EPIDEMIOLOGICAL PROFILE OF CANCER IN WOMAN AT THE WILAYA OF ORAN EPIDEMIOLOGICAL STUDY 2012-2015

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Abstract

The objective of this descriptive retrospective study is to establish an epidemiological profile of cancer in women in Oran within the framework of the hospital cancer register at the EHU of Oran which is a wilaya located in western Algeria. The annual study of the data would provide a picture of the epidemiological profile of cancer in the Wilaya.

A breakdown by sex shows a predominance of the pathology in the female sex with an average age of 48.5 ± 0.4 years. This frequency increases from the age of 30. It is mainly dominated by female cancers. Breast cancer is the first cancer in women in the Wilaya (27.8%) followed by other gynecological cancers. Breast cancer represents a third of all cancers and mainly affects young women. It is 3 times more common than cervical cancer. The other genitals represent 16.6% of cases. Digestive cancers (18.0%) come second, followed by skin cancers. They are mainly represented by colorectal cancers.

Keyword: cancer; woman; registry; breast; Oran; Algeria

1.INTRODUCTION

Epidemiology in oncology remains an essential discipline with multiple aims: to assist clinical and basic research, to provide the population with screening and prevention measures, and to enable States to establish health planning.

The incidence of pathology continues to increase worldwide and, among the main factors contributing to this development, the improvement of life expectancy and the aging of the population, the cumulative exposure to certain environmental nuisances linked to industrialization and the change in behavior of individuals such as smoking and certain consumption patterns.

The cancer surveillance system in Algeria is based on the installation of cancer registers in the various provinces. The epidemiological data produced makes it possible to calculate epidemiological indicators such as prevalence and incidence. They show that a trend similar to that recorded in Western countries is starting to manifest itself in ours. The hospital cancer registry at the EHUO and an analysis of its data shows a slight predominance of the pathology in women compared to men. The objective of our work is to describe the epidemiological profile of cancer in women in the province of Oran and to determine the most common cancer and the most affected location.

2.WORKING METHOD AND PATIENTS

This is a retrospective descriptive study carried out at the EHU in Oran. It concerns all cases of cancer that occurred from January 1, 2012 to December 31, 2015 in women throughout the province of Oran. Data collection was done actively and within the framework of the Oran EHU cancer registry, according to a survey sheet containing several variables, justified in the context of the study objectives. We cite those concerning the identification of the patient: age, date and place of birth, address. Concerning the diagnosis, several variables are sought: the primary location and its morphology (histopathological type), the date of the diagnosis which

is considered as the date of incidence and the basis of the diagnosis as well as the follow-up of the patient.

The incident cases are all malignant tumors diagnosed during the period considered while respecting the definitions recommended in Cancer Registration, Principles and Methods (Jensen et al.).

Data were collected from the medical records of all EHU Oran patients.

The results were analyzed by EPI6Fr for the calculation of frequencies, raw and standardized incidence rates.

3.RESULTS and DISCUSSION

A total of 3678 cases of cancer have been recorded, including 1539 (41.8%) men and 2139 (58.2%) women with a sex ratio of 0.7, and an average age of 48.5±0.4 years. As for the diagnostic bases, they are mainly anatomopathological, the histological verification rate is 76%. The well-differentiated grade is the most frequent grade followed by the little or moderately differentiated. Adenomas and adenocarcinomas are the most present in the classification 15.7% and ductal, lobular and medullary tumors 14% then epithelial tumors 12.4% and epidermoid 11.8%; but a significant percentage 21.2% whose morphological group remains undetermined. Leukemias represent only about 3%.
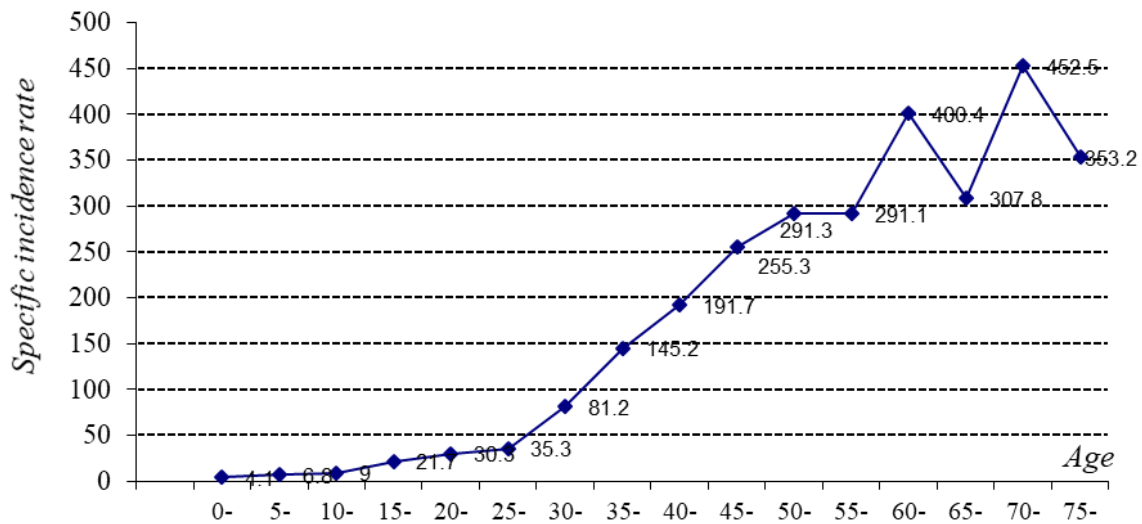

Figure 1: Distribution of cancer cases in women by age group (Descriptive study, Oran 2013-2016)

It is noted that this classification is dominated by carcinomas and adenocarcinomas in relation to the frequency of gynecological and digestive cancers. The first histological type encountered is adenocarcinoma with a frequency that exceeds 24% of the total followed by carcinomas which account for more than 23% of cases. These two histological types are found especially in breast cancer. Lymphomas are also common; are mainly non-Hogkinian malignant lymphoma (2.9%) and Hodgkin's disease (1.3%).

The average annual age remains within the same limits of the interval: 48.5 ± 0.4 years. Cancer in women exists

at all ages, its incidence increases with age from 15 years and reaches its maximum between 45 and 60 years. This peak is very marked in all groups of locations especially for the breast. Young women are affected by cancer. Digestive cancer is also common. We record a very significant peak between 60 and 65 years (figure 1).

The study of the frequency of cancer in women by group of locations shows that that of breast cancer is the highest with a frequency of 27.8% and IR of 27.3 / 100 000 and SIR of 32.4 / 100 000. It accounts for approximately 1/3 of all cancers in women (figure 2).
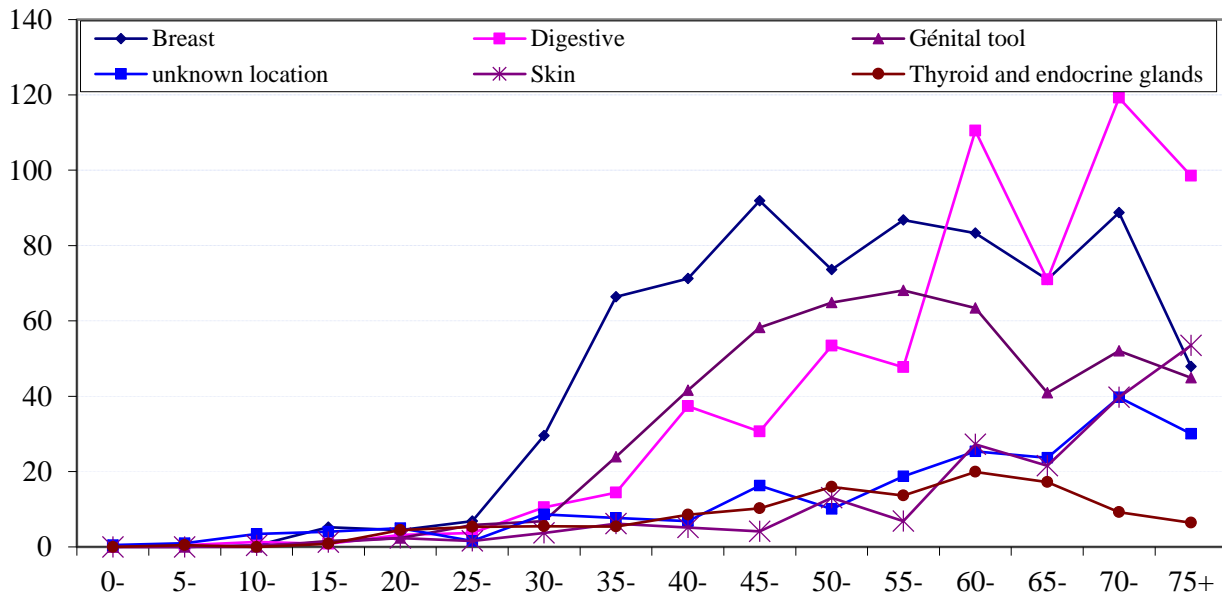
Figure 2: Age distribution and groups of cancer locations in women in Oran
Descriptive study 2013-2016

In second position, come digestive cancers. They represent the 18% of incident cases with IR= 17.7/100 000 and an SIR = 22.0 / 100 000, represented mainly by cancer of the rectum, colon and stomach. Digestive cancer is common in women between 55-65 years old, a superimposed peak for the four organs is observed at 60 years of age. Gallbladder cancer is among the first organs to be classified. It is noted that colorectal cancer is frequent in young women (± 40 years) and its incidence continues to increase and reaches its maximum at 60 years. A high incidence of gastric cancer is also observed at 60 years of age. Bladder cancer is also common, especially in older women. The cumulative risk for digestive cancers is 3%.

The genitals alone account for 17% with SIR = 20.4 / 100 000. The cervix is the second organ affected with a IR = 10.2 / 100 000. The incidence of breast cancer is 3 times greater than that of cervical cancer. Cervical cancer also seems frequent from the age of 30 and

reaches its maximum at 55; however, ovarian and uterine cancer is found from the age of 40. It is the female cancers which are the most affected, dominated by breast cancer which comes first with its frequency of 28% (ASCAR = 25%), a IR = 27.4 / 100 000 and an SIR = 32.4 / 100 000 and a cumulative rate of 3.7%.

Female cancers are common at an early age. The young woman is affected mainly by breast cancer, a first peak is recorded at 45 years, the second at 55 years and the third at 70 years.
Skin cancer ranks fifth followed by the thyroid (5%) and the other endocrine glands. The incidence of skin cancer increases with age; it is very marked in women aged 65 and over. Malignant melanoma is among the first classes due to the high frequency of skin cancer in women; it occupies the third position in the distribution of cases by groups of locations.

Lymph nodes are also affected; they represent an incidence of 3.9 / 100 000 followed by the brain and the nervous system. The risk of having lymph node or skin cancer before the age of 75 is 1%; it is 0.6% for cancer

of the thyroid or hematopoietic and related lymphoid tissue; it is very low for urinary cancer (0.01%). Hematopoietic cancer is found at any age in women, it is common in young girls (before 15 years); leukemias are common in this age group; a peak is recorded at 10 years.

Cases of thyroid cancer are recorded from the age of 15. This cancer seems to affect young women and most are reached at 50 and 65 years of age.

The incidence rate of respiratory cancer is considerable: 3.3 / 100 000. This cancer is frequent especially between 40-50 years and its incidence continues to increase from 55 years. He is dominated by lung and bronchial cancer whose IR is 1.3 / 100 000. This incidence is significant between 40-45 years and 60-70 years.
The incidence of brain cancer is clearly frequent between 45-65 years of age; two peaks are recorded in this age group, the first at 50 and the second at 60.

The eye is also affected by the pathology, there is an attack between 60 and 70 years old.

The nasopharynx is the organ of the oral cavity most affected by cancer with an incidence of 1.5 / 100 000 which is very marked between 35 and 60 years. Amygdala cancer ranks second with an incidence of 0.5 / 100 000. He mainly affects young women between 40 and 55 years of age and another peak is observed at 65 years of age. This type of cancer exists at any age and its incidence increases with age from 55 years; it is very common in elderly women.
Cancer of the urinary tract is found in women and its incidence is considerable (16.3 / 100 000). Kidney cancer seems to affect young women, especially from the age of 30; two peaks are recorded. The pathology is very common between 40 and 60 years of age.

4.CONCLUSION

Cancer is a common disease among women in our province and the number of cases recorded reflects the epidemiological situation. Its frequency reaches its maximum in women in their sixties. Female cancers dominate the distribution; they are common in young women. They are dominated by breast cancer which is the first cancer recorded. Digestive cancers are also common; they come in second position. Oran's wife seems to be paying a heavy price for the disease. It is time to tackle it with a screening program.