844, many more studies have been completed on the epidemiology and etiology of this disease. An analysis of these studies point out certain salient facts and they are (1-2).

1. Carcinoma of the breast occurs more frequently among females than among males.
2. Carcinoma of the breast is more frequent among unmarried women than among married women.
3. Carcinoma of the breast occurs with a greater frequency among women who do not have children than among those who have (3).

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To supplement epidemiological analyses a great deal of work has been done on etiological factors. Some of the suspect causative factors that have been identified are (I) hormonal factors (3-4-5), (II) hereditary factors, (III) immunological factors, (IV) geographical factors (soil, diet, etc.), and (V) an etiological agent, now thought to be a virus. It appears that a combination of factors or agents play a significant role in the development of tumors of the breast leading eventually to malignant cancer of the breast (6-7-8).

Between the years 1956-1971 there were 72,176 pathological cases studied by the pathological Section of Taj Pahlavi Cancer Institute. When considering pathological lesions of all types the number of lesions present in men equalled the number found in women. Of the total 72,176 cases mentioned above, 2,107 (2.9 %) of these were lesions of the breast. Of the breast lesions 1,965 cases (93 %) were observed in females and 142 cases (7 %) were observed in males.

As indicated in Fig. No.1 of the total number of lesions of the breast (2,107), carcinomas comprised 1,023 (48.5 %). Of the total breast carcino-

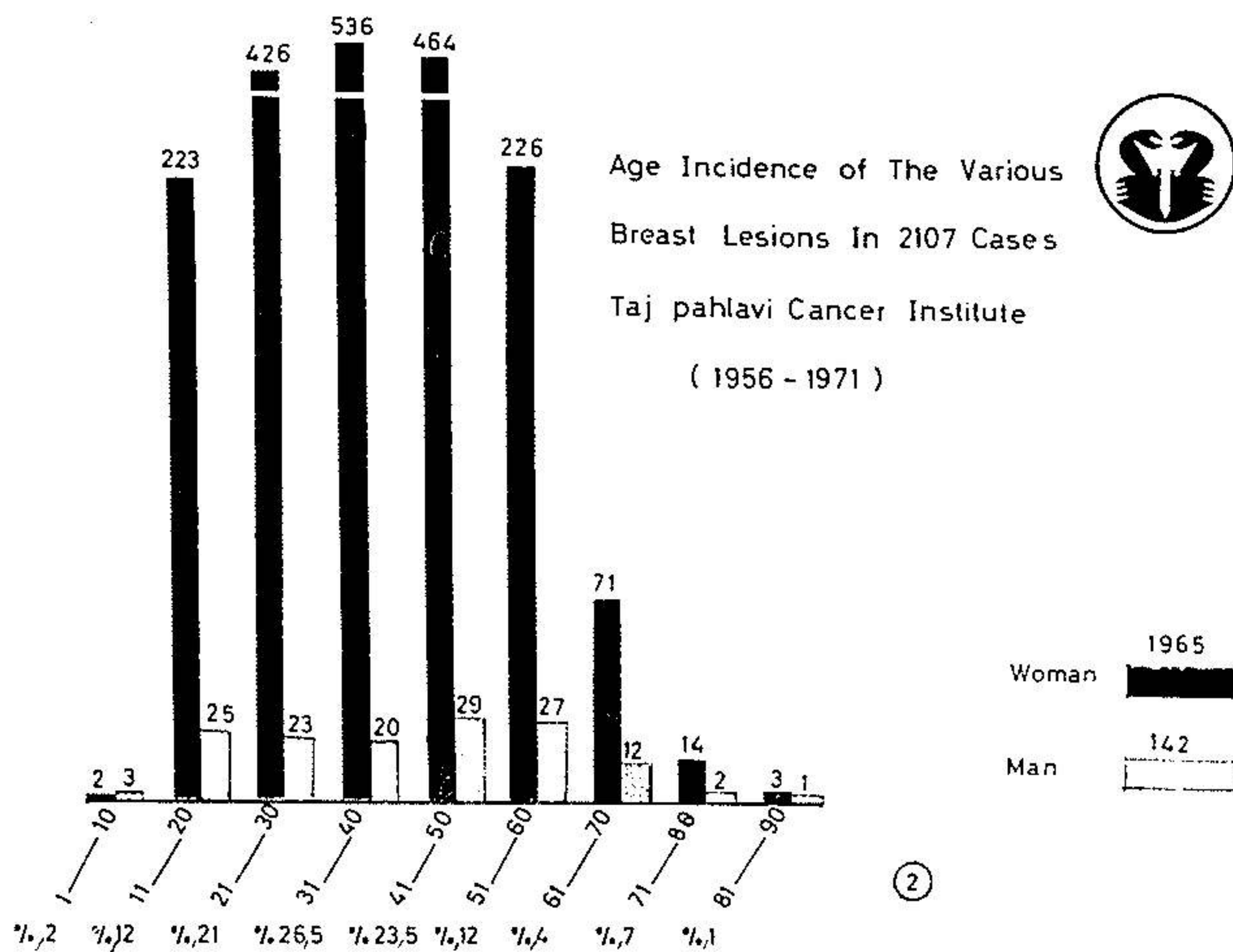
mas 971 (95 %) were observed in females and 52 (5 %) were observed in males. The ratio of females to males suffering from malignant tumors of the breast was 19:1. The ratio of breast cancer to all other types of cancer was 1:23.

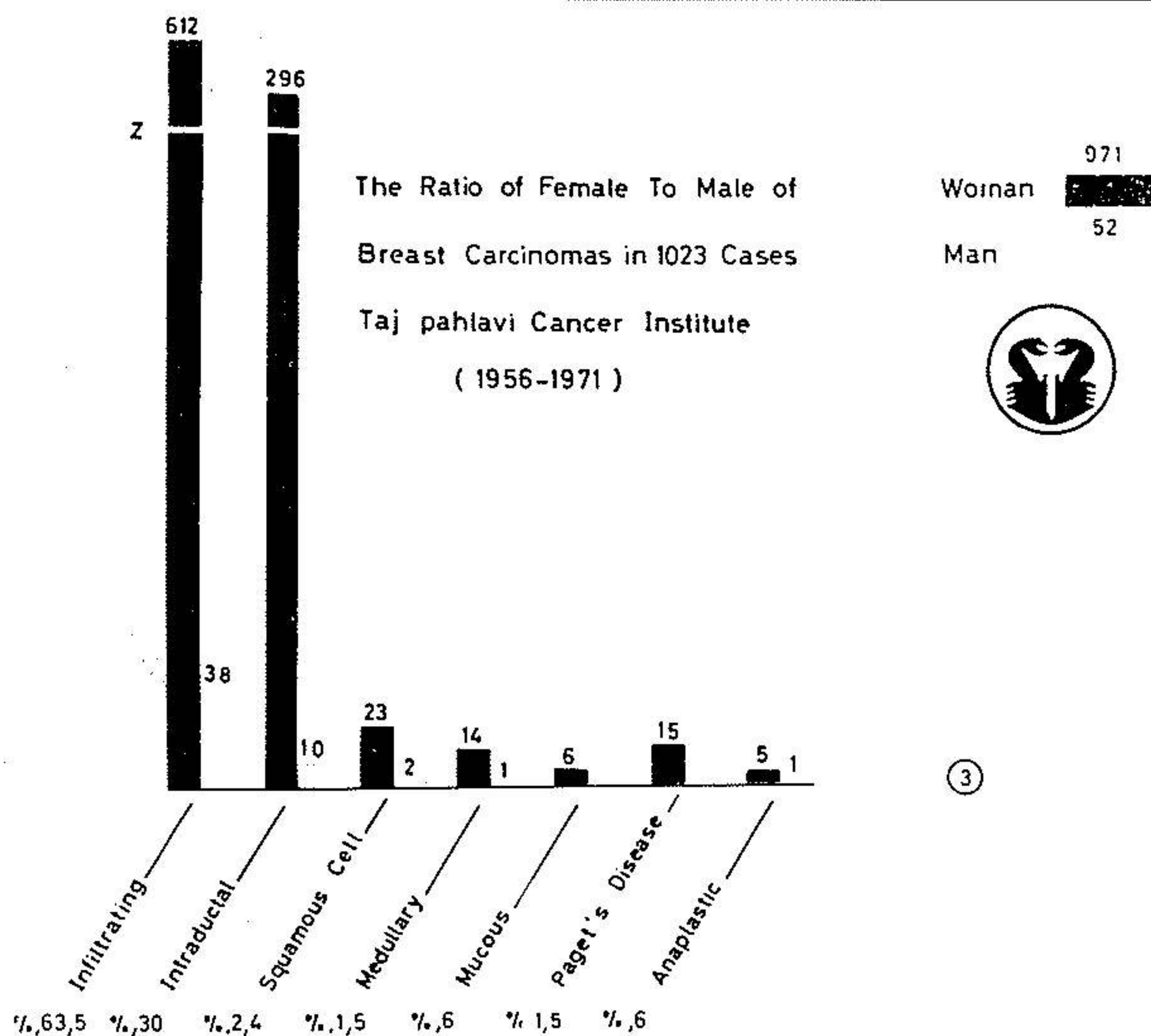
Fig. 2 shows the frequency of breast lesions. As indicated, this disease occurs most frequency in women between the 3rd and 5th decades of life but is more prevalent during the 4th decade. In males it occurs most frequently in the 5th decade of life.

Fig. 3 indicates the different types of carcinomas of the breast among males and females. The infiltrating type is more frequent among both sexes and the intraductal type has the second highest frequency.

Fig. 4 indicates the age frequency of breast carcinomas. It is again evident that this type of cancer occurs with greater frequency between the 4th and 6th decades of life but is most frequent during the 5th decade of life.

From the epidemiological and geographical standpoint, as is indicated in Fig. 5, of the 502 patients currently being treated in the Radiotherapy



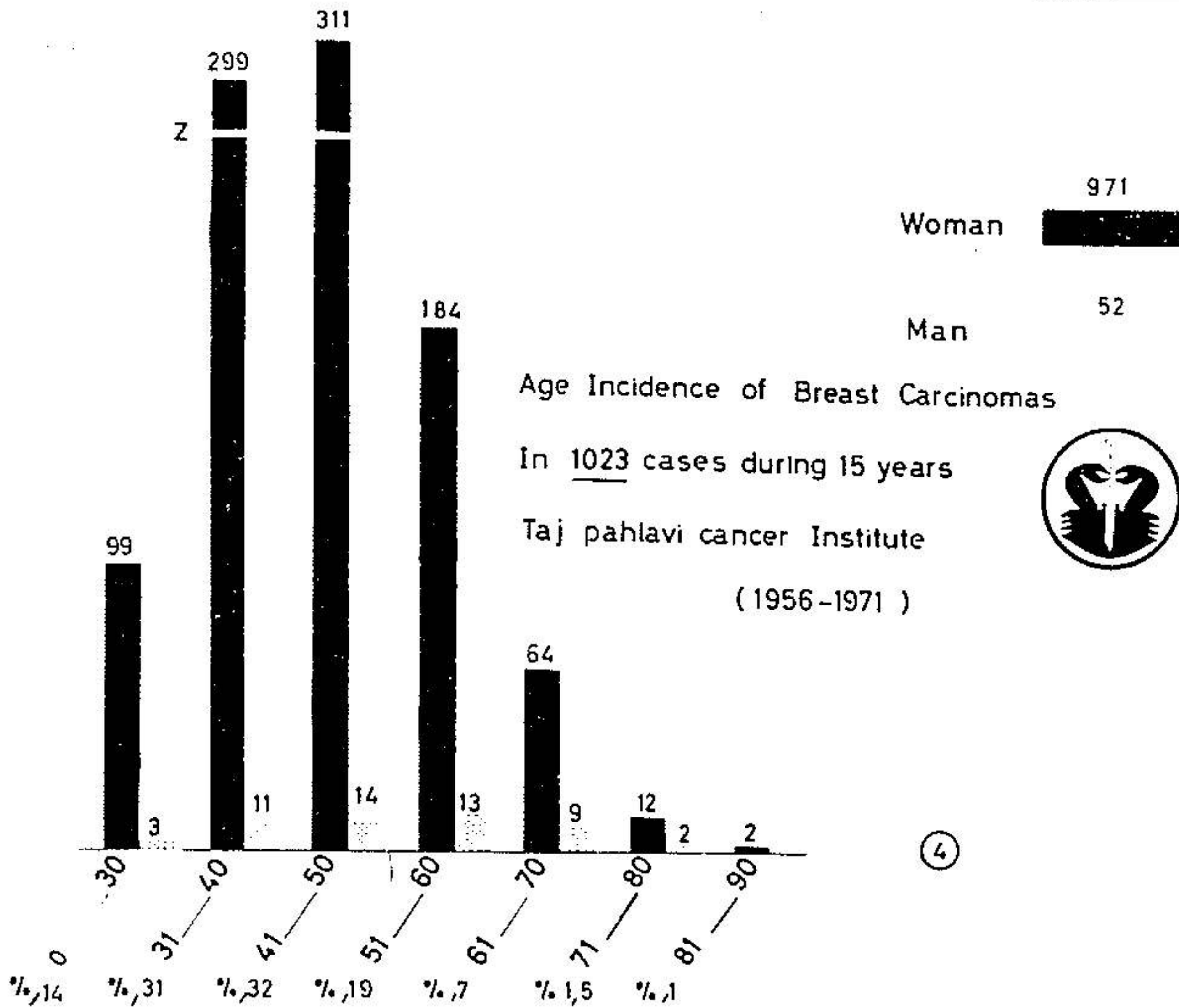


Section of the Taj Pahlavi Cancer Institute, the greatest number of patients come from Central Iran, the next highest number come from Northern, Northeastern, and Northwestern Iran, respectively. We have treated very few cases of breast carcinoma in persons from South and Southeastern Iran.

Discussion

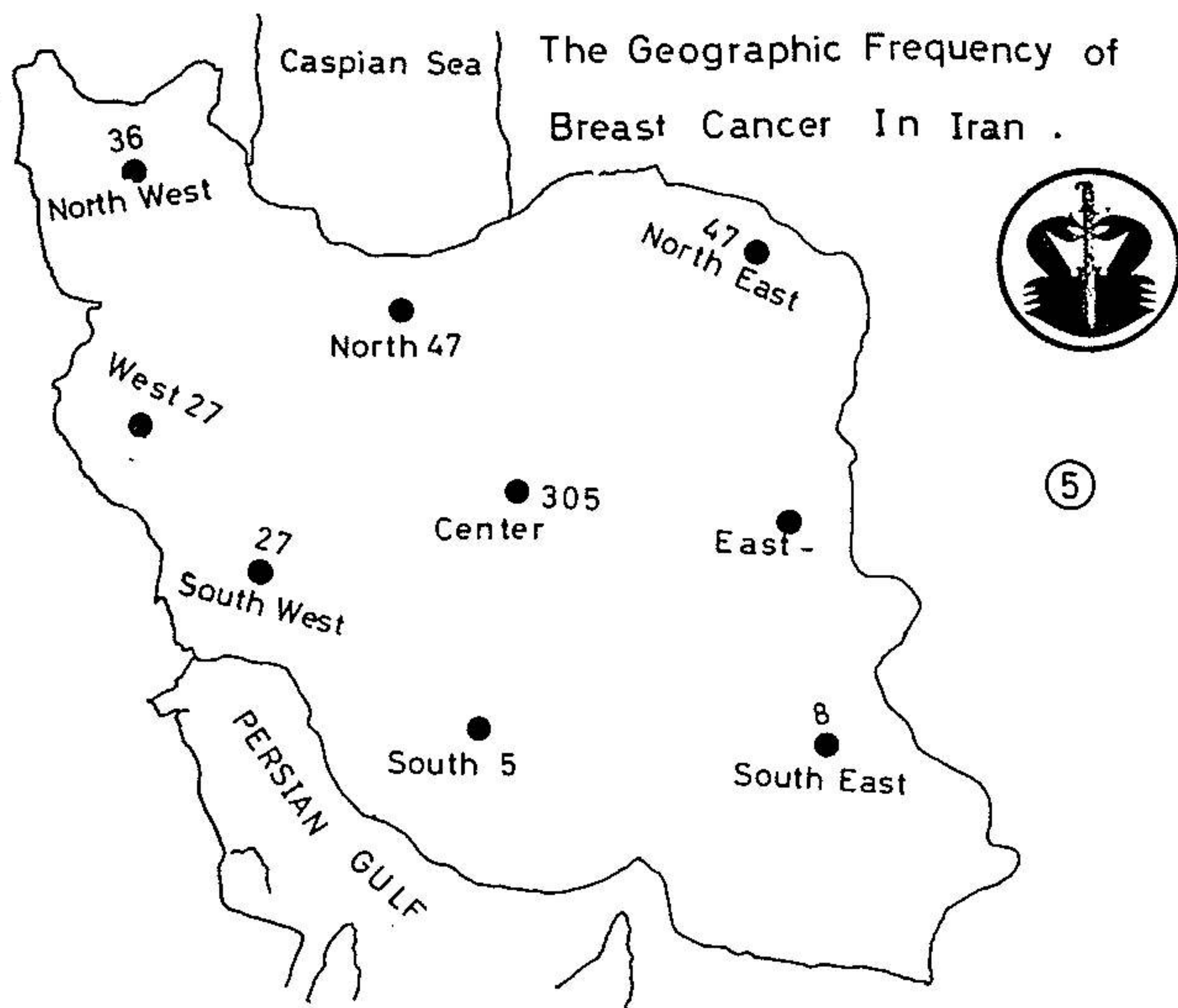
During the course of 15 years some 2,107 cases of breast lesions have been studied in the Pathology Section of the Taj Pahlavi Cancer Institute. Of these 1,965 lesions were found in women and 142 cases in men. About half of the breast lesions were cancerous so that any breast lesion should be suspected.

The high incidence of this disease in the 4th decade of life indicates a strong relationship to endocrine imbalance. The high incidence of this disease among the Parsee women of India indicates hereditary influences.



Our statistical analysis revealed that a large proportion of breast carcinoma occurs in the Central and Northern regions of Iran. A word of caution must be added here, however, in the interpretation of this data, due to the fact that Taj Pahlavi is located in Central Iran and thereby attracts a greater number of persons from this area. Northern Iran has fewer medical centers so that many patients from the eastern and western portions come to Teheran for diagnosis and treatment. Southern Iran has a number of active medical centers hence it might be assumed that a greater number of patients from that area are treated at places other than Taj Pahlavi.

A more comprehensive analysis must be made of the incidence of carcinoma of the breast for all of Iran so that causative factors can be determined more accurately. With this new information better methods can be devised for the treatment and for the prevention of this disease.



SUMMARY

In this paper the breast lesions, more particularly the carcinomas, have been studied in the Taj Pahlavi Cancer Institute, Teheran, Iran, from 1956 through 1971.

In this period of 15 years the number of breast lesions observed have been 2107 cases of which 1023 cases or 48.5 % have had reference to carcinomas especially among women, the ratio of females to males suffering from this type of lesion being 19:1.

The age incidence of carcinomas have been the 4th and 6th decades while the peak frequency has been the 5th decade of life.

Of the various types of carcinomas observed the infiltrating and intraductal types respectively, have had the highest frequency.

From the geographical standpoint vast majority of the 502 cases which have been treated in the Radiotherapy Section of the Taj Pahlavi Cancer Institute have been the inhabitants of the Central and Northern provinces of Iran while from the Southern especially from the Eastern provinces very few cases have come to our attention.

RÉSUMÉ

L'article représente une étude sur les lésions du sein, particulièrement les carcinomes de cet organe, observés dans une période de quinze années (1956-1971) à l'Institut Taj Pahlavi.

Le nombre total des lésions comportait 2107 cas, dont 1023 représentaient des carcinomes. L'incidence par sexe (féminine, masculine) fut 19:1.

La plupart des carcinomes sont répandus entre la 4ème et 6ème decade de la vie, le maximum ayant été observé dans la 5ème decade.

Par ordre de fréquence il s'agissait des types infiltrants et intracanaliculaires. Du point de vue épidémiologique et géographique, parmi les 502 cas qui ont été soumis à la radiothérapie, la majorité des malades venaient des provinces centrales et du nord de l'Iran. Le nombre des malades des régions du sud et particulièrement de l'est était considérablement bas.

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