



## EPIDEMIOLOGICAL AND CLINICAL PROFILE OF BREAST CANCER AT CHU IBN ROCHD CASABLANCA

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### ABSTRACT

Breast cancer is the first female cancer in Morocco, as well as on a world scale. Its incidence is in regular and fast increase and remains the first cause of mortality by cancer in women, in spite of the progress of the diagnostic methods in particular of the mammography and the therapeutic advances carried out in this field. Our work consists of a retrospective study of 415 cases of breast cancer collected in the department of CHU Ibn Rochd over a period. The aim of our study is to elucidate the epidemiological and clinical particularities of breast cancer in women. They were included in this study the patients whose sex is female, without prejudging their age, and who presented malignant tumors of the breast confirmed histologically during the period of study without prejudging their histological type. Male patients and patients without histological evidence were excluded. The age group between 40 and 49 years was the most represented, with a frequency of 39%. 52% of the patients were postmenopausal, 32% of the patients were in PAG, 16% were in premenopausal. The notion of taking an OP contraception was mentioned in 65% of our patients. Nulliparity represented 23% of cases. This was achieved by implementing a screening policy through the promotion of information and training programs for women (breast self-examination) and the training of health workers and medical practitioners.

### INTRODUCTION

Breast cancer is a major public health problem because of its increasing incidence worldwide, with nearly 2 million new cases each year. It is the most frequently diagnosed cancer in women, followed by colorectal and lung cancer. It is the leading cause of cancer death, followed by lung and colorectal cancer.<sup>[1]</sup>

Breast cancer is the first female cancer in Morocco as well as on a global scale; its incidence is steadily and rapidly increasing and remains the first cause of death by cancer in women, despite the progress of diagnostic methods, in particular mammography and therapeutic advances made in this field.

According to the World Health Organization (WHO), improving breast cancer survival through early detection remains the cornerstone of breast cancer control.<sup>[2]</sup> Early diagnosis, combined with therapeutic advances, has contributed significantly to the sharp reduction in breast cancer mortality rates over the past two decades in most high-income countries.<sup>[3]</sup>

### MATERIALS AND METHODS

Our work consists of a retrospective study of 415 cases of breast cancer collected in the department of the CHU

Ibn Rochd over a period. The aim of our study is to elucidate the epidemiological and clinical particularities of breast cancer in women. The patients included in this study were female patients, without prejudice to their age, who presented with histologically confirmed malignant breast tumours during the study period without prejudice to their histological type. Male patients and patients without histological evidence were excluded.

The data were collected by consulting the hospital records in the archives on a pre-established form and the text and tables were entered using EXCEL software.

### RESULTS

The age group between 40 and 49 years was the most represented with a frequency of 39%. 52% of the patients were menopausal, 32% of the patients were in PAG, 16% were in peri-menopause. The notion of taking an OP contraception was mentioned in 65% of our patients. Nulliparity represented 23% of the cases. The average age of the first pregnancy was 22 years with extremes of 12 - 32 years. Arterial hypertension was noted in 9% of the cases, representing, alongside diabetes, the predominant medical history. 13 patients (6%) had a history of contralateral breast cancer. For family history, breast cancer was noted in 13% of cases.

The time between the first clinical signs and consultation was less than 3 months in 57% of cases.

The revealing symptomatology was dominated by the autopalpation of a breast nodule in 76% of cases, followed by the appearance of inflammatory signs in 14% and mastodynia in 2% of cases. On clinical examination, we noted a predominance of involvement of the superior-external quadrants, which represented 38% of cases. Localized stages (T1, T2) represented 57.3%, and advanced stages (T3, T4) were noted in 43%. Lymph node involvement was found in 32% of cases. Almost all patients had an ultrasound mammogram, the right side was the most frequently concerned with 54% followed by the left breast (44%) and bilateral location (2%). In our series, 70% of our patients had a tru-cut biopsy. The pathological study concluded to a NOS infiltrating breast carcinoma in 81% of cases. For the immunohistochemical profile, the analysis revealed that 46% were luminal B, immunohistochemistry was not performed in 33% of our patients. Three percent of our patients had metastases at the time of diagnosis.

## DISCUSSION

The annual increase in standardised incidence rates is seen in both developed countries (Europe and the USA) and developing countries. This trend largely reflects the adoption of a Western lifestyle, including changes in diet, physical activity and reproductive patterns. Population growth and ageing are expected to further increase the global burden of breast cancer, particularly in low- and middle-income countries.<sup>[4]</sup> The age group 40-49 years concentrates the majority of women affected by this disease. This is not consistent with data obtained in France (mean age: 61 years, age range: 60-69 years), but we agree with the results obtained in Algeria (mean age: 50 years, age range: 50-54 years).<sup>[5]</sup> The evolution with age is parallel to that of industrialised countries up to the age of 40-45 years, but there is then a deficit of postmenopausal cancers, resulting in a younger overall average age, wrongly interpreted as an earlier onset of these cancers in these countries.<sup>[6,7]</sup> Les données de la littérature sont concordantes avec celles de notre étude : nous avons trouvé presque la moitié de nos.

The data in the literature are consistent with those of our study: we found that almost half of our patients had their first menstrual period before the age of 12 years, puberty before 12 years increases the risk of breast cancer in adulthood through a more prolonged exposure to oestrogens. The risk associated with nulliparity is low, in our study 23% of patients were nulliparous, we agree with the results that have been found: Mesmoudi Benidar (17%)<sup>[8]</sup>, Menikhar (29.6%).<sup>[9]</sup>

An advanced age at menopause is also often a risk factor for developing breast cancer. The study found a relative risk of 1 for women who had reached menopause before the age of 45 and a relative risk of 2.1 for those who had

reached menopause after the age of 55.<sup>[10]</sup> In our series, 52% of the women were menopausal.

Thirteen percent of our patients had a family history of cancer; breast cancer is hereditary in 5-10% of cases. Estimation of familial and individual risk can be a key contribution to the management of these patients through screening or appropriate prevention.<sup>[11]</sup> Six percent had a personal history of breast cancer, a personal history of treated and cured breast cancer is also a risk factor as is a personal history of ovarian or colon cancer.<sup>[12]</sup> Seventy-six percent of patients revealed the disease by self-examination of a nodule followed by inflammatory signs in 14% of cases. The tumour was found in the QSE in 38% of cases, in the QSI in 6%, regardless of the side of the affected breast. Retroareolar location was found in only 7% of cases, with a dominance of the QSE location as shown in several studies<sup>[13]</sup>, this topography is explained by the amount of glandular tissue always more present in the central and superolateral part of the breast.<sup>[14,15]</sup>

The size of the tumour at the time of diagnosis is variable in the literature. In our series, 57% of patients were diagnosed at localised stages (T1, T2). This is in line with the results of the series from China.<sup>[16]</sup> Axillary node status remains one of the most important prognostic factors in breast cancer and there is a strong association between the degree of axillary invasion and the risk of recurrence. It therefore provides essential information for treatment decisions. The introduction of organised breast cancer screening programmes has resulted in the detection of cancers at an early stage with approximately 70% without axillary metastasis (N0).<sup>[17]</sup> The rate of axillary adenopathy found on clinical examination in our patients (32%).

## CONCLUSION

Breast cancer is currently the most frequent malignant tumour in women both in the world and in Morocco. It is therefore a major public health problem. This pathology is serious because of its age of onset in adult women in full genital activity and the importance of late forms, which explains the difficulties of an adequate management and the poor prognosis. Primary prevention of breast cancer seems difficult given its multifactorial aetiology. It is important that breast cancers are included in national health policies. This can be achieved by implementing a screening policy through the promotion of information and training programmes for women (breast self-examination), and the training of health workers and medical practitioners.

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