

Full Length Research Paper

Primary head and neck malignant tumours in Port Harcourt, Nigeria: A revisit

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Head and neck malignancies pose a great challenge to both the patient and the specialists due to the variability of its mode of presentation and primary tumor sites. The aim of this study is to highlight the current trends of primary head and neck tumors in Port Harcourt. It will also compare reports from other centers and give emphasis to their differences. This is a retrospective study of all histological confirmed head and neck tumors seen in University of Port Harcourt Teaching Hospital (UPTH) from April 2000 to March 2010. The case notes of all patients diagnosed as having head and neck tumors were retrieved from medical records department. Demographic data, clinical features, sites of primary lesions and histopathological diagnosis were recorded. A total of 163 patients were recruited with confirmed histopathological diagnosis of primary head and neck tumors over the period of study. There were 104 (63.8%) males and 59 (36.2%) females with M: F ratio of 1.8:1. The age range was 24-80 years with a mean of 57.78 (SD ± 11.93) years. There was an increase of cases of primary head and neck tumors as well as the emergence of lymphomas. Squamous cell carcinoma remains the commonest histopathological type of tumour. The Pattern of primary head and neck malignant tumors in Port Harcourt revealed a changing trend in the prevalence of primary head and neck tumors as well as the emergence of lymphomas.

Keywords: Primary, head and neck, tumors, squamous cell carcinoma, Port Harcourt.

INTRODUCTION

Head and neck cancers account for over five percent 5% of cancers in Europe and America excluding skin cancers (Fan, 2004). Alcohol consumption, smoking or chewing of tobacco are the major known factors involved in cancers of the head and neck and the effect of these behaviors in terms of risk is multiplicative rather than additive (Ringström et al., 2002). The risk of an individual of having head and neck cancer appears to be increased by poor diet and occupational exposure to certain chemicals, oils, cement, or hardwood dust (Goldenberg et al., 2004). The detection of oncogenic types of human papilloma virus (HPV) in a sub-set of head and neck cancer tissues supports the view that HPV is an emerging etiological factor in patients with Squamous Cell Carcinoma of Head and Neck (SCCHN) (Adeyemi et

al., 2008).

Majority of the lesions of primary head and neck malignancies are squamous cell carcinomas (Ologe et al., 2005; Okoye and Nwosu, 1995). Lymphomas comprise the second most common primary malignancy (Dubey, 1999). Others include salivary gland malignancies and sarcomas (Okoye and Nwosu, 1995; Dubey, 1999). The histological type, primary site of tumour, age of patient, co-morbid conditions and occupation can influence the prognosis of the disease (Abdulwahab et al., 2004; Pivota et al., 2001). However, in developing countries, late presentation contributes immensely to treatment failure (Okoye and Nwosu, 1995).

In view of the fact that there is paucity of recent information on primary head and neck tumors in our environment, this study was carried out to draw attention to the recent trends of primary head and neck tumors in Port Harcourt. The study will also compare reports from other regions of the country and highlight their differences.

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Table 1. Distribution of tumor site and percentage

Site of Tumor	Number of cases	Percentage (%)
Nose/Paranasal sinuses	49	30.0
Nasopharynx	35	21.4
Oropharynx	28	17.2
Larynx	25	15.3
Hypopharynx	12	7.4
Ear	5	3.1
Esophagus	5	3.1
Scalp	4	2.5
Total	163	100

Table 2. Age range and number of cases

Age Range	Number of Cases	Percentage (%)
24 – 29	9	5.5
30 – 35	1	0.6
36 – 41	5	3.1
42 – 47	10	6.1
48 – 53	9	5.5
54 – 59	59	36.2
60 – 65	35	21.5
66 – 71	16	9.8
72 and above	19	11.7

Table 3. Histopathological type and percentage

Histopathological types	Number	Percentage (%)
Squamous cell carcinoma	130	79.7
Sarcomas	15	9.2
Adenoidcystic carcinoma	12	7.4
Lymphoma	6	3.7

MATERIALS AND METHODS

This was a ten year retrospective study of all confirmed histopathological analysis of primary Head/Neck cancers from April 2000 to March 2010. Case notes of all histopathologically confirmed primary Head/Neck cancers were retrieved from medical records of the University of Port Harcourt Teaching Hospital. Records from the ENT surgery department and theatre records were further retrieved to augment the data. The age, sex, histopathological diagnosis, site of primary lesions, duration of symptoms before presentation and reasons for late presentation were extracted and used for this study.

Intracranial, metastatic and thyroid cancers were excluded from this study. The data was entered into the version 16 of the Statistical package for social sciences (SPSS16). Categorical data were expressed as

percentages, mean, mode and standard deviation. Simple tables were further used to illustrate the data.

RESULTS

A total of 163 patients were recorded as having confirmed Primary Head/Neck cancers within the period of study. The total ENT clinic attendance over the period was 12,480, giving a prevalence of 1.3% of primary head and neck tumors in the clinic population. The age range was 24-80 years with a mean of 57.78 (SD \pm 11.93) years. 104 (63.8%) of the patients were males and 59 (36.2%) were females with M: F ratio of 1.8:1. The nose and paranasal sinuses recorded highest number of cancers 49 (30.0%) followed by the nasopharynx 35 (21.4 %). (Table 1). The age range 54 -59 recorded the highest number of cases 59 (36.2%) cases (Table 2).

Table 4. Duration of patient symptoms before presentation to UPTH

Duration of symptom before presentation	Number	Percentage (%)
Less than 2 years	5	3.1
More than 2 years but less than 4years	15	9.2
More than 4 years but less than 6 years	42	25.8
More than 6 years	101	61.9

Majority (61.9%) of the patients presented to the hospital after having symptoms for over 6 years.

Table 5. Reasons for late presentation to UPTH

Reasons given by patients	Number	Percentage (%)
Ignorance of the disease condition	60	36.8
Poverty	70	42.9
Wrong diagnosis made in primary and secondary health facilities	20	12.3
Native treatment	13	8.0

Majority (42.9%) of the patients blamed poverty for their late presentation to the hospital

Squamous cell carcinoma was the highest 130 (79.7%) histopathological type of primary head and neck tumor.

DISCUSSION

The study revealed that the prevalence of primary head and neck tumors in Port Harcourt has increased to 1.3%. A previous study done in Port Harcourt revealed 0.9% (Okoye and Nwosu, 1995). Furthermore, the disease condition was found more in the middle age group with a peak occurrence in the age group 54–59 years, which is in agreement with the study done previously in Port Harcourt (Okoye and Nwosu, 1995). This shows that the pattern in terms of age presentation in Port Harcourt has not changed. The same age presentation was reported in Lagos (Nwawolo et al., 2001). However, in Jos, majority of cases were found in the 3rd and 4th decades of life (Bhatia, 1990).

Moreover, male predominance was found in our study which agrees with previous studies done in Port Harcourt and Lagos (Okoye and Nwosu, 1995; Nwawolo et al., 2001). This may be explained by the high rate of cigarette smoking and alcohol consumption by men as compared to females in the Nigerian society (Okoye and Nwosu, 1995).

The nose and paranasal sinuses accounted for the highest number of cases followed by the nasopharynx and least being the scalp. This work agrees with the study done in Jos (Bhatia, 1990) that reported the nose/paranasal sinuses were the commonest site of

cancer involvement. On the other hand, other works done in Saudi Arabia and Lagos found the nasopharynx to be the commonest site of involvement (Abdulwahab et al., 2004, Nwawolo et al., 2001). Primary site involvement may have to do with geographical location and the socio-cultural practice of the people in that region (Pivota et al., 2001, Nwawolo et al., 2001).

Majority of the lesions were squamous cell carcinoma. This was generally a common finding in various reports (Lilly Tariah et al., 2000; Ahmad and Pindiga 2004; Iseh and Malami, 2006; Nwaorgu et al., 2007). Sarcoma was found to be the second most histopathological type of tumour in our study. This agrees with the findings of previous researchers as well (Okoye and Nwosu, 1995; Lilly Tariah et al., 2000). It was observed that lymphomas accounted for 3.7% of cases in our study; this was not found in the previous study done in Port Harcourt (Okoye and Nwosu, 1995). However, it has been documented by other researchers in other regions of Nigeria and Africa (Dubey et al., 1999; Lilly Tariah et al., 2009).

Late presentation can affect the prognosis of the disease. This factor seriously militates against achieving cure for the disease (Zagar et al., 1993; Tobias, 1994; Watkinson et al., 2000). Our study revealed that majority of the patients presented late to the hospital because of poverty. Other reasons included ignorance, wrong diagnosis and native treatment. In general, none of our patients had cure of the disease mostly due to late presentation and cost of treatment.

A number of researchers have made contributions on how to prevent and manage effectively primary head and

neck tumors these included; public enlightenment campaigns, prevention of environmental pollution, continuous medical education and research amongst health care professional and providers (Okafor, 1983; Garfinkel, 1995; Pivota et al., 2001; Otoh et al., 2004; Amusa et al., 2004; Lilly-Tariah et al., 2009; Alabi et al., 2010).

In the same way, medical practitioners are advised to have a high index of suspicion and refer cases of primary head and neck tumors to centers where prompt diagnosis can be made early enough for the patient to have a chance of a cure for the disease. Besides, the government has a major role to play by providing better diagnostic and therapeutic facilities in hospitals in addition to subsidizing the cost of treatment.

CONCLUSION

A re-visit of the pattern of primary head and neck malignant tumors in Port Harcourt revealed a changing trend in the prevalence of primary head and neck tumors as well as the emergence of lymphomas. It is expedient to carry out this kind of study at regular intervals to enable health care professionals update existing records. Besides, it will also help in the revision of policies that are geared towards reducing the prevalence of primary head and neck tumours in our environment.

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