Original Article

Level of Awareness and

Maxillofacial Surgery

Knowledge among General Dental Surgeon Regarding Oral Cancer

1. Syed Ghazanfar Hassan 2. Muhammad Shahzad 3.Qadeer ul Hassan 4. Salman shams 5. Pareesa Ijaz

1. Asstt. Prof. of Oral Maxillofacial Surgery 2. Asstt. Prof. of operative dentistry 3. Assoc. Prof. of Oral Maxillofacial Surgery 4. M.Sc. Trainee, Oral Maxillofacial Surgery Dept. 5. M.Sc. Trainee, Prosthodontics Dept., Liaquat University of Medical and Health Sciences, Jamshoro

ABSTRACT

Objective: The study was conducted to assess the level of awareness and knowledge Among general dental surgeon regarding oral cancer.

Study Design: Cross sectional study

Place and Duration of Study: This study was conducted among general dental practitioners of Hyderabad city from January to February 2013.

Material s and Methods: A self administered questionnaire comprising of 12 questions was distributed among the 50 general dental practitioners of Hyderabad city.

Results: The level of knowledge and awareness among general dental practitioners regarding oral cancer and its sign and symptoms was not up to the level expected.

Conclusion: Our study Clearly shows that continuous medical education is needed at general practitioner level so early diagnosis and better prognosis of oral cancer could be made possible

Key Words: Dental surgeon. Level of awareness, Oral cancer.

INTRODUCTION

Oral cancer is one of the most common cancer throughout the world and is highly invasive and debilitating. Cancer is the most common and serious cause of death in economically developed parts of the world and the second most lethal entity in developing countries². Oral cancer is a serious health problem that has a widespread occurrence³.

It has been estimated that 83,000 new oral cancer cases occur here each year. furthermore, in hyderabad, the very accepted use of the smokeless tobacco invention called gutkha, especially its adolescence to a greater threat of developing oral submucous fibrosis, a premalignant condition ensuing in increased frequency of oral cancer in younger patients.

Risk factor for oral cancers consist of smoking, alcohol use, smokeless tobacco products. The contribution of each of Smokeless tobacco products and betel guid with or without tobacco are the major risk factors for oral cavity cancer in India and other neighboring countries.⁴ Majority of oral cancers have been observed to arise from long-standing premalignant lesions especially in high incidence areas 5. Mouth cancer is largely preventable by avoiding known risk factors and national and international guidelines stress the importance of early detection Patients with early lesions have better chances for cure and less treatment associated morbidity, yet despite the easy accessibility of the mouth, most patients present with advanced tumors, when treatment is more difficult, more

expensive and less successful compared with earlier interventions⁶. If the disease is diagnosed in its initial stages, not only could the 5-year survival rate increase to up to 80% but also the patient's quality of life would improve as a result of less aggressive and mutilating treatment⁷.

It has been reported that there exists an increased need for general dental practioners to be educated and trained and awared in the identification of signs and symptoms of oral cancer and pre-malignant lesions as well as early management of patients with suspicious oral lesions^{6,7}. Assessment of the level of knowledge, attitudes, and behaviors of dental health care workers regarding oral cancer is thus necessary and it is vital to train such professionals in oral cancer risk, prevention and control measures, and detection procedures if we are to improve the level of knowledge and to achieve a high rate of guidelines adherence^{8,9,10}. Prevention is hence possible in many cases by spreading awareness¹¹.

MATERIALS AND METHODS

The oral cancer awareness and knowledge among general dental surgeon was assessed by means of a questionnaire. A validated questionnaire comprising of twelve questions were designed relating to risk factors, etiology, clinical appearance and treatment of oral cancer. The survey was conducted among general dental practioners of Hyderabad city. A total of 50 questionnaires were distributed among the general dental practitioners of Hyderabad city during their routine practice timings. The study was conducted in

the month of January and February 2013. Of the 50 questionnaires distributed, all the 50 were successfully completed and returned.

The data was compiled and analyzed using SPSS version 17.

RESULTS

Total 50 general dental surgeon practitioners participated survey based question Performa. 44 were male dental surgeon and 6 were female dental surgeon. The male and female percentage is 88% and female 12%. Detail of the result can be seen in figure 1 and table 1-2.

Table No.1: Questionnaire

Questions	Yes	No	%age
1.Can someone get oral cancer	32	18	Yes 64%
before 40years of age?	32	10	0470
2.Can someone gets oral cancer if smoke/chew tobacco?	35	15	70%
3.Can someone get oral cancer if chew betelnut/mainpuri/naswar?	34	16	68%
4.Can someone get oral cancer from premalignant lesions like submucous fibrosis, leukoplakia, lichen planus?	41	9	82%
5.Can oral cancer be triggered from a constant trauma of a broken/sharp tooth?	21	29	42%
6.Can white patch in oral cavity increases the suscpicion of oral cancer?	28	22	56%
7.Can a red patch in oral cavity increases the suscpicion of oral cancer?	28	22	56%
8.Can a long standing non healing ulcer in oral cavity increases the suscipicion of oral cancer?	19	31	38%
9.Can a long standing painless ulcer in oral cavity increases the suscipicion of oral cancer?	26	24	52%
10.Can a lump/ swelling in oral cavity increases the suscpicion of oral cancer?	36	24	72%
11.Can a mixed white/red lesion increases the suscpicion of oral cancer?	30	20	60%
12.As a dentist what do you do when you suspect a pre- cancer/cancerous lesion in oral cavity?			
· Biopsy of the lesion	30	20	60%
· Refer the patient to specialist as soon as possible	20	30	40%

Table No. 2: Dental surgeon empolyed and private practice.

practice.		
Dental Surgeon		
Empolyed dental instituate.	22	44%
Private Practice	28	56%

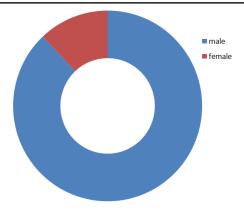


Figure No.1. Dental surgeon male and female particepant ratio

DISCUSSION

This proforma based question study reports knowledge, attitudes, and level of awreness amongst dental surgeon regarding oral cancer in Hyderabd. 50 dental male and 6 were females, the surgeon,44 were percentage of 88% male and female 12 % participated in this study.22(44%) dental surgeon out of 50 were employed in dental teaching institute and were also involved in private practice in evening so we expect them to have wider understanding about oral cancer because being part of teaching institute. It is quite understandable that knowledge and understanding of oral cancer in dental surgeon could help towards early diagnoses which in turn improves prognoses. Clearly lack of sound knowledge could delay the early diagnosis which adversely effect the prognosis.

This study was carried out at dental practitioners level to assess their level of understanding regarding early diagnosis because dental practitioners are the front line soldier to see the oral lesion first time and timely diagnosis and referral to specialist centre could enhance the over all survival of the patients.

The results clearly indicate that although the overall awareness regarding oral cancer was satisfactory but application of the knowledge was not up to the expected standard.

In reply to our first question regarding age of the patient 32(64%) dental surgeon answered that it could occur before 40 years of age.

Answering the 2nd question which was role of smoking, 35(70%) dental surgeon wrote that smoking could cause oral cancer. In this reply our our finding was similar to international and regional study.

International study by Rehman in uk 2005 and regional study was carried out by agrawal in india in 2012. ^{13.14} Answering the role of betel nut in oral cancer ,34(68%) dental practioner replied positive which was in line with other studies carried out by Warnakulasuriya,Gupta, Thomas . ^{14,15,16}" "role of betel nut and oral cancer" . Rrgarding premalignant lesions like leukoplakia,

submucus fibrosis etc which has a tendancey to transform into oral cancer, 41(82%) dental surgeon has knowledge it which is also supported by different studies has published regionally and internationally..^{17,18,19}.

One of the question in this study was persistent trauma like sharp edges from teeth or ill fitting denture could aggrevate and cause the oral cancer.

23 (42%) Dental surgeon answered yes to the question, same study were carried out by piemonte D IN 2010 where he worked on "role of persistant trauma and oral cancer.

27(56%) Dental surgeons have had positive response²⁰ regarding white and red lesions which they think can change in to malignancy. Similar study were carried out poh in 2008.

Another questions Long standing nonhealing and non healing painless to ulcer has tendency to change in oral cancer . in our survey 38% and 52% respectively,the dental surgeons have understanding that these could poteniatly be malignant lesion at the time of diagnosis. . similar study was carried out by compilato D in Italy 2009. ²² lump, swelling and mixed white and red lesion can change into mailgancey. Subsequently 72% and 60% dental surgeon has positive response . recent study were carried out in 2010 by Mcgurk in britian and 2011 by McCullough in Austrlia. This internationally study also support our study ^{23,24}.

The last question was in this survey , that once suspicion is raised about a lesion in oral cavity what is the next thing clinician would do, wheather referred to specialist or do a biopsy himself.in our study 40% dentist wrote that they would reffere to the specialist and rest of 60% said they will biopsy themselves.

CONCLUSION

Our study Clearly shows that continuous medical education is needed at general practitioners level so early diagnosis and better prognosis of oral cancer could be made possible.

REFERENCES

- 1. Ottolenghi L, Romeo U, Carpenteri F, et al. Cognitive experience of oral cancer among young people of "Sapienza" University of Rome. Ann Stomatol Roma 2012;3(3-4):106–112.
- Health Organization. The Global Burden of Disease: 2004 Update. Geneva: World Health Organization; 2008.
- 3. Moore SR, Johnson NW, Pierce AM, Wilson DF. The Epidemiology of Mouth Cancer: A Review of Global Incidence. Oral Dis 2000;6:65-74.
- 4. Jemal A, Brey F, Center M, et al. Global cancer statistics CA. Cancer J Clin 2011;**61**, 69-90.

- Rehman S, Khan M. Awareness of oral cancer in undergraduate medical and dental students. Pak Oral Dent Jr 2012;32(3):385-388.
- 6. Khan M, Salam A, Din QU. Niswar as a risk factor in theaetiology of oral cancer. J Pak Dent Assoc 2007;16(2):77-81.
- 7. Kazmi F, Iqbal S, Mumtaz M, Asad S. Awareness regarding screening of oral cancers in young dental graduate. Pak Oral Dent Jr 2012;32(1):56-61.
- 8. Greenwood M, Lowry RJ. Primary care clinicians' knowledge of oral cancer: a study of dentists and doctors in the North East of England. Br Dent J 2001; 191: 510-12.
- 9. Kujan O, Duxbury AJ, Glenny AM, Thakker NS, Sloan P. Opinions and attitudes of the UK's GDPs and specialists in oral surgery, oral medicine and surgical dentistry on oral cancerscreening. Oral Dis 2006; 12: 194–99.
- 10. Shah I, Rehman P, Ibrahim MW, et al. Oral cancerare the dentists doing enough for its prevention and early diagnosis? A study. Pak Oral Dent Jr 2010; 30(1):72-74.
- 11. Rahman M, Sakamoto J, Fukui T. Bidi smoking and oral cancer: a meta-analysis. Int J Cancer 2003 10; 106:600–604.
- 12. Agrawal M, PandeyS, JainS, MaitanS. Oral Cancer Awareness of the General Public in Gorakhpur City. Asia Pacific J Cancer 2012;13(10);5195-5195
- 13. Warnakulasuriya S, Areca nut use: an independent risk factor for oral cancer. BMJ 2002;324(7341): 799–800.
- 14. Gupta PC, Warnakulasuriya S. Global epidemiology of areca nut usage. Addiction Biology. 2002;7:77–83.
- 15. Thomas S, Kearsley J. Betel quid and oral cancer: a review. Eur J Cancer B (Oral Oncology) 1993;29B:251–255.
- 16. Zain RB, Ikeda N, Gupta PC, Warnakulasuriya KA, van Wyk CW, Shrestha P, et al. Oral mucosal lesions associated with betel quid, areca nut and tobacco chewing habits: J Oral Pathol Med 1999;28:1–4.
- 17. Napier SS, Speight PM. Natural history of potentially malignant oral lesions and conditions: an overview of the literature. J Oral Pathol Med 2008;37(1):1-10.
- 18. Tilakaratne WM, Klinikowski MF, Saku T, et al. Oral submucous fibrosis: review on aetiology and pathogenesis. Oral Oncol 2006;42(6):561-8.
- 19. Lingen MW, Kalmar JR, Karrison T, Speight PM. Critical evaluation of diagnostic aids for the

- detection of oral cancer. Oral Oncol 2008; 44:10–22.
- 20. Piemonte ED, Lazos JP, Brunotto M. Relationship between chronic trauma of the oral mucosa, oral potentially malignant disorders and oral cancer. J Oral Pathol Med 2010;39(7):513-7.
- 21. Poh CF, Ng S, Berean KW, Williams PM, Rosin MP, Zhang L. Biopsy and histopathologic diagnosis of oral premalignant and malignant lesions. J Can Dent Assoc 2008; 74(3):283–8.
- 22. Compilato D, Cirillo N, Termine N, Kerr AR, Paderni C, Ciavarella D, Campisi G. Long-standing oral ulcers: proposal for a new 'S-C-D classification system. J Oral Pathol Med 2009; 38(3):241-53.

- 23. Mcgurk M, Scott SE. The reality of identifying early oral cancer in the general dental practice. British Dental J 2010;2089(3);347 351.
- 24. 24. McCullough MJ, Prasad G, Farah CS. Oral mucosal malignancy and potentially malignant lesions: an update on the epidemiology, risk factors, diagnosis and management. Aust Dent J 2010;55(1):61-65.

Address for corresponding author:

Dr. Syed Ghazanfar Hassan,

Asstt. Prof. of Oral Maxillofacial Surgery, Liaquat University of Medical and Health Sciences, Jamshoro