TO ASSESS THE AWARENESS OF PRE-MALIGNANT CONDITIONS IN DIAGNOSED CANCER PATIENTS IN PRIVATE UNIVERSITY HOSPITAL

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ABSTRACT:

Globally oral cancer is one of the ten most common cancers with prevalence being high in Central and South East Asian countries. This retrospective study conducted to estimate the prevalence of oral pre-malignant lesions(OPML).A institutional retrospective study was carried out among individuals aged ≥18 years. The first clinical sign and their first dental visit was noted. Oral cavity of all the participants was examined in detail by the study investigator as per WHO guidelines and biopsy reports were thoroughly **.**The mean duration of the patient dental visit after initial clinical symptom seen is 64.3 days.A significant association was seen between the number of males affected more compared to females.The study reinforces that use of substances such as tobacco, alcohol and areca nuts are the modifiable risk factors for OPML.

KEYWORDS: Oral premalignant lesions, oral cancer,premalignant condition.

INTRODUCTION:

Oral cancer in India, which still is a developing nation, is a major health problem in world.World wide studies have shown the annual incidence of 3,000,000 oral cancer cases.(Coelho, 2012) In India Incidence rates per 100,000 population were 12.8 in men and 7.5 in women.(Kiran *et al.*, 2012). Rarely it is seen in young people and mostly occurs in the elderly people during the fifth to eighth decade of life.(Coelho, 2012) Generally predisposing factors for oral carcinoma are alcohol, tobacco use and smokeless tobacco, betel nut chewing and human papilloma virus(HPV) most of the human pathogens have been isolated from oral secretions.(Patil *et al.*, 2017; Marimuthu *et al.*, 2018)(Kumar and Rahman, 2017) Also Most patients are not aware of the complications.(Jesudasan, Abdul Wahab and Muthu Sekhar, 2015) Poor dental care and poor diet may also contribute to Oral cancer.(Selvamani *et al.*, 2015). Oral cancer incidence is highest in India and 90 to 95% of the oral cancers is oral squamous cell carcinoma.(Feller and Lemmer, 2012). Cases of oral cancer amplified from 1 million in 2012 to 1.7 million in 2035 according to different research agencies on cancer thus indicating that the death rate due to oral cancer will also increase in the same period.(Selvamani *et al.*, 2015). Pre malignant lesions and conditions like oral submucous fibrosis, leukoplakia, erythroplakia, and lichen planus are commonly seen in India, and carry an increased risk for malignant transformation.(Garg, Chaturvedi and Sarin, 2018) The scale of oral cancer varies from place to

place within the country(Garg, Chaturvedi and Sarin, 2018; Alharbi, 2020). Dentistry comprises practices related to oral cavity.Oral diseases are a major problem among the general population and there are various procedures carried out to prevent and treat them.Oral health have a direct impact on general health patterns as it helps to talk ,eat and feel confident.(Patturaja and Pradeep, 2016)(Christabel *et al.*, 2016) In Tamilnadu ,patients are referred from many primary health centers and district hospitals across the region to saveetha dental college and hospital.This study was planned to evaluate the awareness of their pre-malignant condition of oral cavity .The progression of the disease varies from months to years. This study was thus planned to evaluate the scale of pre malignant and malignant oral lesions referred to saveetha dental college and hospital for a period of 10months from 2019to 2020.

MATERIALS AND METHODS:

A retrospective study on the duration of the diagnosed cancer patient to the dental clinic after the first clinical symptom seen .The patients referred to saveetha dental college ,department of oral and maxillofacial surgery.The patients diagnosed malignancy from june-2019 to march-2020.we reviewed patient records and analysed the data of 86000 patients. In patients who were confirmed, a malignancy by biopsy their reports were collected . Patient review notes were taken and complaints were noted.All the data was collected and recorded in EXCEL and transferred to spss(2.0).All the available data was included in the study to reduce sampling bias.

Inclusive Criteria: All the patients who were diagnosed malignancy were included in the study.

Excluding Criteria: Patients with incomplete data were excluded from the study.

RESULTS AND DISCUSSION:

Total 30 patients were reviewed out of which 74 biopsy reports others were excluded from the study.The males were more affected than females.24 were males (80%) and 6(20%) were female.The mean age of 57.1 years with minimum of 41 years and maximum of 70 years.The mean duration of the patient to the dental clinic after initial clinical appearance is 67.33 days with a minimum of 11 days and maximum of 180 days. There is a correlation between the gender of the patients and diagnosis of the patients , there is more male dominance when compared to female.

There is correlation between age of the patient and diagnosis; the mean age group is 57.1 years. Prevalence studies in oral pathology can be done on visiting outpatients or examining on whole population, however examining outpatients is easier to perform then the whole population examination due to its method but it gives information about the whole population.Several factors may influence the perception of pain as it is a complex process.dental pain and needs to be considered more often as a possible diagnosis also.(Abhinav, Sweta and Ramesh, 2019)(Kumar, 2017c)(Kumar, 2017c; Rao and Santhosh Kumar, 2018)(Kumar, 2017b)Malignant neoplasm incidence varies from one region to another, because of different factors and the potential predisposing etiologies(Anis and Gaballah, 2013) The mortality rate has remained largely unchanged for decades despite advances in surgery and radiotherapy, which remain the standard treatment options, with a 5-year survival rate of around 50%. In OSCC Surgery along with radiotherapy are the treatment of choice in primary stages however in the later stages combination therapy such as surgery, radiotherapy or chemotherapy have responded well.(Markopoulos, 2012)(Gundamaraju *et al.*, 2014). (Anjanappa *et al.*, 2015) Most frequently encountered whitelesions in clinics is leukoplakia which is generally seen at ages between 5th and 7th decade with a male predominance.(S *et al.*, 2015) The prevalence of oral leukoplakia done by Dambi et al in 2001(Dombi *et al.*, 2001) varies from 1% to 13% and mostly affects buccal mucosa,floor of the mouth, tongue and soft palate.(Waal *et al.*, 1997) .Oral cavity could be used in early detection of precancerous and cancerous lesions as it is more accessible to complete examination, but usually it gets detected in later stages. Use of recent advances in oral screening and detection aids such as Vizilite And VELscopehelp in detection in

early stage, or even in the pre-malignant stage(Messadi, 2013) It can be recommended that the choice of investigation can depend on the size of the lesion.(Packiri, Gurunathan and Selvarasu, 2017)

 Surgical alterations in the position of the bony facial skeleton will inevitably affect the soft tissues(Jain *et al.*, 2019)It is important for dental students to improve their knowledge to enable diagnosis and management of patients to have a more positive attitude toward these patients.(Kumar, 2017a)(Kumar and Sneha, 2016)(Abhinav *et al.*, 2019).

CONCLUSION:

In terms of prevalence, frequency and presentation awareness of the precancerous and malignant lesions of oral cavity is beneficial for oral pathologists and general dental practitioners in making early and better diagnosis and treatment. Based on knowledge early detection of pre malignant lesions minimize potential complications and enhances life expectancy of the patient.

AUTHORS CONTRIBUTION:

ARP wrote the manuscript and provided data and AWPU reviewed the study design and data analysis VJ conducted all statistical analysis. All the authors reviewed the final manuscript.

CONFLICT OF INTEREST:

The authors declare no conflicts of interest.

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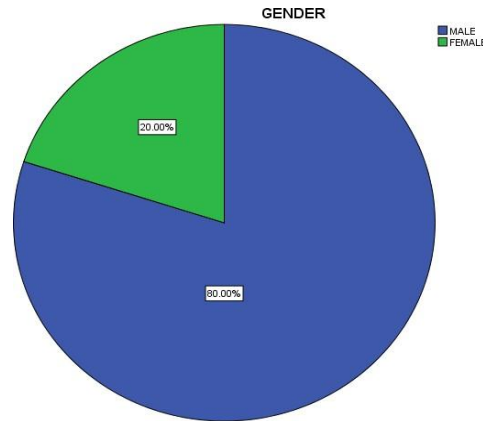
Figure1:The following pie chart represents the gender of the patient. Color blue represents male (80%) and color green represents female (20%). From the above pie chart it is evident that males are more affected than females.
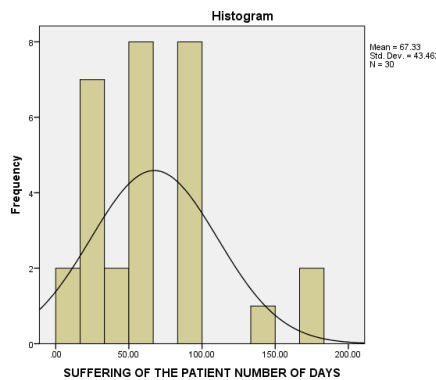

Figure 2 : The following histogram represents the duration of the patient to the dental clinic after initial clinical appearance. The mean duration of the patient to dental clinic visit after initial clinical sign is 67.33 days.
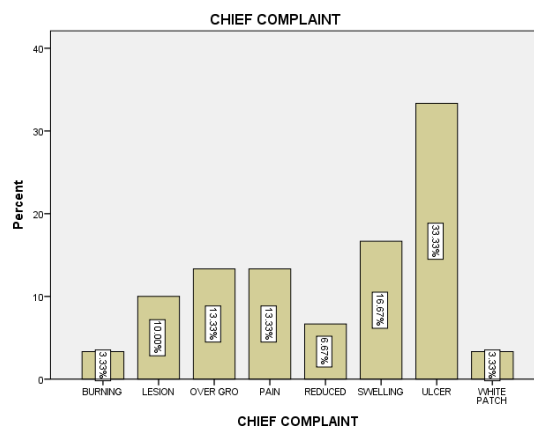

Figure 3:The following bar chart represents the clinical sign of the patient . From the above bar chart it is evident that ulcer (33.33%) is the most clinical sign shown by the patient in pre-malignant condition.
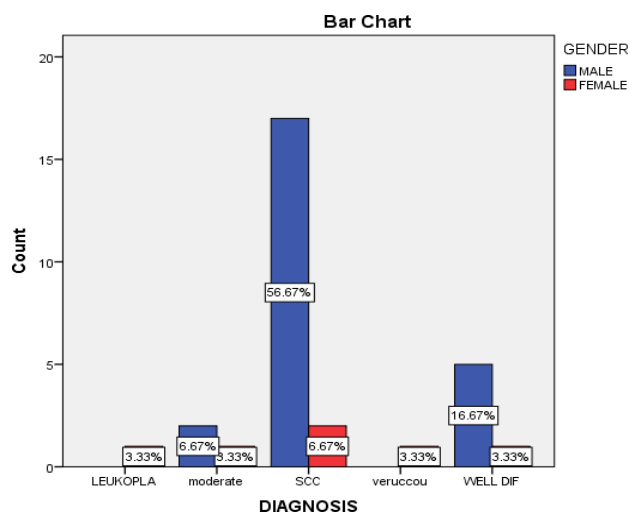
Figure 5 :The following bar chart represents the correlation between gender and the diagnosis of the patient . X axis represents diagnosis of the patients and Y axis represents number of patients affected. Blue color represents male and red color represents female. Chi-square test has been done to know the correlation between diagnosis and gender. There is a significant correlation between gender and diagnosis of the patient.Pearson chi-square value = 9.441, p =0.051 (= 0.05) which is statistically significant. Highest prevalence of Squamous cell carcinoma was seen among males when compared to females.