

Statistical View of Malignant and Suspected Malignant Tumors in the Surgical Ward of the Yaounde University Teaching Hospital

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Received date: September 03, 2019; Accepted date: September 17, 2019; Published date: September 24, 2019

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Abstract

Cancer is a major public health problem in both industrialized and developing countries. One in ten deaths is attributable to cancer worldwide. This situation calls for a development of a cancer registry in hospital and in the general population that can allow a systematic collection, storage, analysis and interpretation of cancer data. The purpose of this work is to highlight an epidemiological profile of malignant tumors and suspected of malignancies at the Yaounde University Teaching Hospital to improve their management.

We conducted a descriptive and retrospective study over a period of five years from 2010 to 2014. We registered 231 hospitalized patients for malignant or suspected malignancies during the study period. The predominance was male with a sex ratio of 1.03. The modal classes were in both sexes 51-60 years followed by 31-40 years. The main tumors encountered were digestive tumors (41.6%), odonto-stomatological tumors (22.1%), gynecological tumors (10%), and ENT (6.9%). Among the digestive tumors in order of frequency, colorectal tumors are the most common (36%), followed by gastric tumors (22%), and tumors of the pancreatic head (19%).

The incidence of malignant tumors increases with time. The need to develop a cancer registry is necessary for epidemiological surveillance to improve their management, and to guide the teaching of tumor pathology in our context.

Keywords: Malignant tumor; University teaching hospital; Yaounde; Cancer

Introduction

Cancer is a major public health problem in both industrialized and developing countries [1,2]. It is the leading cause of death in the world and surgery has a fundamental place in its care in a multidisciplinary approach [3,4]. In sub-Saharan Africa, its mortality alone exceeds that related to malaria, HIV and tuberculosis combined [5,6].

The development of a registry of cancers in hospitals and in the general population that can allow a systematic collection, storage, analysis and interpretation of cancer data is a fundamental step in the fight against cancer. Unfortunately the problem in Africa is that they are unavailable and when they are, they are poor in most African countries. According to WHO in 2015, only 9 registers producing quality reports for the entire African population were recorded in Africa [4]. This leads to an under-evaluation and inadequate orientation of available resources in the fight against cancer in the health system [2,6,7]. Thus, it would be opportune to present in a preliminary work on the hospital statistics of malignant tumors and suspicious of malignancies in the surgical department of the University Hospital of Yaoundé to contribute to a relevant care and training of professionals.

Methodology

We conducted a descriptive and retrospective study over a period of five years from 2010 to 2014, in the surgery department of the Yaounde University Teaching Hospital. Patients hospitalized for malignancy or strongly suspected of malignancy were included. The study variables were: age, sex, diagnosis, tumor location and the specialty involved in the management. The data was entered and analyzed using EPI info version 3.5.4. The results were presented in the form of tables, figures and graphs developed from the Excel software (Office 2003 version).

Results

We counted 231 hospitalized patients for malignant or suspected malignancies during the study period out of a total of 3780 hospitalizations, a prevalence of 6.1% (Figure 1).

The predominance was male with a sex ratio of 1.03. We counted 117 men and 114 women. The modal classes were in both sexes, 51-60 years followed by 31-40 years (Figure 2).

The main tumors encountered were digestive tumors (41.6%, n=96), odonto-stomatological tumors (22.1%, n=51), gynecological tumors (10%, n=23), and ENT (6.9%, n=16) (Figure 3).

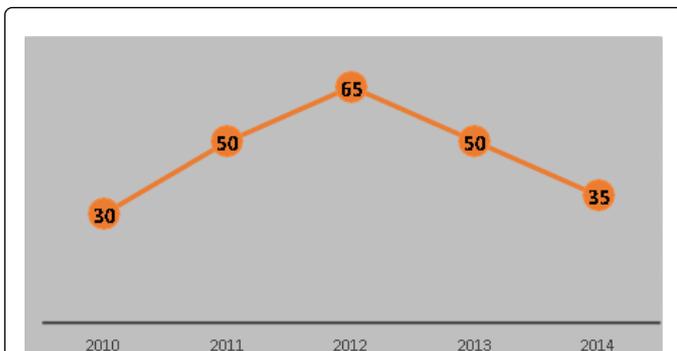


Figure 1: Number of cases per year (2010-2014).

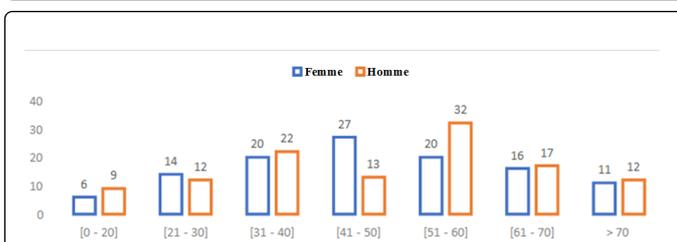


Figure 2: Number of patients based on sex and age.

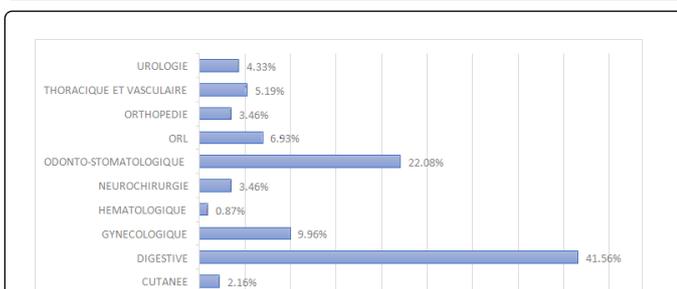


Figure 3: Global distribution of cancers based on location.

With regard to the distribution of tumors according to the location in women, in order of frequency, the most frequently encountered were: mandibular tumors (16%, n=18) in the head, followed by breast tumors (14%, n=16), then colorectal tumors (12%, n=14), gastric tumors (11%, n=12), pancreatic head tumors (8%, n=9), and parotid tumors (6%, n=7).

For men, in order of frequency, colorectal tumors ranked first (17%, n=20), followed by mandibular tumors (11%, n=13), then nonspecific abdominal masses (9%, n=10), gastric tumors (9%, n=10), pancreatic head tumors (7%, n=8) and laryngeal tumors (5%, n=6).

Digestive tumors were the most common in the entire study population. Thus, colorectal sites (36.46%, n=35) were the most important, followed by gastric tumors (21.88%, n=21) and pancreatic head tumors (18.75%, n=18 (Figure 4).

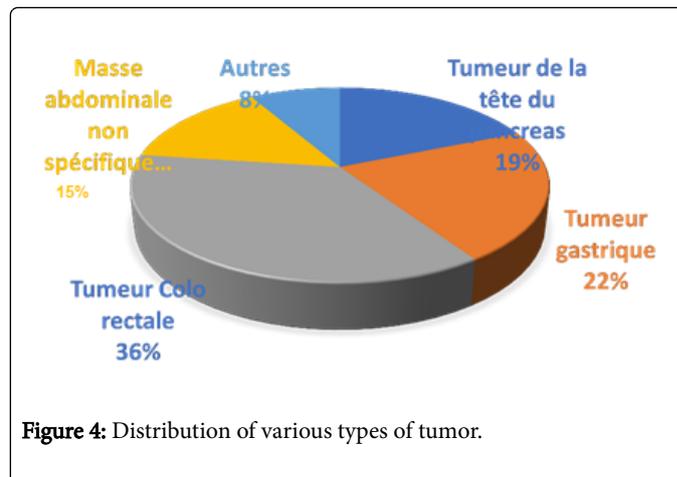


Figure 4: Distribution of various types of tumor.

Discussion

We have seen an increase in the frequency of cancers over time, peaking in 2012, this finding is consistent with the WHO projections of a progressive increase in the incidence of cancer worldwide, which in 2003 predicted an increase in the incidence of cancer by 50% by 2020 [1,2].

There is also a decrease in the incidence that can be justified either by the efforts made by the health authorities in the prevention, or by a specific decrease in the number of visitors to the study site. In our study population, we had a discrete male predominance; this is not the case in the 2012 Dahindwa series in Rwanda [8], and that of other authors in Italy where they find rather a discrete female predominance. Since gynecological tumors are the most frequent in most studies, the lack of recruitment in the gynecology department as part of our work could explain this. Cervical cancer being the second most common cause according to WHO after breast cancer in women, was rarely encountered in our series (1.33% n=2). According to WHO, prostate and liver cancers are the most common in the male population. Yet these were rarely encountered in our work. This finding may reflect on the one hand the divergence in epidemiology, but the absence of recruitment in the gastroenterology department could also be a bias. In addition, the possible variations due to exposure to risk factors that change over time should also be taken into account.

Conclusion

The incidence of malignant tumors increases with time. The growing burden of cancer and misdistribution of cancer care resources in low income countries and this can warrant a need of a massive re-evaluation of the cancer state to improve both prevention and treatment strategies. It is necessary to develop a cancer registry for epidemiological surveillance in order to improve their management, and to guide the teaching of tumor pathology in our context.

Acknowledgement

The abstract is published in Joint Event on Cancer Treatment & Breast Cancer and Biomarkers March 20-21, 2019 Paris, France.

References

1. Magrath I, Epelman S (2013) Cancer in adolescents and young adults in countries with limited resources. *Curr Oncol Rep* 15: 332-334.
2. Pesec M, Sherertz T (2015) Global health from a cancer care perspective. *Future Oncol* 11: 2235-2224.
3. Rose J, Weiser TG, Hider P, Wilson L, Gruen R, et al. (2015) Estimated need for surgery worldwide based on prevalence of diseases: A modelling strategy for the WHO Global Health Estimate. *Lancet Glob Health* 3: 13-20
4. Zinsou CP, Fourn L, Zohoun T (1990) Epidemiological aspects of cancers at the national hospital and university center of Cotonou. *Méd Afr Noire* 37: 232-236
5. Boyle P, Ngoma T, Sullivan R, Ndlovu N, Autier P, et al. (2016) The State of Oncology in Africa 2015. International Prevention Research Institute, France.
6. Frederick S (2015) Cancer in Sub-Saharan Africa: The Need for New Paradigms in Global Health. Pardee Center Publications, Boston, Massachusetts.
7. Farmer P, Frenk J, Knaul FM, Shulman LN, Alleyne G, et al. (2010) Expansion of cancer care and control in countries of low and middle income: A call to action. *Lancet* 376: 1186-1119.
8. Ndahindwa V, Kamanzi C, Semakula M, Abalikumwe F, Hedt-Gauthier B, et al. (2014) Determinants of fertility in Rwanda in the context of a fertility transition: A secondary analysis of the 2010 demographic and health survey. *Reprod Health* 13: 11-87.