



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1421343>Available online at: <http://www.iajps.com>

Research Article

**RISING PREVALENCE OF SQUAMOUS CELL CARCINOMA
OF HEAD AND NECK****Dr. Iqra Zainab, Dr. Anam Farooq, Dr. Ghania Asif**
Nishter Medical University, Multan**Abstract:**

Introduction: The most common malignancy of head and neck region is squamous cell carcinoma, Accounting for a large number of patients and the prevalence is even more in Asian countries. According to an estimate around 23% of all malignancies in the Asian region is malignancies of head and neck region. Most of the patients present with this disease in the 5th decade of life. The tumor of head and neck comprises of neoplastic growth of nasal and paranasal sinuses, lips, oral cavity, nasal cavity pharyngeal and hypo-pharyngeal area

Method: Descriptive case study.

SETTING: The study was conducted at department of ENT at Nishter Hospital Multan. The duration of study is July 17- May 18. 102 patients were enrolled in the study and Biopsies were taken and then sent to the laboratory of the hospital for histopathology. Disease primarily of the region, mucosal disease. Children with congenital tumors, mentally retarded cases.

Objective: The study was based to determine the risk factors and the sites involved so as to promote the education in the community and improve the Treatment besides prevention of the disease. The mean age of patients enrolled in the study is 52±8.31 years and the percentage of the males is higher as compared the females i.e 57% of patients were males while 43% females. And among the patients.69% belonged to city areas and 31% were from rural community.

Conclusion: The squamous cell carcinoma is a major health problem due to its high morbidity and mortality. And it is the most common malignancy of head and neck region. The most common area involved is hypo-pharyngeal area

*** Corresponding author:****Dr. Iqra Zainab,**
Nishter Medical University,
Multan

QR code



Please cite this article in press Iqra Zainab et al., *Rising Prevalence of Squamous Cell Carcinoma of Head and Neck.*, Indo Am. J. P. Sci, 2018; 05(09).

INTRODUCTION:

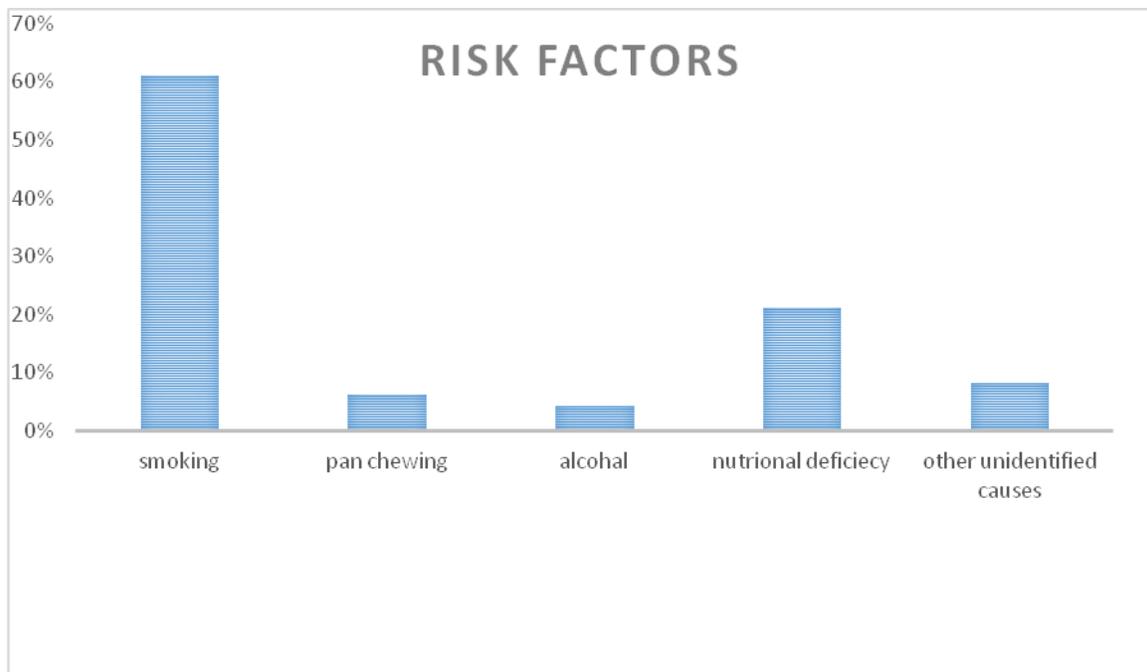
The Head and neck cancers are categorized together with the justification of their epidemiology, similar Natural history, Risk factors, control measures and their gross and microscopic morphology. Squamous cell carcinoma of head and neck is the most common of All head and neck malignant tumors accounting for almost 23% of Asian burden of all the cancers. . The incident of the disease is 6% of total cancers of the world. According to an estimation,112000 patients are diagnosed as a case of head and neck malignancy in Europe per year. The 5-survival rate of the patient presenting with the disease is associated with the stage and grade of the malignancy. A number of the studies have been done on the subject. A study done locally on the trends of the patients suffering from the disease shows that the 2-year survival rate is 73%. And it is higher if the stage is lower. The other thing that is associated with the disease prognosis is grading as the use of treatment options are directly dependent on the staging and grading of the cancer.

METHODOLOGY:

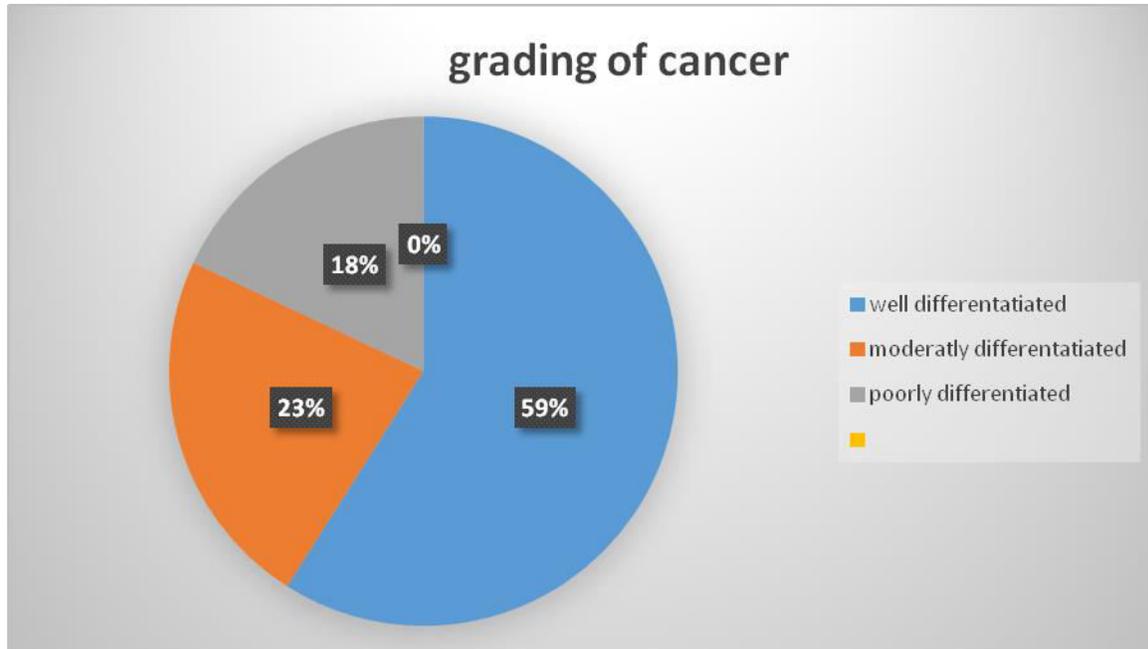
It is a retrospective type of descriptive cross-sectional study. 102 patients were enrolled in this study. Biopsies of the patients were taken and sent to laboratory for histopathological diagnosis. and patients who were diagnosed by lab as squamous cell carcinoma were included in the study. The duration of study is July 17- May 18. Data was collected and analyzed about the age, gender, radiation exposure, beetle nut and pan chewing and smoking history. Histological diagnoses were taken from the histopathology lab. The Data was compiled and analyzed by SPSS 21. The quantitative variables were represented as mean and qualitative variables as percentages. Stratification of effect modifiers was done and chi square was applied.

RESULTS:

Mean age of patients is 52 ± 8.31 . Median Age of patients is 54 years. And the Mean age of female's patients was 46.83 ± 3.15 .



It was revealed on histopathology that 59% of patients had well differentiated carcinoma ,23% had moderately differentiated and 18% of patients showed poor differentiation.



DISCUSSION:

The prevalence of Head and Neck malignancies is different in different parts of the world. Pakistan is amongst the countries having high prevalence of this disease due to increased Pan and betel nut chewing and smoking. Our study shows that the males suffering from the disease are slightly more as compared to the females. The most common site involved in the malignancy of this region is hypopharynx. The results of our study are in line with a study done by Smith *et al.* in 2004 that showed that the tobacco and alcohol have joint effect in development of head and neck cancer along with the evidence of HPV infection in exfoliated oral cells as compared to control group. The independent role of tobacco smoking was first identified as a cause for head and neck cancer by Wynder and Bross in 1957. Later, chewing tobacco and tobacco products were confirmed as causes of cancer in head and neck region in 1991 by Kahyo and Franceschi in 1999. In Pakistan there is unchecked usage of tobacco and tobacco products in the form of cigarettes, pan chewing, eating *niswar* etc. All of these recreational activities put the life of person in danger of developing cancer. Another study done by Luo *et al.* shows the evidence of DNA breaks due to smoking in oral cancer patients in 2004. A study similar to ours is done in Karachi shows the same ratio of males to females but in our study the male proportion of patients is slightly higher as compared to females. A study in Bihar, India, showed that the Hypo

pharyngeal carcinoma is the third most common carcinoma, In contrast to our study, and shows larynx to be the Most Common site for head and neck malignancies.

The results can be different in different geological areas depending upon the epidemiology and change of risk factors causing the disease. In our study it is assessed that the females usually present earlier in contrast to their male counterparts. This may be due to poor nutritional statuses and nutritional deficiencies in the female population of our country. And those areas where the betel nut, pan chewing and smoking is high, have higher risk of head and neck cancers. Proper awareness campaigns should be launched in order to put a control on this deadly disease on local, institutional and government level.

CONCLUSION:

The population of the under developed and developing countries like Pakistan are at high risk of developing head and neck cancers probably due to poor education of people regarding health, risk factors like pan chewing, betel nut chewing, malnutrition and smoking. Furthermore, late presentation and lack of facilities for treatment worsens the prognosis. It is highly important to take steps to increase the awareness regarding the risk factors and proper health education must be ensured to put a control on the rising number of this disease.

REFERENCES:

1. Luo LZ, Werner KM, Gollin SM, Saunders WS (2004). Cigarette smoke induces anaphase bridges and genomic imbalances in normal cells. *Mutat Res* 554:375-385.
2. Smith EM, Ritchie JM, Summersgill KF, Hoffman HT, Wang DH, Haugen TH, et al. (2004). Human papillomavirus in oral exfoliated cells and risk of head and neck cancer. *J Natl Cancer Inst* 96:449-455.
3. Franceschi S, Levi F, La Vecchia C, Conti E, Dal Maso L, Barzan L, et al. (1999). Comparison of the effect of smoking and alcohol drinking between oral and pharyngeal cancer. *Int J Cancer* 83:1-4.
4. Nelson, T.G. and R.E. Ashton, Low incidence of metastasis and recurrence from cutaneous squamous cell carcinoma found in a UK population: Do we need to adjust our thinking on this rare but potentially fatal event? *Journal of surgical oncology*, 2017. 116(6): p. 783-788.
5. Akinshipo, A.-W.O., et al., Head and neck cancers: An histopathologic review of cases seen in three Tertiary Hospitals in Northwestern Nigeria. *Journal of Clinical Sciences*, 2017. 14(3): p. 113.
6. Hamiter, M., et al., A pilot study of Merkel cell polyomavirus in squamous cell carcinoma of the tongue. *Oral oncology*, 2017. 74: p. 111-114.
7. Sundermann, B.V., et al., The localization and risk factors of squamous cell carcinoma in the oral cavity: A retrospective study of 1501 cases. *Journal of Cranio-Maxillo-Facial Surgery*, 2018. 46(2): p. 177-182.
8. Platek, A.J., et al., The association of lifetime physical inactivity with head and neck cancer: a hospital-based case-control analysis. *European Archives of Oto-Rhino-Laryngology*, 2017. 274(10): p. 3773-3780.
9. Minhas, S., et al., Concomitant-chemoradiotherapy-associated oral lesions in A Descriptive Case Study on the Rising Incidence of the Squamous Cell carcinoma of the Head and Neck Region *Cancer biology & medicine*, 2017. 14(2): p. 176.
10. Schmitt, J., et al., Is ultraviolet exposure acquired at work the most important risk factor for cutaneous squamous cell carcinoma? Results of the population-based case-control study FB- 181. *British Journal of Dermatology*, 2018. 178(2): p. 462-472.