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STUDY OF BREAST CANCER TREATMENT WAITING TIMES: EXPERIENCE OF NATIONAL INSTITUTE OF ONCOLOGY OF RABAT, MOROCCO

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ABSTRACT

Background: Breast cancer is a public health problem in terms of its frequency and severity. Along with the increase in the incidence of this cancer, there has been growing awareness of the length of delays in accessing care. Measuring waiting times is a good indicator of quality and performance of cancer care. The aim of this study was to determine the waiting times of medical care of patients with breast cancer in the National Institute of Oncology in Rabat (INO). **Materiel and methods**: This is a descriptive retrospective study of 505 cases of patients followed for breast cancer at INO. The five most observed following waiting times in the department of medical oncology were evaluated. **Results**: The mean age was 48 years old. The average deadline from diagnosis to chemotherapy was 82.6 days. The average deadline between chemotherapy and radiotherapy was 53.7 days. Overall, the average deadline between surgery and chemotherapy was 59.3 days. The average deadline between surgery and adjuvant chemotherapy was 61.4 days. The average deadline from neoadjuvant chemotherapy to surgery was 68.8 days. **Conclusion**: Controlling access times to treatment is a real strategic issue for improving breast cancer care through the development of an active and continuous policy to improve these times. It is essential to reduce the waiting time during the care pathway to ensure successful treatment and to meet patients' needs.

KEYWORDS: Breast cancer, Waiting times, Care pathway.

INTRODUCTION

Breast cancer is a public health problem in terms of its frequency and severity. It is the most common type of female cancer worldwide. Along with the increase in the incidence of this cancer, there has been growing awareness of the length of delays in accessing care.[1] In several countries, delays in treatment and access to healthcare services have become a priority in public health policies.[2] Measuring waiting times is a good indicator of quality and performance of cancer care.[3] The impact of treatment delay on patient survival has been proven by several studies showing the importance of reducing this delay.[4] The aim of this study was to determine the waiting times of medical care of patients with breast cancer in the National Institute of Oncology in Rabat (Morocco).

MATERIEL AND METHODS

This is a descriptive retrospective study of 505 cases of patients followed for breast cancer at Institute National of Oncology of Rabat. For each patient, the following data were collected: socio-demographic and clinical data, personal and family history related to cancer, method of discovery, history of the disease as well as the treatment modalities and the complete dates of the various stages of treatment. The five most observed following waiting times in the department of medical oncology were evaluated. The SPSS 10.0 software was used for statistical analysis.

RESULTS

The average age was 48 +/- 11.7 years. Most of the patients (76.50%) were unemployed. More than half of them were illiterate (60.96%) and only 4.02% had a higher level of education. For marital status, 59.8% of patients were married. 75.20% of patients were of urban origin.

For the gynecological history, 60.40% of the patients were premenopausal and 56.61% used oral contraception. In our study population, 6.02% of patients had a personal history of breast or ovarian cancer and 19.40% had a family history of these cancers.

The mode of discovery of the disease was self-examination in 84.63% of cases. Most of the patients (94, 35%) were aware of the diagnosis.

The mammographic ACR classification revealed an ACR of 5 in 63.18% of cases, ACR of 4 in 30.54% and ACR of 3 in 6.26% of cases. For the CA15-3 assay, the

median level is 21.02 U / ml with extremes ranging from 14.13 to 38.2 U / ml.

The dominant histological type was invasive ductal carcinoma which accounts for 91.95% of cases. The histopronostic distribution according to the grade of Scarff-Bloom and Richardson is 56.28% for grade II, 37.52% for grade III and 6.18% for grade I.

Of the patients, 70.02% have positive hormone receptors and 24.63% have positive HER-2 status.

Clinical TNM classification was noted in 242 patients. Tumors were in 4.95% of non-palpable cases, in 17.35% of cases of stage T1, in 61.15% of stage T2, in 14.46% of stage T3 and finally in 2.06% of cases of stage T4.

The diagnosis was made in a localized situation in 87.06%; the most frequent stages were stage II (41.18%) and stage III (33.46%). However, 12.47% of the patients were in a metastatic situation.

In most cases, therapeutic management included curative surgery. It was a mastectomy with axillary dissection in 73.92% of cases. Radiation therapy was delivered to 83.68% of patients. Chemotherapy was performed in 496 patients: it was adjuvant in 65.12% of cases, neoadjuvant in 23.38% of cases and palliative in 11.49% of cases. Hormone therapy was delivered in 70% of cases and only 22.36% of patients received targeted therapy with Trastuzumab.

For treatment waiting times, we focused on the most observed therapeutic pathways in our medical oncology department. The average deadline from diagnosis to chemotherapy was 82.6 days. The average deadline between chemotherapy and radiotherapy was 53.7 days. Overall, the average deadline between surgery and chemotherapy was 59.3 days. The average deadline between surgery and adjuvant chemotherapy was 61.4 days. The average deadline from neoadjuvant chemotherapy to surgery was 68.8 days.

DISCUSSION

The treatment waiting time is very important for the effectiveness of treatment and the quality of life of people with breast cancer. Indeed, Smith et al. mentioned the negative impact on survival of a treatment delay of more than six weeks.[5] The UK's National Health Service (NHS) recommendations stressed that the time between diagnosis and decision on first treatment should not exceed 31 days.[6]

Cancer Care Ontario recommends a maximum delay of 28 days between the treatment decision and surgery (4 weeks) for invasive breast cancers.[2]

English cohort studies found a deleterious effect on survival in the event of a delay in treatment between mammography and breast surgery of more than 12 weeks when it is a lesion discovered on mammography and not a palpable lesion.[6]

The European Society of Breast Cancer Specialists, for its part, defines management recommendations for patients with breast cancer, and sets quality criteria. According to EUSOMA, the time criterion is a quality indicator: it specifies that, in a referral center, the interval between the date of diagnosis and the date of surgery must be strictly less than 6 weeks.[7]

The Canadian Steering Committee on Clinical Practice Guidelines in the Treatment of Breast Cancer recommends that adjuvant chemotherapy should be started as soon as possible after surgical recovery. Thus, it has been shown that relapse and survival are negatively influenced when chemotherapy begins more than 12 weeks after surgery.[8]

English recommendations suggest performing the first cure of chemotherapy within 31 days of surgery.[9]

European recommendations indicate that adjuvant chemotherapy should be started between 2 and 6 weeks after surgery and that its effectiveness would be greatly reduced if administered more than 12 weeks after surgery.[10] Conversely, some studies do not show an obvious difference in overall survival compared to the time taken to initiate adjuvant chemotherapy.[11]

The time taken to initiate radiotherapy is associated with the risk of locoregional recurrence. INCa recommends not to exced 12 weeks (84 days) after surgery in the absence of prior chemotherapy. When adjuvant chemotherapy is interposed between surgery and adjuvant radiotherapy, this time should not exceed 6 months.[12]

According to the HAS, radiotherapy should be started at most 5 weeks after chemotherapy.[13]

It should be noted that on the issue of treatment delays in breast cancer, the level of scientific evidence is limited. The literature offers few specific studies. Also, the heterogeneity is the major limitation of these studies: whether it is linked to the population studied, to the treatments received or to the chosen endpoint.

In general, this study has several important scientific and methodological advantages, by allowing us to draw up an inventory of the treatment waiting times for breast cancer at the National Institute of Oncology of Rabat which is a pioneer center in cancer treatment in Morocco.

However, in the absence of a computerized medical file allowing the collection of all the dates of the various procedures and stages of treatment, the dates of the explorations and treatment were not found for all patients. This is how often we have missing data when calculating deadlines. Some dates were hardly

documented despite the notion of performing the diagnostic or therapeutic act.

The deadlines for this study appeared rather long compared to countries advanced in the management of breast cancer, however the situation has radically changed in Morocco since the launch of the cancer plan. In just a few years, great advances have been made in all areas of cancer control.[14]

CONCLUSION

In parallel with the multidisciplinarity and the increasing complexity of the management of breast cancer, there has been an increase in awareness of the possible long delays in access to care. Controlling access times to treatment is a real strategic issue for improving breast cancer care through the development of an active and continuous policy to improve these times. It is essential to reduce the waiting time during the care pathway to ensure successful treatment and to meet patients' needs.

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