

Assessment of awareness amongst Dental Specialists regarding Oral Precancerous lesions.

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Abstract

Aim:

To assess the awareness amongst Dental Specialists regarding Oral Precancerous lesions.

Material and Method:

In this questionnaire based digital survey, 240 Dentists having or doing specialisation in Prosthodontics, Periodontics and Endodontists in and around Nagpur region were included in the study to evaluate the awareness regarding Oral precancerous lesions.

Results:

Maximum participants agreed that they take habit history of every patient (86%) and thoroughly evaluate oral cavity for any precancerous lesions (64%). However, only a small percentage of participants (43%) refer their patients with precancerous lesion to specialists. 25% of all participants neither examine the lymph node status of patients nor do they advise their patients regarding cessation of deleterious habits.

Conclusion:

Dental specialists have good awareness regarding oral precancerous lesions and their importance. However, lack of time and training are the probable constraints for thorough screening.

Keywords: Oral precancerous lesions, Oral cancer

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I. Introduction

Cancer is one of the greatest threats to public health and leading cause of death. Although the incidence is high in developing countries, developed countries are also witnessing the rise in cases day by day. Cancer affecting the oral cavity is the most common cause of mortality and morbidity and sixth common cancer worldwide.¹ Squamous cell carcinoma is the common type of oral malignancy which accounts for nearly 2.4% of all cancers and commonly affects, lip, oral mucosa pharynx and tongue.² Various risk factors are associated with the occurrence of oral carcinoma include, tobacco use, alcohol consumption, sun exposure, advanced stage, immunocompromised patient and genetic predisposition.³ Out of these risk factors, smoking and tobacco consumption are considered as the major aetiological factors for the development of malignant disorders in the oral cavity. These disorders are usually preceded in the form of premalignant lesions and conditions such as leukoplakia, erythroplakia and oral submucous fibrosis. Many times such lesion go unnoticed and undiagnosed by the clinician and eventually patients land up in advanced stage of malignant lesions. So, detection of such lesions in an early stage can help to prevent their progression to potentially malignant form.⁴

Oral Medicine is the branch of dentistry that deals with diagnosis, prevention and treatment of diseases, disorders and conditions of the oral cavity including, dentition, oral mucosa and associated structures. Oral Physicians are in a better position to detect oral precancerous lesions in an early stage which can help to significantly improve outcome and prognosis of such conditions. However, lack of awareness and training limits clinicians of other specialities to pay attention to mucosal condition of patient thereby missing out on early detection of premalignant lesions. Hence current study is planned to assess the awareness among different branches of dentistry in the diagnosis of potentially malignant disorders of oral cavity.

II. Material and Method

This cross-sectional questionnaire study was carried out with the help of Google form. The validated questionnaire included 16 closed ended questions regarding awareness and knowledge of precancerous lesions. The google forms were shared among Post graduate students, Faculty members and Private dental practitioners of the specialists of Endodontics, Prosthodontics and Periodontics via digital platforms such as What's app. The data was obtained within 45 days, transformed into excel sheet and statistically analysed.

Total 240 google forms were circulated among Endodontists, Prosthodontists and Periodontists from all Dental Colleges of Nagpur and periphery region.

III. Result

Out of total 240 respondents in this questionnaire study, maximum were endodontics (50%) followed by prosthodontics (25%) and periodontics (24.6%).

Questions regarding awareness of precancerous lesions showed maximum participants with affirmative responses for taking habit history of every patient (86.1%) followed by 64.6% respondents examined their patients thoroughly for oral precancerous lesions. However, only 28.8% participants look for any suspected lesions in the oral cavity during recall visit.

48.8% of participants always screen oral cavity thoroughly in high-risk patients followed by 47.7% occasionally and 3.3% never do the same.

Out of 240, 148 (61.7%) participants answered that they are able to diagnose oral precancerous lesions; with only small percentage 24(10%) showed inability to diagnose the same.

Sizable participants occasionally refer their patient with suspected lesion to specialists as almost 136 (56.7%) participants responded the same and 104(43.3%) always do it. Similarly highest percentage of people agreed that they usually advice their patient for cessation of tobacco related habits 169(70.4%) and risk factors of oral cancer 153(63.8%). However, 60 (25%) and 23(9%) of participants never advice for stoppage of habit and oral cancer related risk factors respectively.

130 (54.2%) participants out of 240, always examine lymph node of every patient; and almost one third 67(27.9%) never evaluate the same.

Highest percentage of participants about 233 (97.1%) gave affirmations that regular follow up of referral patients is necessary. Participants in our study were aware about possible manifestation of underlying malignancy and predisposing factors such as ulcer in relation of prosthetic denture or restoration, ill-fitting denture and unusual mobility of teeth; and percentage of participants responded the same way were 141 (58.8%), 187 (77.9%) and 213 (88.8%) respectively.

Almost half of the participants 140 (58.3%) aware about different diagnostic aids used for diagnosis of suspicion lesion and they have used for same whereas 100 (41.7%) were clueless about such diagnostic aids.

In our questionnaire study, emphasis was put on the possible reason behind lack of awareness among dental specialists regarding precancerous lesions. Maximum participants agreed that lack of clinical time is a barrier for the screening Oral Precancerous lesions 160 (66.7%) and regular review and reinforcement of theoretical and practical aspect is necessary for same 188 (78.3%).

Table no. 1: Speciality

	Frequency (n)	Percentage (%)
Endodontics	121	50.4%
Prosthodontics	60	25%
Periodontics	59	24.6%
Total	240	100%

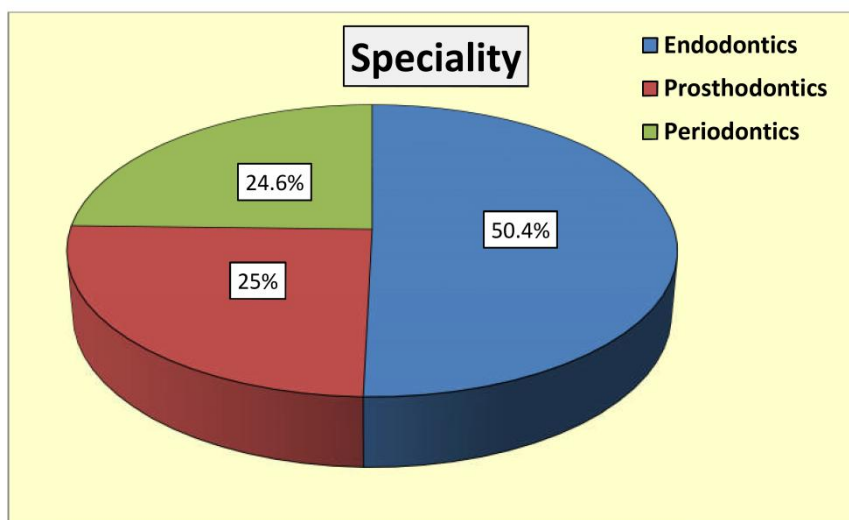


Table 2:

	Always n (%)	Occasionally n (%)	Never n (%)
1. Take addictive habit history of every patient	207 (86.1%)	26 (10.8%)	7 (2.9%)
2. Examine patient for Oral Precancerous lesions	155 (64.6%)	64 (26.7%)	21 (8.8%)
3. Examine recall patient for Oral Precancerous lesions	69 (28.8%)	167 (69.6%)	4 (1.7%)
4. Screen patient's oral cavity thoroughly if high risk for Oral Malignancy	117 (48.8%)	115 (47.9%)	8 (3.3%)
5. Able to diagnose Oral Precancerous lesion to specialists	148 (61.7%)	68 (28.3%)	24 (10%)
6. Refer patients with lesions to specialists	104 (43.3%)	136 (56.7%)	0(0%)
7. Advice patient for cessation of deleterious habits	169 (70.4%)	11 (4.6%)	60 (25%)
8. Counsel patient for risk factors of Oral Cancer	153 (63.8%)	64 (26.7%)	23 (9.6%)
9. Examine patients lymph nodes for suspicious lesion	130 (54.2%)	43 (17.9%)	67 (27.9%)

Table 3:

	Yes n (%)	No n (%)	p value (Chi square test)
10. Use different diagnostic aids for diagnosis of lesions	140 (58.3%)	100 (41.7%)	p =0.01*
11. Feel regular follow up of referral patient is necessary	233 (97.1%)	7 (2.9%)	p<0.001**
12. Ulcer in relation to prosthetic denture /restoration can be malignant	141 (58.8%)	99 (41.2%)	p=0.007*
13. Ill-fitting denture can cause Oral Cancer	187 (77.9%)	53 (22.1%)	p<0.001**
14. Unusual mobility can be manifestation of underlying malignancy	213 (88.8%)	27 (11.2%)	p<0.001**
15.Lack of clinical time is a barrier for screening of Oral Precancerous lesions	160 (66.7%)	80 (33.3%)	p<0.001**
16. Regular review and reinforcement of theoretical and Practical aspect of Precancerous lesion is necessary for screening such lesions	188 (78.3%)	52 (21.7%)	p<0.001**

IV. Discussion

Precancerous lesions of oral mucosa consist of a group of diseases which have potential to transform into malignancy and hence should be diagnosed in the early stage. The most commonly seen precancerous lesions and conditions in the oral cavity are oral leukoplakia, oral erythroplakia and oral submucous fibrosis (OSMF).^[5]

Oral squamous cell carcinoma is the most common cancer in the oral cavity which accounts for > 90% of all oral malignancy. Oral cancer generally occurs in middle-aged and older individuals. However, significant number of these malignancies affecting young adults have also been documented in recent years.^[6] Various advancement in the management of oral carcinomas have been done in past few years to improve the prognosis but insignificant improvement was observed by different clinicians. The root cause remains in the diagnosis of such entities. Invasive oral squamous cell carcinoma is often preceded by the presence of clinically identifiable premalignant changes of the oral mucosa. So, early detection not only decreases the incidence, but also for improves the survival of those who develop this disease.

Early presentation of oral cancers and precancerous lesions are often subtle and asymptomatic. Therefore, it is imperative for the clinician to have awareness regarding its prevalence, clinical presentation, diagnostic features and related risk factors such as tobacco use or alcohol abuse.

In the present questionnaire study, overall knowledge and awareness regarding precancerous lesions were evaluated among dental specialists and the hypothesis was accepted as most of the dental specialists were identified as being aware about suspicious lesion affecting oral cavity and make referrals for same.

The main finding in the present study was that most of the surveyed dental specialists claimed to take habit history of their patient and refer them for treatment when necessary. These results are comparable with the findings reported by Allen K et al. However, about 42% of the participants admitted that they do not examine their patients at recall visits. This finding differs from that of that of same study.^[7]

Tobacco is widely reported as a major risk factor for oral cancer and potentially malignant disorders.⁸ Dental specialist of all branches are in ideal position to provide tobacco cessation advice, and thus help reduce

the incidence of oral mucosal pathologies. However, only 70.4% of the participants in the present study always gave tobacco cessation advice, and less than that (63.8%) counsel their patients regarding risk factors associated with the oral cancer. These findings are consistent with those of other studies.^[4,7,9]

A moderate proportion (58.3 %) of the dental specialists were not aware of mucosal screening and diagnostic aids and almost same proportion of participants (61.7%) were able to diagnose oral precancerous lesion on their own. However, very less of them feel referral to specialists for suspicion lesion is necessary as only 43.3% participants refer their patients to specialists.

Based on the results, it seems the participants have a moderate awareness regarding more general issues such as the predisposing factors of the precancerous lesions, required diagnostic methods, diagnosing precancerous lesion, symptom of a cancerous ulcer and examination of lymph nodes.

V. Conclusion

It is concluded that dental specialists have good motivation and practices regarding oral precancerous lesions. However, lack of time and training are the probable constraints for thorough screening.

Oral malignancy affects the mortality and morbidity of patient and hence diagnosing it in an early stage is a need of an hour. Oral clinicians are in a better position to examine oral cavity thoroughly for any potentially malignant disorders however lack of time and training restricts them to look for mucosal conditions. Although many of them have knowledge and awareness for oral precancerous lesions and conditions but regular review and reinforcement of theoretical and practical aspect is utmost important.

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